

ELECTRIC • PNEUMATIC
HYDRAULIC • GAS

...the power of innovation!®

# Metalworking Tools & Accessories

for Fabricating, Finishing, & Cutting



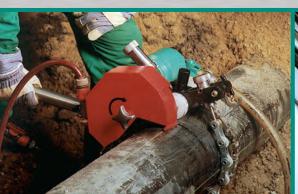




Magnetic Drills
Annular Cutters & Cutting Tools
Portable Saws
Surface Finishing
Flap Discs
Drills & Drive Units
Surface Preparation
Wet/Dry Industrial Vacuums









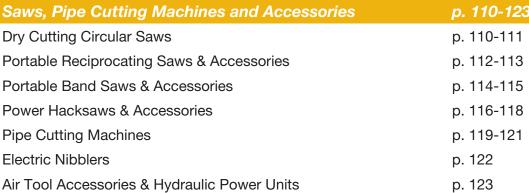




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#### Safety Guidelines

Use all products according to the safety regulations of OSHA and directives by ANSI (American National Safety Institute) B7.1, European DIN EN 13743 and all other applicable international safety standards.



## **Surface Preparation Tools & Dust Collection Vacuums**

CS Unitec's Trelawny™ line of surface preparation tools features many Vibro-Lo™ models. These models include integrated vibration reduction technology to operate with up to 8x less vibration than standard models. Vibration damping components offset the hammer vibration when the tool impacts the workpiece, reducing the risk of vibration-related injury.





#### Low-Vibration Steel Deck Hammer (Pneumatic) p. 6

 Fracture and reduce scale, corrosion and thick coatings in minutes, reducing blast media costs

#### Hand-Held Scaling Hammers (Pneumatic) p. 7

- Single-Head and Triple-Head
- Remove thick scale, heavy corrosion, hard coatings and more





#### Needle and Chisel Scalers (Pneumatic) p. 8-14

- Remove coatings, corrosion and other accumulated materials
- ATEX-Certified needle scalers for use in Ex Zones and hazardous environments

## Long-Reach Chisels / Scrapers / Scalers (Pneumatic) p. 15

 Available lengths ranging from 2' to 6'; chip, scrape and descale with one tool





#### Floor Scarifiers (Electric • Pneumatic • Gas) p. 16-17

- Available with 8" and 10" cutting widths
- Ideal for the most demanding surface prep & material removal applications

## Hand-Held Scarifiers – Rotopeen™ (Pneumatic)

- p. 18
- Ideal alternative to small-area shot blasting
- Available with 3M's Rotopeen™ 'C' flaps, star cutters and beam cutters





## Trident Neptune Flexible Shaft Deck Descalers (Electric) p. 19

 Rapidly remove scale, rust, paint and other unwanted deposits on ship decks and other metal surfaces

#### Dust Collection Vacuums (Electric • Pneumatic) p. 21

- Electric-powered wet/dry models with HEPA filtration
- Air-powered models are ATEX classfied to collect dust/ debris and non-flammable liquids. Optional HEPA filtration available.





## **Surface Preparation Tools for Small and Large Areas**































## **SF11 Steel Deck Hammer**

## 11 heads deliver 33,000 BPM

Fracture and reduce scale, corrosion and thick coatings in minutes – and reduce blast media costs

CS Unitec's Trelawny™ ScaleForce Eleven Pneumatic Deck Hammer will fracture and reduce scale, corrosion and thick coatings in minutes. The machine's low profile body and adjustable handle mean the deck hammer needs only 6" clearance for working under pipes and other constructions.

- Includes Vibro-Lo™ vibration reduction technology
- Optional ATEX model beryllium copper replacement heads to reduce risk of explosion in potentially hazardous areas
- Replaceable taper fit cutter head reduces cost of replacement and extends piston life
- Vacuum shroud reduces hazardous and nuisance dust when used with dust collectors



Vibration

11 heads provide 33,000 BPM (11 x 3000 BPM)

#### **Applications Include:**

- Ship Decks
- Tank Tops
- Bridge Decks
- Floating Platforms

CS Unitec's Trelawny™
ScaleForce Eleven Pneumatic
Deck Hammer operates with 8x less vibration than
standard models. This tool utilizes vibration damping
components to offset the hammer vibration created
when the heads impact the workpiece.

#### **SF11 Accessories**

	Part No.
Cruciform Cutter Head	426.5351
Copper Beryllium (CuBe) Cruciform Cutter Head	606.5303
Bush Cutter Head	426.5352
Common Tapered Piston	612.5301
Vacuum Shroud	437.0100



Bush



Cruciform

**Copper Beryllium** for use in potentially explosive areas







See page 21 for air-powered dust collection vacuum – ATEX classified for use in Gas Zone 2 and Dust Zone 22.

## ScaleForce Eleven (SF11) Pneumatic Deck Hammer

	Model Number	Motor Specifications	Cutting Width	Blows per Minute	Dimensions (WxH)	Level dB(A)	Levels m/s <sup>2</sup>	Weight (lbs.)		
1	SF11 with	Cruciform Heads and Du	ıst Shrou	d						
IBRO LO	159.5910	70 CFM @ 90 PSI	10"	33,000	11.1" x 47.6"	113.1	5.76	83		
1	SF11 (with ATEX certification) Copper Beryllium (CuBe) Heads									
IBRO LO	159.5930	70 CFM @ 90 PSI 🚸 🦎	10"	33,000	11.1" x 47.6"	113.1	5.76	83		

Vibration

Vibration Reduction

Technology

## **Pneumatic Hand-Held Scaling Hammers**

# Remove thick scale, heavy corrosion and hard coatings

CS Unitec's Trelawny™ line of pneumatic hand-held scaling hammers are ideal tools for the removal of thick scale, heavy corrosion and hard coatings. Areas of application include pipes, ship decks, oil platforms, storage tanks and bridge structures.

- Single-head scaling hammer includes Vibro-Lo™ vibration reduction technology
- Optional spark-resistant copper beryllium replacement heads reduce risk of explosion in potentially hazardous areas
- Detachable taper fit cutter head reduces cost of replacement and extends piston life



- Pipes
   Ship Decks
   Oil Platforms
- Storage Tanks Bridge Structures
- Gas / Utility Contractors



#### **Pneumatic Hand-Held Scaling Hammers**

- Air consumption @ 90 PSI Single Head: 7 CFM; Triple Head: 11 CFM
- Noise level 88.1 dB(A) to 92.7 dB(A)

Description	Model Number	Handle Type	Dimen- sions (LxH)	Vibration Levels (m/s²)	Weight (lbs.)
SF1 Single Head - 3000 Blows	per minute	71	· ,	( 1 2 )	(11)
TCT Cruciform Head	151.5100	Long	19" x 6"	6.8	5
TCT Bush Head	151.5105	Long	19" x 6"	6.8	5
TCT Cruciform Head	199.5150	Short	9.25" x 6"	6.8	4.5
VLSF1 Low-Vibration Single He	ead - 3000 B	lows per n	ninute		
TCT Cruciform Head	196.5095	Long	19" x 5.5"	3.7	5
CuBe Cruciform Head 💠 😥 🌰	196.5110	Long	19" x 5.5"	3.7	5
SF3 Triple Head - 9000 Blows	per minute				
TCT Cruciform Head	153.5300	Long	19" x 6"	13.4	8
TCT Bush Head	153.5305	Long	19" x 6"	13.4	8
TCT Cruciform Head	199.5350	Short	9.25" x 6"	13.4	7
CuBe Cruciform Head 🕀 🐼	153.5310	Long	19" x 6"	13.4	8
0 1 12 21 17 21 1 27 6 17					

Service kits available. Visit our website for more information.



CS Unitec's Trelawny™
Single-Head Hand-Held
scaler operates with
8x less vibration than
standard models. This
tool utilizes vibration
damping components
to offset the hammer
vibration created when
the head impacts the
workpiece.



## Hand-Held Scaling Hammer Accessories

	Part No.
TCT Cruciform Cutter Head	426.5351
Copper Beryllium (CuBe) Cruciform Cutter Head	606.5303
TCT Bush Cutter Head	426.5352
Common Tapered Piston	612.5301
Single-Piece Steel Piston with Cruciform Head	612.5305



SCAN TO SEE FULL PRODUCT DETAILS

## **Heavy-Duty Needle Scalers**

#### **Heavy-Duty Needle Scalers**

Ideal for cleaning and stress-relieving weld seams and joints; texturing concrete; removing coatings, corrosion and other accumulated materials.

#### **Power & Productivity**

- Oversized piston with longer stroke
- Heavy-duty hardened anvil ff
- High-strength, long-lasting chisel-tipped needles

#### **Low Maintenance & Less Downtime**

- Air-powered fewer moving parts
- Converts to chisel scaler in seconds
- Piston valve

#### **Versatile**

• One tool for different applications

• Lightweight - easy to handle







2B Combination Kit See next page for more information.

Grip	Description	Model Number	Needle Qty (3 mm)	Weight (lbs.)	Blows per minute	CFM @ 90 PSI	Noise Level dB(A)	Vibration Levels m/s <sup>2</sup>
Inline	1B Needle Scaler	111.1099	12	3.5	3800	3	110.4	8.5
Inline	2B Needle Scaler	121.2099	19	5.75	3000	5.5	113.3	9.3
Pistol	2BPG Needle Scaler	123.2199	19	5.75	3000	5.5	113.3	12.6
	3BPG Needle Scaler	133.3199	28	8.25	2200	8.0	114.5	18.9



Service kits available. Visit our website for more information.



#### **Dust Collection Shroud for Standard Needle Scalers**

**1B** 

**Inline Grip** 

**2B** 

Optional Dust Shroud for Needle Scalers – for use with dust extraction vacuums. Model 2B and 2BPG Needle Scalers – Order Dust Shroud P/N 418.2200 Model 3BPG Needle Scaler – Order Dust Shroud P/N 418.3040



Scan to Learn More

Needle options – see page 14 for the following types of needles:								
Chisel	Flat	Pointed	Copper Beryllium	Stainless Steel				
light surface marking	light treatment and polishing effect	very hard scale	use in potentially (Exexplosive areas	use in applications where corrosion or humidity is a problem, such as the food processing industry				

## TVS™ Needle Scalers with Integrated Vacuum Shroud



CS Unitec's Trelawny™ TVS™ Needle Scalers with Integrated Vacuum Shroud enable dust-free working in hazardous applications when used with a dust extraction vacuum (see page 21 for dust collection systems).



Grip	Description	Model Number	Weight (lbs.)	Blows per minute	CFM @ 90 PSI	Noise Level dB(A)	Vibration Levels m/s <sup>2</sup>
Inline	2B Needle Scaler	139.2007	6.4	3000	5.5	98.6	17.4
Dietel	2BPG Needle Scaler	139.2107	6.6	3000	5.5	98.6	22.4
Pistol	3BPG Needle Scaler	139.3107	9.9	2200	8	105.1	19.9

Service kits available. Visit our website for more information.



## **Heavy-Duty Chisel Scalers**

Ideal for splitting, chipping, pointing, brick raking and removing accumulated materials and corrosion.

- Inline, pistol and semi-pistol grip
- Ball bearing chisel retainer

#### **Inline Grip**



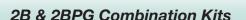


Grip	Description	Model Number	Weight (lbs.)	Blows per minute	CFM @ 90 PSI	Noise Level dB(A)	Vibration Levels m/s <sup>2</sup>
Inline	1B Chisel Scaler	114.1200	3.3	3800	3	98.9	8.2
	2B Chisel Scaler	124.2200	4.4	3000	5.5	98.6	17.4
	2BPG Chisel Scaler	125.2300	4.5	3000	5.5	98.6	22.4
Pistol	3BPG Chisel Scaler	135.3300	6.2	2200	8	105.1	25.6
	3BPG Chisel Scaler*	135.3395	6.2	2200	8	105.1	25.6



**Learn More** 

<sup>\* 3</sup>BPG Chisel Scaler 135.3395 has 5/8" hexagonal chisel holder and is compatible with chisels shown on page 15. All others Chisel Scalers shown above have 1/2" square shank. Service kits available. Visit our website for more information.





Pistol Grip Kit includes 2BPG Needle Scaler, 19 (3mm) needles, 3/4" width chisel and allen wrench. P/N 199.3121



#### **Chisels for Standard Chisel Scalers**

#### ■ 1/2" Square Shank

	Chisel Part N	o. Shank	Length	Width	Application
	704.1110	Square	7"	2"	Spark-resistant Aluminum Bronze for use in hazardous areas
	704.2105	Square Cranked End	7"	1-3/8"	Weld flux and thick coating removal
	704.1101	Square	7"	3/4"	Weld splatter removal
	704.1103	Square	7"	2-1/2"	Wide flat chisel for the removal of rust or peeling paint
	704.1107	Square	10"	3/4"	Flat chisel for weld splatter and sand cast cleaning
	704.1106	Square	8"	1/4"	Mortar removal for repointing brick work
M	704.1112	Square	7"	Moil Point	Concrete chipping

CS Unitec offers a full line of non-sparking, non-magnetic chisels and safety hand tools for hazardous areas and Ex zones. Contact us for details.

Standard Needle Scalers and Chisel Scalers convert in seconds with optional head or when purchased as a Kit. Contact us for more information.



## **Low-Vibration Needle/Chisel Scalers**

# High power with low vibration – 8x less than standard models

CS Unitec's Trelawny™ line of Low-Vibration needle/ chisel scalers offer high performance and low vibration for greater productivity and improved operator comfort. Ergonomically designed with low maintenance and quick change tooling option.

- Integrated Vibro-Lo™ vibration reduction technology
- · Lightweight, easy to handle
- Optional dust shroud for dust and debris collection
- Tool-free needle changeover
- Converts to chisel scaler in seconds













Needle Scalers and Chisel Scalers convert in seconds with optional head or when purchased as a Kit. See page 12 for Kit information.



- Cleaning and stress-relieving weld seams and joints
- Removing coatings, corrosion and other accumulated materials
- Texturing concrete
- Splitting, chipping, pointing and brick raking



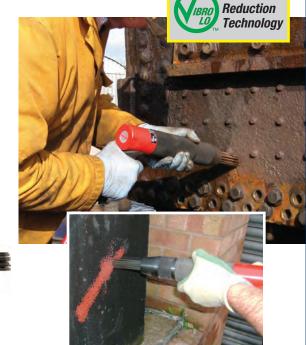
**VL303** 

## **Heavy-Duty Low-Vibration Needle Scalers**

## Heavy-Duty Vibro-Lo™ Needle Scalers

- Inline or pistol grip
- Remove coatings, corrosion and other accumulated materials
- Ideal for stress-relieving weld seams and joints





**Vibration** 

Grip	Description	Model Number	Needle Qty (3 mm)	Weight (lbs.)	Blows per minute	CFM @ 90 PSI	Noise Level dB(A)	Vibration Levels m/s <sup>2</sup>
Inline 🗐	VL223 Needle Scaler	199.2103	19	5.25	2400	4	90.7	2.56
	VL223 Needle Scaler w/ dust shroud	199.2313	19	5.25	2400	4	90.7	2.56
Pistol 6	VL203 Needle Scaler	199.2003	19	6	2400	4	90.7	2.75
	VL203 Needle Scaler w/ Dust Shroud	199.2303	19	6	2400	4	90.7	2.75
	VL303 Needle Scaler	199.3003	28	7.75	3000	5.5	109.5	2.30
	VL303 Needle Scaler w/ Dust Shroud	199.3005	28	7.75	3000	5.5	109.5	2.30

Service kits available. Visit our website for more information.

Needle option	Needle options – see page 14 for the following types of needles:							
Chisel	Flat	Pointed	Copper Beryllium	Stainless Steel				
light surface marking	light treatment and polishing effect	very hard scale	use in potentially (Ex) explosive areas	use in applications where corrosion or humidity is a problem, such as the food processing industry				

#### **Dust Collection Shroud for Vibro-Lo™ Needle Scalers**



See page 21 for dust extraction systems.

#### **Drop Protection Kit**

CS Unitec offers a drop protection kit for our Vibro-Lo™ Needle/ Chisel Scalers. Protect your investment when working at heights or in applications where dropping/ losing the tool is likely, including: offshore platforms and rigs, bridges/ scaffolding, vessels and ships.

**VL223 and VL203** Order P/N 720.2003\*

VL303

Order P/N 720.3003\*

\* Safety clip and line not supplied





VL203 Needle Scaler - Dust Shroud P/N 418.2003

VL303 Needle Scaler - Dust Shroud P/N 418.3003

## **Heavy-Duty Low-Vibration Chisel Scalers**









Grip	Description	Model Number	Weight (lbs.)	Blows per minute	CFM @ 90 PSI	Noise Level dB(A)	Vibration Levels m/s <sup>2</sup>
Inline	VL223 Chisel Scaler	199.2213	6.5	2400	4	76.3	3.69
Distal	VL203 Chisel Scaler	199.2203	7	2400	4	76.3	3.33
Pistol	VL303 Chisel Scaler	199.3203	9.5	3000	5.5	78.2	3.7

Shank Length Width Application



Service kits available. Visit our website for more information.

Chisel Part

Number

#### Chisels for Vibro-Lo™ Chisel Scalers

704.3110	Square	7"	2"	Spark resistant Aluminum Bronze for use in hazardous areas
704.3205	Square Cranked End	7"	1-3/8"	Weld flux and thick coating removal
704.3101	Square	7"	3/4"	Weld splatter removal
704.3103	Square	7"	2-1/2"	Wide flat chisel for the removal of rust or peeling paint
704.3107	Square	10"	3/4"	Flat chisel for weld splatter and sand cast cleaning

CS Unitec offers a full line of non-sparking, non-magnetic chisels and safety hand tools for hazardous areas and Ex zones. Contact us for details.



#### Vibro-Lo™ Needle/ Chisel Scaler Kits

CS Unitec offers Vibro-Lo<sup>™</sup> Needle/Chisel Scaler Kits, each supplied with the Needle Scaler, 3mm needles, a chisel holder, anvil and a 3/4" blade chisel.

VL223 Kit – Order P/N 199.2113 VL203 Kit – Order P/N 199.2105 VL303 Kit – Order P/N 199.3103

VL223 Kit and VL303 Kit do not include a plastic carrying case.



VL203 Kit – Plastic carrying case included.

## **ATEX-Certified Needle/Chisel Scalers**

Specially-designed for use in hazardous environments – equipped with Vibro-Lo™ low vibration technology

These specially engineered Trelawny VL203Ex, VL223Ex and VL303Ex needle scalers are:

Fully certified to the classification: EX II 2G Ex h IIB T6 Gb & Ex II 2 D Ex h IIIC T135 °C Db under the ATEX Directive 94/9/EC. Certified for use in Gas Zone 1 and Dust Zone 21.

 Ideal for use in Ex Zones, oil, gas & petrochemical industries such as refineries, offshore platforms, LPG terminals and all chemical processing environments.







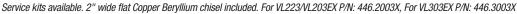




	Grip	Description	Tool Model Number	Kit Model Number	Needle Qty (3 mm)	Weight (lbs.)	Blows per minute	CFM @ 90 PSI	Vibration Levels m/s <sup>2</sup>
(IBRO)		VL223Ex Needle Scaler with dust shroud		139.2423	19	5.25	2400	4	2.56
(IBRO)	Pistol	VL203Ex Needle Scaler with dust shroud		139.2403	19	6	2400	4	2.75
(BRO LO)		VL303Ex Needle Scaler with dust shroud	196.3007	139.2433	28	7.75	3000	5	2.3

3mm Copper Beryllium needles included. Service kits available: For VL223/VL203EX P/N: 446.2003X, For VL303EX P/N: 446.3003X

	Grip	Description	Tool Model Number	Weight (lbs.)	Blows per minute	@ 90 PSI	Vibration Levels m/s <sup>2</sup>
(BRO)	Inline	VL223Ex Chisel Scaler 🕀 😥	196.2117	6.5	2400	4	3.33
(IBRO)	Pistol	VL203Ex Chisel Scaler 🕠 😥	196.2217	7	2400	4	3.69
(IBRO)	PISIOI	VL303Ex Chisel Scaler 🕀 🐼	196.3017	9.5	3000	5	3.7
IV			. =				





#### **Standard Features**



Copper Beryllium needles – high strength with nonsparking and non-magnetic properties



Dust shroud to protect user from hazardous dust and debris



Fall arrestor eliminates the risk of dropping the tool causing injury or equipment damage



Optional Accessory
Anti-static lanyard available
for use with the fall arrestor
(P/N 415.3003)

Needle Scaler Kit includes: ATEX-Certified needle scaler, extra set of Copper Beryllium needles, dust shroud, corner cuff, edge cuff, flat cuff and fall arrestor.



#### Safety Hand Tools LIFETIME WARRANTY



CS Unitec offers over 3000 safety hand tools for use in Ex Zones, ATEX Zones and hazardous environments where hazardous, flammable or combustible vapors, liquids, dusts or residues may be present. Contact us for more information!

## **Needles for Needle Scalers**

CS Unitec's Trelawny™ needles last 10x longer than standard needles. Save time and money with fewer needle changes and less downtime.

All of CS United's Needle Scalers are delivered from stock complete with 7"(180mm) long x 3mm diameter high performance needles. Other needle holders are available as accessories for use with 2mm and 4mm diameter needles.

We also offer spark resistant needles for use in potentially hazardous areas and Ex zones, as well as stainless steel needles for use in humid areas - such as applications in the food processing industry where corrosion is a concern.







#### **Chisel Tip**

These needles will clean the same materials as a pointed tip, but will leave light surface marking

$ \wedge $

Size	Description	Part #
3mm Box of 19 needles		403.2119
3mm	Box of 100 needles	453.2110
3mm	Box of 1000 needles	443.2107

#### **Pointed Tip**

Sharpened to a conical point, these are the most effective in breaking through very hard scale on materials where some surface indentation is permissible - or where a roughening or keying of the surface is actually desirable.

Size	Description	Part #
3mm	Box of 100 needles	453.3110
3mm	Box of 1000 needles	443.3107

#### Flat Tip

Flat-tipped needles will reduce marking on metal surfaces and can give a polishing effect. For use on thin gauge metals and any surface where a light treatment is required.



2mm needles used on a welded joint produce a similar effect to shot peening, reducing stress in the weld.

Size	Description	Part #
2mm	Box of 100 needles	452.1110
3mm	Box of 100 needles	453.1110
3mm	Box of 1000 needles	443.1107

#### Spark-Resistant Copper Beryllium

Available in 3mm flat tip only; for use in potentially hazardous areas.

Size	Description	Part #
3mm	Box of 19 needles	403.1319
3mm	Box of 28 needles	403.1328
3mm	Box of 100 needles	453.1310
3mm	Box of 500 needles	443.1307









Available in 3mm flat tip only, to be used in applications such as refurbishment of food processing machinery or areas of high humidity where the corrosive effect on needles would be prohibitive.

Used on decorative concrete surfaces where contamination of the surface from carbon steel needles is undesirable.

Size	Description	Part #
3mm	Box of 100 needles	453.1207
3mm	Box of 500 needles	443.1207

See page 21 for dust extraction solutions.



#### Conversions: 2mm = 0.08" 3mm = 0.12"

180mm = 7"

## Long-Reach Chisels/Scrapers/Scalers

## Chip, scrape and descale with one versatile tool

CS Unitec's Trelawny™ Long-Reach Scrapers feature one tool with multiple applications.

- Available in 2', 4', 5' and 6' lengths
- 3 tools in 1 chipper, scraper and descaler
- Quick-change chisel release
- Low air consumption
- Standard and "LITE" models





#### Applications include removal of:

- Ice
- Mortar
- Residue
- Floor tiles
- Adhesive
- Metal slag
- Asbestos
- Rubber coatings
- Roofing materials
- Linoleum
- Chemical spillages
- Carpeting Plaster
- Bituminous products



#### 3 tools in 1:





Accessories sold separately.

## Long-Reach Chisels/Scrapers

Model	Description	Model Number	Weight (lbs.)	per minute	@ 90 PSI	Level dB(A)
	2ft. Chisel	136.3299	8	2200	4.5	84
Standard	4ft. Needle	137.3400	11	2200	4.5	104
Scalers	4ft. Chisel	136.3499	11	2200	4.5	84
	5ft. Chisel	136.3599	12	2200	4.5	86
	4ft. Chisel	136.3497	6.75	2200	4.5	89
LITE Scalers	5ft. Chisel	136.3597	7.5	2200	4.5	89
	6ft. Chisel	136.3697	8.5	2200	4.5	84

#### A: Chisel Accessories - 5/8" hex

Part No.	Length	Blade Width	Applications
705.1100	9"	2"	Spark-resistant aluminum bronze for use in hazardous areas
705.1101	9"	1"	Flat chisel for sand cast chipping
705.1102	8"	4"	Asphalt cutter/paint removal/ general chipping applications
705.1106	9"	2"	Removal of linoleum from floor base
705.1112	8"	4"	Spark-resistant aluminum bronze for use in hazardous areas
705.2102	8"	4"	Floor tile removal
708.1101	1"	1-1/8" comb insert	Brick cleaning and reclamation (use with 8" long comb holder 708.1100)



Chisel

#### C: Needle Scaler Accessories

All long-reach scrapers are available as needle scalers by changing the scraper/chisel with the needle attachment P/N 415.3532. See page 14 for needles.

#### **B:** Scraper Accessories

(Assembly includes holder and 1 blade)

Assembly Part No.	Blade Pack	Blade Width	Applications
Flat			
431.3504	439.3504 (5 Blades)	4"	Adhesive and paint build up removal
431.3508	439.3508 (5 Blades)	8"	Paint and coating spillage removal
431.3512	439.3512 (4 Blades)	12"	Carpet and tile removal
Beveled			
431.3904	439.3524 (5 Blades)	4"	Stubborn adhesive removal
431.3908	439.3528 (5 Blades)	8"	Carpet and tile removal
431.3912	439.3522 (4 Blades)	12"	Adhesive removal

## Floor Scarifiers Gas • Electric • Pneumatic

Remove rust, scale, paint, adhesives and more from steel and concrete

#### Mounted Drum & TCT Cutter Set Included

CS Unitec's Trelawny™ Floor Scarifiers tackle the most demanding surface preparation and material removal applications. Ideal for the removal of coatings and corrosion from steel and concrete surfaces to prepare for re-coating. Produce an ideal keyed or grooved profile on concrete for waterproofing and non-slip surface applications.

- Depth control maximizes performance and extends cutter life
- Integrated vacuum connection and hold-to-run button
- Electric, pneumatic or gas power



- Removal of rust, scale, paint, adhesives and more
- Keyed or grooved profiles
- Roughing concrete







TFP 200 Cutters	Individual Cutter	Cutters/Spacers Required Per Drum	Drum Assembly
Wire Brushes	N/A	N/A	320.9620
Beam Cutters	320.5120	264 Pieces	320.1020SB
Star Cutters	320.3658	208 Pieces	320.1020SS
TCT Cutters and Spacers	320.5500 320.4140	80 Pieces 88 Pieces	320.1020ST
Milling Cutters (22mm)	320.5600	24 Pieces	320.1020SM
TCT Cutters (for grooving) and Spacers	320.5500 320.4140	20 Pieces 196 Pieces	320.1020G

Every TFP 200 machine includes mounted drum and TCT cutter set

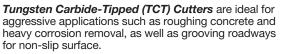
#### **Cutter Applications:**

Wire Brushes are ideal for cleaning loose rust, flaking coatings, & cement deposits.

Beam Cutters are ideal for light paint/corrosion removal, with minimal damage to substrate.

Star Cutters are ideal for the removal of

mastics and rubberized coatings.



Milling Cutters are ideal for the removal of plastic road markings without penetrating the surface.

> Scan To **Learn More**

#### Max Cutting Cutting Weight **Dimensions Model Number Motor Specifications Depth per Pass** Width (WxLxH) (lbs.) **TFP 200 Electric** 320.2342T 120V, 50/60 Hz, 1Ph, 1.5 HP 8" 149 1/8" 14" x 35" x 35" 320.2404T 230V, 50/60 Hz, 1Ph, 3 HP 1/8" 8" 14" x 35" x 35" 149 **TFP 200 Pneumatic** 1/8" 8" 320.2412T 165CFM @ 90 PSI, 3.5 HP 14" x 35" x 35" 99 TFP 200 Gas 8" 320.2400T Honda GX160 Gas, 5.5 HP 1/8" 14" x 35" x 35" 130

400V and 110V, 60hz, 3HP also available, contact CS Unitec for details | For handheld scarifier models see page 18



**TFP 200 Floor Scarifiers** 

## Floor Scarifiers Gas • Electric

# TFP 260 floor scarifier with 10" cutting width for medium to large jobs

#### **Mounted Drum & TCT Cutter Set Included**

Remove coatings and corrosion from steel and concrete surfaces to prepare for re-coating. Level and remove hard materials. Remove painted lines.

- Depth control maximizes performance and extends cutter life
- Integrated vacuum connection for dustfree operation
- Quick-lift drum lever for operator control
- Gas or electric power







Scan To Learn More

TFP 260 Cutters	Cutters/Spacers Individual Required Cutter Per Drum		Drum Assembly
Beam Cutters	326.5120	332 Pieces	326.1016DB
Star Cutters	326.3658	342 Pieces	326.1016DS
TCT Cutters and Spacers	320.7009 320.4160	123 Pieces 129 Pieces	326.1016ST
Milling Cutters (16mm)	320.5680	60 Pieces	326.1016DM
TCT Cutters (for grooving) and Spacers	320.7009 320.4160	36 Pieces 224 Pieces	326.1016GT

#### **TFP 260 Floor Scarifiers**

Every TFP 260 machine includes a mounted drum and TCT cutter set

Model Number	Motor Specifications	Max Cutting Depth per Pass	Cutting Width	Dimensions (WxLxH)	Weight (lbs.)
TFP 260 Gas					
326.2400T	Honda GX240 Gas, 8 HP	1/4"	10"	17" x 44" x 45"	408
TFP 260 Electric					
326.2406T	415V, 50/60 Hz, 3-Phase, 7.5 HP	1/4"	10"	17" x 44" x 45"	408

For handheld scarifier models, see page 18



## Hand-Held Scarifiers - Rotopeen™ Air Powered

Peening Preparation Tool (PPT) – ideal alternative to small-area shot blasting

CS Unitec's Genuine Trelawny™ Rotopeen™ hand-held scarifiers are the ideal alternative to small-area shot blasting for cleaning and preparing steel and concrete surfaces. They utilize Rotopeen™ 'C' flaps to offer a captive shot method of surface preparation.

 Integrated dust shroud for dust and debris collection, as well as cleaner, safer removal of lead-based paints and contaminated particles



Air Models 194.0405 and 194.C405, 4" cutting width



Above: Ergonomic rubber hand grip standard on all new 2" and 4" models. Provides grip for easier pushing along material.

#### **Applications include:**

- Aggressive removal of alkyds, adhesives, leadbased paints, mastics, coatings, corrosion, antiskid material & more
- Cleaning & preparing steel and concrete surfaces

See page 21 for dust extraction systems.

**HEAVY SCALING** 



**Optional Accessory** 

Above: Optional top handle attachment kit to replace rubber grip on 2" and 4" models. (P/N 312.Q450)

Hand-Held Scarifier Accessories

Nuclear

Ships decks

Construction

**Factory Floors** 

Swimming Pools

Bridge Maintenance

Pipeline Maintenance

Star Cutter P/N 312.S200 Aggressive removal

of thick coatings

Non-slip coatings

Plaster removal

Adhesive removal

Sealant removal

Beam Cutter
P/N 312.R200
Removal of hard coatings, less
aggressive than star cutter

Ceiling / wall paint removal

Floor marking removal

Adhesive removal

3M™ Rotopeen™ 'C' Flap

P/N 312.MRPC Removal of paint and rust to bare metal finish Produces SSPC 11 Finish

Radioactive waste removal/capture

General paint removal

Ceiling / wall paint removal

Floor marking removal

Paint / sealant removal

Protective coating removal

► SURFACE PROFILING



Star Cutter
Cutting Quantity

Width Required 2" 80 4" 160



Beam Cutter
Cutting Quantity

Width Required **2" 56** 

4" 112



Rotopeen™ 'C' Flap

Cutting Quantity Width Required

2" 6 4" 12

Pneumatic	Hand-Held	Scarifiers

I IICaiiia	tio i iu	ila ila	id Oot				
Model Number	CFM @ 90 PSI	Speed (RPM)	Cutting Width	Cutting Media	Weight (lbs.)	Vibration Levels m/s <sup>2</sup>	
194.0205	30	2700	2"	'C' Flaps	7.5	3.5	These models are
194.C205	30	2700	2"	Star Cutters	11.5	6	compatible with
194.0405	30	2700	4"	'C' Flaps	9	3.1	Star Cutters, Beam Cutters and
194.C405	30	2700	4"	Star Cutters	13.25	4.6	Rotopeen™ 'C' Flaps



Floor Models Available See Pages 16 & 17



## **Deck Descalers**

## Rapidly remove scale, rust, paint and other unwanted deposits

CS Unitec's Trelawny™ Trident Neptune Deck Descaler is ideal for the rapid removal of scale, rust, paint and other unwanted deposits on ship decks and other metal surfaces, leaving a receptive surface for priming/painting or coating application.

Dimensions

- 9' x 5/8" flexible shaft for wide coverage area
- Unique non-corrosive D-coupling with positive locking mechanism
- Two-skid base design keeps unit stable and upright; optional swivel base available



#### **Trident Neptune Deck Descalers**

Model Number	<b>Motor Specifications</b>	ISSA Number	IMPA Number	(RPM)	(LxWxH)
<b>Electric with Skid</b>	Base				
340.TN/S/110	110V / .75 HP	55.077.00	59 12 41	2850	106" x 8.3" x 11.4"
340.TN/S/220	220V / .75 HP	55.077.00	59 12 42	3450	106" x 8.3" x 11.4"

Standard equipment includes: 9' x 5/8" flexible shaft; heavy-duty leaf scaling head; 6-cutter scaling head; 6" dia. power brush, spanner set and hand guard.

**SAFEWRENCH® SAFE Striking Wrench** 

Hands-free – secures itself in any position



## **Prevent Hand Injuries**

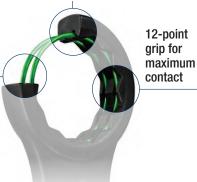
Operate hammer with 2 hands



- Manufactured of CRV30 chrome vanadium steel
- Black coated surface for maximum rust protection

High precision groove shape (0.05mm tolerance)





US Inch - I	mperial
Part No.	Bolt Siz
SW-3031S	1-1/4
SW-3036S	1-7/16
SW-3041S	1-5/8
SW-3046S	1-13/10
SW-3050S	2"
SW-3055S	2-3/16
SW-3060S	2-3/8
SW-3065S	2-9/16
SW-3070S	2-3/4

Metric	
Part No.	Bolt Size
SW-2024S	24mm
SW-2027S	27mm
SW-2030S	30mm
SW-2032S	32mm
SW-2036S	36mm
SW-2041S	41mm
SW-2046S	46mm
SW-2050S	50mm
SW-2055S	55mm
SW-2060S	60mm
SW-2065S	65mm
SW-2070S	70mm
SW-2075S	75mm



## Tools for Hot Work – Ex Zones (Ex)



CS Unitec's heavy-duty pneumatic and hydraulic power tools and non-sparking hand tools are specifically designed, manufactured and tested for use in hazardous areas and Ex Zones.



ATEX Certified Air and Hydraulic Tools

See page 83 for ATEX details or visit www.csunitec.com



For cutting steel and pipe up to 6" dia. See page 112-113



#### **PORTABLE HACKSAWS**

For on-site cutting of pipe up to 30" OD and structural steel See page 116-118



PORTABLE BAND **SAWS** 

Cut up to 9" See page 114-115



**CIRCULAR SAWS** 

7-1/2", 9" & 12-5/8" dia., cut 90° and 45° angles up to 4-3/4" deep See page 110-111



Explosion-proof **AXIAL FANS** 12" to 24" diameter

> ATEX IMPACT **WRENCHES**

Scan for



**MAGNETIC DRILLS** Air & Hydraulic

For drilling up to 4" dia. holes See page 54 - 56

## Safety Tools - Non-Sparking, Non-Magnetic

- Lifetime Warranty
- Non-sparking, non-magnetic, & corrosion-resistant safety tools
- Aluminum Bronze (AlBr) or Copper Beryllium (CuBe) alloys
- For Ex and hot work zones where hazardous, flammable or combustible materials are present
- · Hammers, wrenches, sockets, wedges, chisels and more
- Over 5000 different SKU's
- Produced in an ISO9001:2015

For use in Ex and Hot Work Zones







## **Dust Collection Vacuums**

**Dust Collection Vacuums with HEPA Filtration** 

For use Wet & Dry







UNITEC

POWERHOUSE BASIC

POWERHOUSE TOP

POWERHOUSE XI.

THE ULTIMATE

Specifications	Powerhouse Basic	Powerhouse TOP	Powerhouse XL	The Ultimate
Filter Cleaning	Automatic Electromagnetic	Automatic Electromagnetic	Automatic Electromagnetic	(((iPulse)))
Container Volume (gal.)	6.6	6.6	13.2	9.2
CFM	157	157	157	157
Weight (lbs.)	26.9	26.9	40.3	37
Power Cable/ Hose Reach (ft.)	42.6	42.6	42.6	42.6
Replacement Bags	10PK Fleece P/N 468495, 10PK Plastic P/N 468532	10PK Fleece P/N 468495, 10PK Plastic P/N 468532	10PK Fleece P/N 468501, 10PK Plastic P/N 468570	10PK Fleece P/N 468495, 10PK Plastic P/N 468532



Dustfixx Pre-Separator (Part No. 103402) - Catch large quantities of dust before reaching the main filter to extend filter life. Replacement Bag (P/N 468549)



Starbox (Part No. 468518) - For convenient carrying of vacuum accessories



Wide range of accessories, including but not limited to: vacuum hoses, nozzles, filters, filter bags, & more

## To Learn More about our Dust Collection Vacuums & Accessories, Scan Here:

## Air-Powered Dust Collection Vacuum – KAV 30 AIR



- Antistatic vacuum and air supply hose
- ATEX classified Ex II 2 GcT6 for use in Gas Zone 2 and Dust Zone 22
- Robust stainless steel construction
- Floor tool kit for general cleaning work
- Double filtration with optional 14" Permaflow filter
- Optional HEPA filter for collection of hazardous dust
- Disposable paper filter or reusable cloth bag for wet use

#### **KAV 30 AIR Vacuum Specifications**

Dry Model 303.10KAV30/D	Wet/Dry Model 303.10KAV30/WD
35	35
70 CFM	70 CFM
6.8 gal.	6.8 gal.
32 lbs.	32 lbs.
303.1030	303.1030
303.1060	303.1060
303.1005	303.1005
303.1003	303.1003
	35 70 CFM 6.8 gal. 32 lbs. 303.1030 303.1060 303.1005

CS Unitec make no claim that use of a vacuum will eliminate contaminants. Wear an approved respirator mask and follow all appropriate OSHA safety regulations for proper ventilation, dust handling, eye protection, etc. when using a dust extraction grinder and vacuum.



## **Portable Magnetic Drills**







#### MABasic Series

p. 28-31

Capacity: Ø 1-3/8" to 3-1/16" cutter Professional grade, versatile



#### **MAB 100 K**

p. 32-33

Capacity: Ø 1-3/8" cutter; Ø 1/2" twist drill Our lightest weight MAB Magnetic Drill Ever! Only 21.8 lbs!



#### **MAB 155 PRO** p. 34-35

Capacity: Ø 1-1/2" cutter For drilling in tight spaces



#### AutoMAB 350

p. 36

Capacity: ø 1-1/2" cutter Automatic feed – forward and reverse



#### AutoMAB 450

p. 37

Capacity: ø 2" cutter; ø 3/4" twist drill Automatic feed – forward and reverse



#### PipeMAB 200

p. 38

Capacity: ø 1-3/8" cutter; ø 1/2" twist drill Game changer for pipe drilling & more



#### PipeMAB 525

p. 39

Capacity: ø 2-1/2" cutter; ø 1" twist drill; ø 15/16" tapping 2-speed motor Game changer for pipe drilling & more



#### MAB 455 & MAB 455 SB

p. 40-41

Capacity: Ø 2-1/16" cutter; Ø 7/8" twist drill
Reversible, 2-gear motor
Swivel base (MAB 455 SB)



#### MAB 485 & MAB 485 SB

p. 42-43

Capacity: Ø 2-1/16" cutter; Ø 7/8" twist drill; Ø 15/16" tapping Reversible, 2-gear motor Swivel base (MAB 485 SB)



#### MAB 525 & MAB 525 SB

p. 44-45

Capacity: ø 2-1/2" cutter; ø 1" twist drill; ø 15/16" tapping Reversible, 2-gear motor Swivel base (MAB 525 SB)



#### **MAB 825 KTS**

p. 46-47

Capacity: ø 3-1/8" cutter; ø 1-1/4" twist drill; ø 1-3/16" tapping; ø 5" milling at 1" depth Portable magnetic mill drill for boring, slotting, etc.

Reversible, 4-gear motor



## MAB 825, MAB 825 V & MAB 845, MAB 845, WAB 845 V

p. 48-49

Capacity: Ø 4-1/16" cutter; Ø 1-1/4" twist drill; Ø 1-1/8" tapping Auto feed (MAB 825 V), Swivel base (MAB 845 & MAB 845 V,) Reversible, 4-gear motor



#### MAB 1300 & MAB 1300 V p. 50-52

Capacity: ø 6" cutter

ø 1-3/4" twist drill

ø 1-5/8" tapping

Reversible, 4-gear motor

Auto-feed and reverse (MAB 1300 V)

The ultimate in power

#### Warranty

Products of CS Unitec, Inc. are warranted to be free from defects in material and workmanship for one year from date of purchase. This warranty does not apply to normal wear or products which have been abused, misused, modified or repaired by someone other than CS Unitec, Inc. or its Authorized Service Representatives.

If a product proves defective in material or workmanship within one year after purchase, return it to CS Unitec, Inc. or an Authorized Service Center, transportation prepaid. CS Unitec, Inc. will, at its option, repair or replace defective products free of charge.

CS Unitec, Inc.'s sole liability and your exclusive remedy under this warranty is limited to repair or replacement of the defective product. There are no other warranties expressed or implied and CS Unitec, Inc. shall not be liable for incidental, consequential or special damages, or expenses excepting only the cost or expense of repair or replacement as described above.

#### Safety

Operators of any power tool should use appropriate safety precautions for work being performed. This includes safety chains, eye protection, hearing protection, gloves and more. Follow instructions included in operating manual.

## **Tools and Accessories**





Heavy-Duty Tap Holders, Tap Collets, & Reducing Adapters



#### - HB 4400

p. 55

Hydraulic power Capacity: ø 2-1/16" cutter; ø 1/2" twist drill

For marine, construction and underwater applications



#### AIRBOR™ AB-4300

p.54

Pneumatic power Capacity: ø 2-1/16" cutter; ø 1/2" twist drill ATEX for hazardous environments

#### 2 1345 0020

p. 56

Hydraulic power Capacity: ø 4" cutter; ø 1-1/4" twist drill; ø 1" tapping ATEX certified

#### Underwater Tools also available, see page 57

#### **Annular Cutters**

p. 58-69



#### 6-Series HSS Unibroach® p. 60-61

High-speed steel 7/16" to 5-1/8" diameter 1", 2" 3", 4", 6", 8" depth Metric & Special sizes available



#### 8-Series Armor Plated Unibroach™

For higher working temperatures 7/16" to 5-1/8" diameter 1". 2" and 3" depth Metric & Special sizes available



#### 9-Series TCT Hornet p. 64-65

Tungsten carbide-tipped 1/2" to 6" diameter 1", 2-3/8", 3-3/8", 4",6", 8" 10" depth Metric & Special sizes available



7-Series Cobalt	p. 66
10-Series One-Touch NK TCT	p. 67
4 & 47-Series Rail Cutters	p. 68
1 & 2 Series	

**Carbide-Tipped Hole Saws** 

# **Accessories**











**Pipe Drilling Solutions** Safe, secure drilling of pipes and tubular material p. 75

## Hand-Held Drills, Drive Units and More

p. 76-83







Electric, Slow-Speed Electric Drills & Drive Units	p. 76-77
Pneumatic Drills and Drive Units	p. 78
Corner Drills and Drive Units	p. 79
Pneumatic/Hydraulic Rotary Hammer Drills	p. 80
Pneumatic Woodboring Drills and AirPac	p. 81
Pneumatic/Hydraulic Nut Runners	p.82
ATEX Directive	p. 83

## Portable Magnetic Drilling Machines

## Fast, accurate hole cutting... on the job site or in the shop!



Designed for continuous operation, CS Unitec's portable magnetic drills are ideal for drilling structural steel and virtually any metal. We offer the most compact, powerful and reliable series of portable magnetic drills for holes up to 6" diameter. All CS United drills are heavy-duty for use in construction and industry. Our complete line includes electric, pneumatic and hydraulic tools. They are available for prompt delivery.

#### CS United is the industry leader in:

- Power-to-weight ratios
- Strongest clamping force with high-density (HD) dual-coil magnets
- Magnetic drills for tapping
- Annular Cutters: TiAIN, HSS, cobalt steel and carbide-tipped

#### Our drills have unique features:

- Longest drills stroke in the industry
- Variable-speed, multiple-geared models
- · Electric, pneumatic and hydraulic power
- Reversible motors for tapping
- Swivel base stand for hard-to-reach areas
- mm drill models for in place machining
- Patented pipe swivel base models

## Rugged construction and sophisticated functionality.



Intuitive magnets, ergonomic controls and simple operation for superior cuts.

#### **Overheating Protection with**



#### **COOLMAG™** Electromagnets

ensure that the magnet does not overheat. When the magnet is switched on for long periods of time, the coils could overheat or even burn out. The CoolMag feature reduces the power of the magnets when the drill motor is not active. Therefore, it won't build up heat.

CS United high-density dual-coil magnets are ground, not cast, and are wound into two circles to increase the surface area and density of the magnetic field.



**Twist Drilling** 



**Tapping** 



Reaming





Countersinking







## **Custom machines for unique applications**

Our engineers can create a drill, drill rig, or other application-specific arrangement to meet your needs.

For more information, or call 1-800 700-5919 for design assistance.











## IQ Magnetic System for Active Safety

#### Magnetic force is the key to safety and success.

The magnetic force of your magnet depends on a number of factors:

- Thickness of material being drilled
- Coatings or paint layers on material
- Chips, dirt or grease between the magnet and the material



Electronic Safety Shutoff Sensor

The **SAFEMAG™ System** measures whether the magnet has sufficient adhesive force on the material. An LED indicator on the switch panel warns you of insufficient magnetic force (Red Light) or tells you if the correct force is present (Green Light).



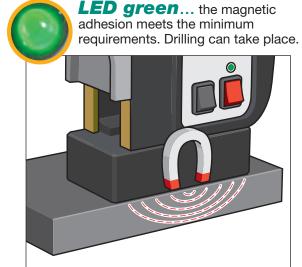
**LED red...** insufficient magnetic force. Drilling should not take place. Possible causes are too-thin material, coatings of paint, scale or zinc.











## Integrated cable routing: MAB Series

The new generation of our MAB portable magnetic drilling machines has been developed for increased safety. This includes complete cable routing within the casing.



No tearing or snapping off







Simple, ergonomic arrangement of controls for one-handed operation. Emergency-off function for quick shutdown.



High power at low speeds. Electronic torque control prevents damage to motor.

## Magnetic Drill Comparison Chart



		4	4.					1	The Real Property lies	
	MABasic 200	MABasic 400	MABasic 450	MABasic 850	MAB 100 K	MAB 155 PRO	AutoMAB 350	AutoMAB 450	PipeMAB 200	PipeMAB 525
Annular Cutters Diameter (ø)	up to ø 1-3/8"	up to ø 1-5/8"	up to ø 1-3/4"	up to ø 3-1/16"	1-3/8"	up to ø 1-1/2"	up to ø 1-1/2"	up to ø 2"	up to ø 1-3/8"	up to ø 2-1/2"
Twist Drills Diameter (ø)	up to ø 1/2"	up to ø 5/8"	up to ø 3/4"	up to ø 1-1/4"	up to ø 1/2"		up to ø 1/2"	up to ø 3/4"	up to ø 1/2"	up to ø 1"
Tapping Diameter (ø)										up to ø 15/16"
Countersinking Diameter (ø)										up to ø 2"
Reaming Diameter (ø)										
Stroke	6-1/3"	6-1/3"	6-1/3"	10"	2-3/4"	1-1/2"	6"	6"	6-1/3"	6-1/3"
Weight	27 lbs.	27 lbs.	29 lbs.	53 lbs.	21.8 lbs.	24 lbs.	33 lbs.	35-1/4 lbs.	27 lbs.	43 lbs.
Speed Range 1	450 RPM	430 RPM	250 RPM	110 RPM	460 RPM	460 RPM	460 RPM	250 RPM	450 RPM	70-280 RPM
Speed Range 2		760 RPM	450 RPM	175 RPM				450 RPM		180-580 RPM
Speed Range 3				245 RPM						
Speed Range 4				385 RPM						
REVERSIBLE										1
CoolMag									Patented Permanent Mag System	Patented Permanent Mag System
SafeMag System					1		1	1		
Electronic Safety Shutoff Sensor	1	1	1	1	1	1				
Special Features					Quick-change	Low Profile, LED Light	Automatic	Automatic	Patented Pipe Base	Patented Pipe Base
Morse Taper (MT)			MT2	MT3				MT2		MT3
Safety Friction Clutch										
<b>Torque Control</b>										1
Pipe Adapted or Adjustable Base									1	1
Magnet Size	6-5/8" x 3-1/3"	6-5/8" x 3-1/3"	6-5/8" x 3-1/3"	8-5/8" x 4-1/3"	6-1/3" x 3-1/8"	6-5/16" x 3-3/16"	6-5/8"x 3-1/3"	6-5/8"x 3-1/3"	10.5" L x 7.5" W x 3.5" H	10.5" L x 7.5" W x 3.5" H





		47	100			THE PERSON NAMED IN		ALL STATES	
MAB 455 MAB 455 SB	MAB 485 MAB 485 SB	MAB 525 MAB 525 SB	MAB 825 KTS	MAB 825 MAB 825 V MAB 845 MAB 845 V	MAB 1300 MAB 1300 V	AIRBOR™	HB 4400	2 1345 0020	
up to ø 2-1/16"	up to ø 2-1/16"	up to ø 2-1/2"	up to ø 3-1/8"	up to ø 4-1/16"	up to ø 6"*	up to ø 2-1/16"	up to ø 2-1/16"	up to ø 4"	Max. hole diameter up to 6"
up to ø 7/8"	up to ø 7/8"	up to ø 1"	up to ø 1-1/4"	up to ø 1-1/4"	up to ø 1-3/4"	up to ø 5/8"	up to ø 1/2"	up to ø 1-1/4"	Max. twist drilling up to 1-3/4"
	up to ø 15/16"	up to ø 15/16"	up to ø 1-3/16"	up to ø 1-3/16"	up to ø 1-5/8"			up to Ø 1"	Max. tapping up to 1-5/8"
	up to ø 1-5/8"	up to ø 2"	up to ø 2"	up to Ø 2"	up to ø 3"			up to Ø 2"	
	up to ø 7/8"	up to ø 7/8"	up to ø 1-1/4"	up to ø 1-1/4"	up to ø 2"			up to ø 1-1/8"	
6-1/3"	6-1/3"	6-1/3"	10"	10"	3.35" (12" w/ out retainer)	up to 10-1/4"	up to 3-3/4"	12"	
29 lbs.	29 lbs.	35 lbs.	99 lbs.	55 lbs.	112 lbs.	43 lbs.	48-1/2 lbs.	50 lbs.	
250 RPM	50-250 RPM	70-280 RPM	40-110 RPM	40-110 RPM	30-80 RPM	400 RPM	0-630 RPM	40-250 RPM	Pneumatic Hydraulic
450 RPM	100-450 RPM	180-580 RPM	65-175 RPM	65-175 RPM	50-120 RPM				
			140-360 RPM	140-360 RPM	130-350 RPM				
			220-600 RPM	220-600 RPM	210-550 RPM				
	1	1	1	1	1			1	Allows thread cutting
√ .	1	1	1	1	1				Overheating protection
√	1	1	1	1	1				Magnet adhesion indicator
√	1	1	J	J	1				Shuts down motor if magnetic contact lost
Quick-change	Quick-change	Quick-change	X,Y-MILLING	Automatic - Quick-change	Automatic	Air & ATEX	Hydraulic	Hydraulic & ATEX	
MT2	MT2	MT3	MT3	MT3	MT4			MT3	
			V	J	1				
		1	1	1	1				
1	1	1	1	1					Adjustable Base or Patented Pipe Base Adapter
6-5/8" H x 3-1/3" W	6-5/8" x 3-1/3"	7-1/8" x 3-1/2"	8-11/16" x 8-11/16"	8-5/8" x 4-1/3"	14" x 4-3/4"	8-3/4" x 3-1/2"	7-1/4" x 3"	11-11/16" x 4"	

\*Annular cutter drilling capacity 6\* diameter up to 1\* thick in carbon steel - Use TCT cutters for large diameters







## Heavy-duty, purpose-built, single-speed workhorse



#### Powerful • Reliable

- Strong 8.2 Amp motor
- Compact, lightweight and portable - 12-1/4" high, 27 lbs.

#### Drill up to 1-3/8" dia.

- Uses annular cutters up to 1-3/8" dia.; 6-1/3" stroke
- Twist drilling capacity up to 1/2" dia.
- 3-1/3" stroke with included geared chuck
- Internal lubrication system

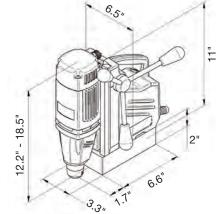


With included 1/2" geared chuck (IBC 18), this model easily converts to a standard drill press with a 3 1/3" stroke for conventional twist drills.













Standard Equipment includes lubrication
bottle, 3/4" weldon arbor, 1/2" geared chuck,
safety strap, carabin hook, allen keys, pilot pin
and carrying case.

MABasic 200 Specific	cations
Motor Power	8.2 Amp / 110 Volt
Weight	27 lbs.
Hole Capacity	1 <sup>3</sup> / <sub>8</sub> " dia.
Twist Drill Capacity	1/2" dia.
Speed	450 RPM
Magnet Base Size	6 <sup>5</sup> /8" L x 3 <sup>1</sup> /3" W
Dimensions	$12^{1}/_{4}$ " H x 9" L x $6^{1}/_{2}$ " W
Magnetic Force (1" plate)	3080 lbs.
Arbor Bore	3/4" Weldon Shank
Internal Lubrication	Oil Bottle Included









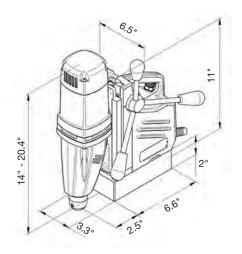
## Two gears - powerful and reliable

#### Powerful • Reliable

- 9.5 Amp double-insulated motor
- 3/4" direct arbor

#### Drill up to 1-5/8" dia.

- Uses annular cutters up to 1-5/8" dia.
- Twist drilling capacity up to 5/8" dia.
- 3-1/3" stroke with chuck
- · Internal lubrication system
- Compact and lightweight







With included 1/2" geared chuck (IBC 18), the MABasic 400 easily converts to standard drill press with a 3<sup>1</sup>/<sub>3</sub>" stroke for conventional twist drills.

**Equipped with Electronic** Safety Shutoff Sensor (see p. 25

#### **MABasic 400 Specifications Motor Power** 9.5 Amp / 110 Volt 27 lbs. Weight **Hole Capacity** 15/8" dia. **Twist Drill Capacity** 5/8" dia. Speed 430 / 760 RPM (2 gears) 65/8" L x 31/3" W Magnet Base Size **Dimensions** 14" H x 9<sup>1</sup>/<sub>2</sub>" L x 6<sup>1</sup>/<sub>2</sub>" W Magnetic Force (1" plate) 3080 lbs. 3/4" Weldon Shank **Arbor Bore** Internal Lubrication Oil Bottle Included



**Learn More!** 



chuck, safety strap, carabin hook, allen keys, pilot pin and carrying case.











## Professional-grade, two-speed versatility



#### Powerful • Reliable

- 10.5 Amp double-insulated motor
- MT2 3/4" direct arbor with automatic cooling

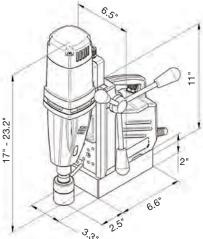
#### Drill up to 1-3/4" dia.

- Uses annular cutters up to 1-3/4" dia.
- Twist drilling capacity up to 3/4" dia.
- Internal lubrication system
- Compact and lightweight





With included 3/4" geared chuck (IBC 22), the MABasic 450 easily converts to standard drill press for conventional twist drills.









Scan to Learn More!

	MABasic 450 Sp	ecifications
	Motor Power	10.5 An
32	Weight	29 lbs.

Motor Power	10.5 Amp / 110 Volt
Weight	29 lbs.
Hole Capacity	1 <sup>3</sup> / <sub>4</sub> " dia.
Twist Drill Capacity	3/4" dia.
Speed	250 / 450 RPM (2 gears)
Magnet Base Size	6 <sup>5</sup> /8" L x 3 <sup>1</sup> /3" W
Dimensions	17" H x 9 <sup>1</sup> / <sub>2</sub> " L x 6 <sup>1</sup> / <sub>2</sub> " W
Magnetic Force (1" plate)	3080 lbs.
Arbor Bore	3/4" Weldon Shank
Spindle	MT2
Internal Lubrication	Oil Bottle Included



#### Standard Equipment

includes: ZIA 219KN - MT2 to 3/4 weldon internal lubrication tool holder, lubrication bottle, 3/4" geared chuck, safety strap, carabin hook, allen keys, pilot pin and carrying case.







## 4-gear, powerful motor for demanding jobs

#### Powerful • Reliable

- 16 Amp double-insulated motor
- MT3 3/4" direct arbor with automatic cooling
- 19-3/8" high, 53 lbs.
- High-speed, 4-speed gearbox

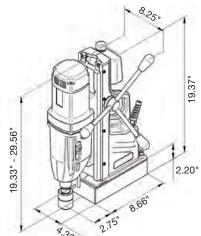
#### Drill up to 3-1/16" dia.

- Uses annular cutters up to 3-1/16"; 10" stroke
- Twist drilling capacity up to 1-1/4" dia.
- Internal lubrication system



With included 3/4" chuck (IBC 21), this model easily converts to a standard drill press for conventional twist drills.







Scan to Learn More!

MABasic 850 Sp	ecifications
Motor Power	16 Amp

Motor Power	16 Amp / 110 Volt
Weight	53 lbs.
Hole Capacity	3 <sup>1</sup> /16" dia.*
Twist Drill Capacity	1 <sup>1</sup> / <sub>4</sub> " dia.
	1: 110 RPM, 2: 175 RPM
Speed	3: 245 RPM, 4: 385 RPM
Magnet Base Size	8 <sup>5</sup> /8" L x 4 <sup>1</sup> /3" W
<b>D</b>	19 <sup>3</sup> /8" H x 11 <sup>5</sup> /8" L x 8 <sup>1</sup> /4"
Dimensions	W
Magnetic Force (1" plate)	6000 lbs.
Arbor Bore	3/4" Weldon Shank
Spindle	MT3
Internal Lubrication	Included

<sup>\* 3-1/16&</sup>quot; cutters have 1-1/4" Weldon shank. Part No. ZIA 30/32 arbor is required.

#### Standard Equipment includes

ZIA 319KN - MT3 to 3/4 weldon internal lubrication tool holder,3/4" geared chuck, safety strap, carabin hook, allen keys, pilot pin and carrying case.



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## **MAB 100 K NEW!**



## Ultra Lightweight, Compact and Fast to Use!



#### Powerful • Reliable

- 9 Amp double-insulated motor
- 3/4" Quick Change Keyless Chuck

#### Drill up to 1-3/8" dia.

- Uses annular cutters up to 1-3/8" dia.
- Twist drilling capacity up to 1/2" dia.
- Internal lubrication system
- Compact and lightweight

Equipped with Electronic Safety Shutoff Sensor (see p. 25)

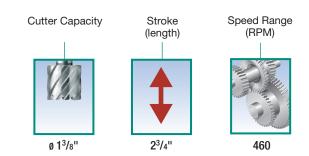
## Weldon Shank Twist Drill Bits Available, see page 72



# OUR LIGHTEST WEIGHT MAB MAGNETIC DRILL EVER Only 21.8lbs!



Quick-Change Chuck for Fast, Easy Cutter Changeover!

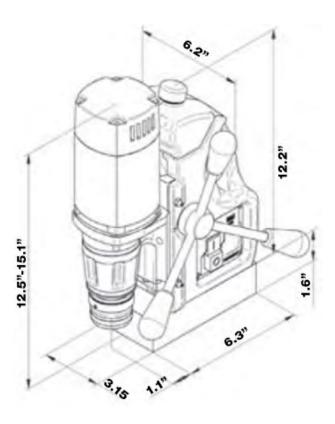




## MAB 100 K Specifications









See pages 58-68 for our Annular Cutters - HSS, Carbide-tipped, Armor Plated, & Cobalt. Available up to 6" Dia. and 10" Depth.



## **MAB 100 K Specifications**

Motor Power	9 Amp / 110 Volt
Weight	21.8 lbs.
Hole Capacity	1%" dia.
Twist Drill Capacity	1/2" dia.
Stroke	2-3/4"
Speed	460 RPM
Magnet Base Size	6 <sup>5</sup> /8" L x 3 <sup>1</sup> /3" W
Dimensions	12- <sup>1</sup> / <sub>2</sub> " H x 7 <sup>2</sup> / <sub>5</sub> " L x 6 <sup>1</sup> / <sub>5</sub> "
Difficusions	W
Magnetic Force (1" plate)	3080 lbs.
Arbor Bore	3/4" Quick Change Keyless
AIDUI DUIE	Chuck
Internal Lubrication	Oil Bottle Included

#### **Standard Equipment**

1 Magnetic drilling machine
1 3/4" Weldon Quick Change chuck (affixed)
1 Heavy-Duty Carrying Case
1 1" Pilot Pin
1 2" Pilot Pin
1 Safety strap
1 Operating manual
1 Warranty certificate



Scan to Learn More!









## MAB 155 PRO NEW!



## Horizontal motor mount for drilling in tight spaces



#### Powerful • Reliable

- 9.25 Amp doubleinsulated motor
- Ultra compact, 7-3/32" high
- Ratchet-style advancing mechanism for work in spaces with limited clearance
- Lightweight, 24 lbs.
- Intelligent electronic torque control
- Designed for continuous use

#### Drill up to 1-1/2" dia.\*

 Uses annular cutters up to 1-1/2" dia.

#### **Integrated Safety**

- Emergency-off function
- Internal cable routing
- Simple, ergonomic arrangement of controls for one-handed operation

Internal cable routing protects the motor power cord from external damage











\* Model MAB 155 PRO accepts cutters with a 3/4" weldon shank and a maximum depth of cut of 1-1/2".

Switches for power and magnet adhesion are arranged for simple, uncomplicated operation.



cutters

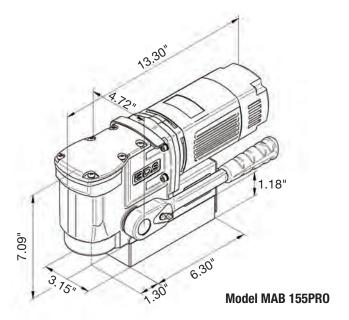


## MAB 155 PRO NEW!





## Specifications





Advancing ratchet can be mounted on either the left or right side of the MAB 155PRO.

MAB 155 PRO Specifications	
Part No.	MAB 155PRO
Motor Power	9.25 Amp / 110 Volt
Weight	24 lbs.
Hole Capacity	1 <sup>1</sup> / <sub>2</sub> " dia.
Speed	320 RPM
Magnet Base Size	$1^{-17}/32$ " H x $3^{-5}/32$ " L x $7^{-9}/32$ " W
Dimensions	$7^{-1}/8$ " H x $13^{-5}/16$ " L x $4^{-3}/4$ " W
Magnetic Force (1" plate)	2640 lbs.
Arbor Bore	3/4" Weldon Shank



See pages 58-68 for our Annular Cutters - HSS, Carbide-tipped, Armor Plated, & Cobalt. Available up to 6" Dia. and 10" Depth.



#### Scan to Learn More!

#### **Standard Equipment**

- 1 Magnetic drilling machine
- 1 Pilot pin
- 1 Heavy-Duty Carrying Case
- 1 Safety chain
- 1 Hexagon socket screw key SW 4
- 1 Operating manual
- 1 Warranty certificate



Standard **Equipment** also includes safety strap, carabin hook and allen keys.







## AutoMAB 350



## Compact drill with automatic feed – forward and reverse



#### Powerful • Reliable

- 10.5 Amp double-insulated motor
- Designed for continuous use
- Lightweight, 33 lbs.
- Automatic feed with auto stop and retraction
- Power feed automatically controls drill pressure to maintain optimal RPM and feed rate

#### Drill up to 1-1/2" dia.

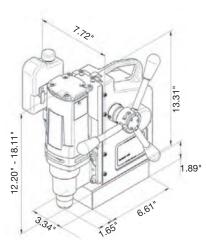
- Uses annular cutters up to 1-1/2" dia.
- Twist drilling capacity up to 1/2" dia.
- 6" stroke, 3-1/3" stroke with chuck
- Integrated cutting oil reservoir
- Automatic internal lubrication

#### **Integrated Safety**

• Simple, ergonomic arrangement of controls for one-handed operation



With optional 1/2" geared chuck (IBC 18), this model easily converts to a standard drill press with a 3 1/3" stroke for conventional twist drills.







Scan to
Learn More!

Motor Power	10.5 Amp / 110 Volt
Weight	33 lbs.
Hole Capacity	1 <sup>1</sup> / <sub>2</sub> " dia.
Drilling Depth	2-3/8" with pilot pin 4-3/8" without pilot pin
Speed	460 RPM
Magnet Base Size	6 <sup>5</sup> /8" L x 3 <sup>1</sup> / <sub>3</sub> " W
Dimensions	12 <sup>1</sup> / <sub>4</sub> " H x 8 <sup>3</sup> / <sub>4</sub> " L x 7 <sup>3</sup> / <sub>4</sub> " W
Magnetic Force (1" plate)	3750 lbs.
Arbor Bore	<sup>3</sup> / <sub>4</sub> " Weldon Shank
Automatic Lubrication	Included
Spindle	_

**Model AutoMAB 350 Specifications** 

**Standard Equipment** includes auto lubrication, safety strap, carabin hook, allen keys and heavy-duty carrying case.



## *AutoMAB 450*







#### Powerful • Reliable

- 10.5 Amp double-insulated motor
- Designed for continuous use
- Lightweight, 33 lbs.
- · Automatic feed with auto stop and retraction
- Power feed automatically controls drill pressure to maintain optimal RPM and feed rate

#### Drill up to 2" dia.\*

- Uses annular cutters up to 2" dia. (\*with TCT Carbide cutters, 1-3/4" dia. with all other annular cutters)
- Twist drilling capacity up to 3/4" dia.
- 6" stroke, 3-1/3" stroke with chuck
- Integrated cutting oil reservoir
- Automatic internal lubrication

#### **Integrated Safety**

• Simple, ergonomic arrangement of controls for one-handed operation



An optional 3/4" geared chuck is also available (Part No.

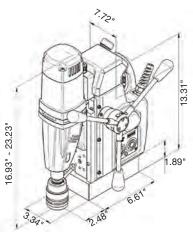
### **Model AutoMAB 450 Specifications**

Motor Power	10.5 Amp / 110 Volt
Weight	35 <sup>1</sup> / <sub>4</sub> lbs.
Hole Capacity	2" dia.*
Drilling Depth	2-3/8" with pilot pin 4-3/8" without pilot pin
Speed	250 / 450 RPM (2 gears)
Magnet Base Size	6 <sup>5</sup> /8" L x 3 <sup>1</sup> /3" W
Dimensions	$16^{7}/8$ " H x $9^{1}/8$ " L x $7^{3}/4$ " W
Magnetic Force (1" plate)	3750 lbs.
Arbor Bore	<sup>3</sup> / <sub>4</sub> " Weldon Shank
Automatic Lubrication	Included
Spindle	MT2

**Standard Equipment** includes ZIA 219KN - MT2 to 3/4 weldon internal lubrication tool holder, lubrication bottle, safety strap, carabin hook, MT2 drift key, allen keys and heavy-duty carrying case.



Scan to **Learn More!** 









<sup>\* 2&</sup>quot; dia. with TCT Annular Cutters; 1-3/4" capacity with all other annular cutters



## PipeMAB 200 NEW!



## Game Changers for Pipe Drilling, Tapping, & More



#### Powerful • Reliable

- Ideal for drilling on pipe, flat or curved surfaces
- Strong magnets adhere to material as thin as 9/64" (3mm)
- 8.2 Amp double-insulated motor
- Designed for continuous use
- Lightweight, 27 lbs

#### Drill up to 1-3/8" dia.

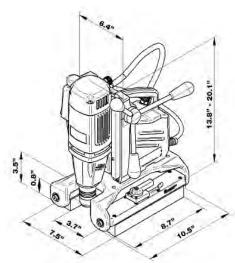
- Uses annular cutters up to 1-3/8" dia.
- Twist drilling capacity up to 1/2" dia.
- 6-1/3" stroke, 3-1/3" stroke with chuck
- Elongated tool holder for maximum utilization of machine stroke
- Integrated cutting oil reservoir
- Automatic internal lubrication

#### **Integrated Safety**

• Highly stable, permanent magnet stays active independent of electricity



With optional 1/2" geared chuck (IBC 18), this model easily converts to a standard drill press with a 31/3" stroke for conventional twist drills.







Scan to Learn More!

Model PipeMAB 200	Specifications
Motor Power	8.2 Amp / 110 Volt
Weight	35 lbs.
Hole Capacity	1 <sup>3</sup> /8" dia.
Stroke	6-1/3"
Speed	450 RPM
Magnet Base Size	10.5" L x 7.5" W x 3.5" H
Dimensions	113.75" H x 10.5" L x 7.5" W
Magnetic Force (1" plate)	2250 lbs.
Arbor Bore	<sup>3</sup> / <sub>4</sub> " Weldon Shank
Automatic Lubrication	Included

**Standard Equipment** includes auto lubrication, safety strap, carabin hook, allen keys and heavy-duty carrying case.

➤ Annular Cutters: pages 58-68 ➤ Accessories: pages 70-75



# PipeMAB 525 NEW!







#### Powerful • Reliable

- Ideal for drilling on pipe, flat or curved surfaces
- Strong magnets adhere to material as thin as 9/64" (3mm)

  14.5 Amp double-insulated motor
- Designed for continuous use
- Lightweight, 43 lbs

#### Drill up to 2-1/2" dia.

- Uses annular cutters up to 2-1/2" dia.
- Twist drilling capacity up to 1" dia.
- 6-1/3" stroke
- Integrated cutting oil reservoir
- Automatic internal lubrication

#### **Integrated Safety**

· Highly stable, permanent magnet stays active independent of electricity

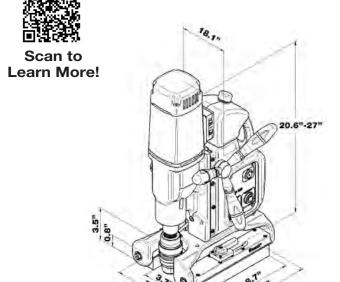


geared chuck is also available (Part No.

### **Model PipeMAB 525 Specifications**

14.5 Amp / 110 Volt
43 lbs.
2-1/2"dia.*
6-1/3"
70-280 & 180-580 RPM
10.5" L x 7.5" W x 3.5" H
20.7" H x 10.5" L x 7.5" W
2250 lbs.
3/4" Weldon Shank
Included
MT3

**Standard Equipment** includes auto lubrication, safety strap, carabin hook, MT#3 to 3/4" Weldon, MT3 drift key, allen keys, operation manual, warranty certificate and heavy-duty carrying case.



➤ Annular Cutters: pages 58-68 ➤ Accessories: pages 70-75



<sup>\* 2-1/2&</sup>quot; dia. drilling capacity for pipes 8" OD and larger. For smaller pipe maximum drilling diameter is 2"



## MAB 455 & MAB 455 SB

#### Powerful • Reliable

- 10.5 Amp doubleinsulated motor
- 17-1/4" high, 29 lbs.
- 2-speed oilbath gearbox, ideal for annular cutters and twist
- Designed for continuous use
- Intelligent electronic torque control

#### Drill up to 2-1/16" dia.

- Uses annular cutters up to 2-1/6" dia.
- Twist drilling capacity up to 7/8" dia.
- Integrated cutting oil reservoir
- Automatic internal lubrication
- Swivel base (model MAB 485 SB)

#### **Keyless Cutter Mount**

- · Quick-change keyless cutter system for 3/4" Weldon shank, standard
- Also includes manual arbor for 3/4" Weldon shank (MT2) with set screws



With included 3/4" chuck (IBC 22), this model easily converts to a standard drill press for conventional twist drills.



Internal cable routing protects the motor power cord from external damage

**Equipped with Electronic** Safety Shutoff Sensor (see p. 25)



Model MAB 455 SB features a swivel base providing 20° movement left and right and 5/8" forward and backward.

Electronics





**Cutter Capacity** 

Ø 2<sup>1</sup>/<sub>16</sub>

ø 7/8" / ø 15/8

Twist Drill /

Countersink

ø 7/8" /

ø 15/16"

Ream /

Tap



Stroke



Protection STOP CoolMag<sup>™</sup>

**Overheat** 

Indicator

(CW/CCW)

SafeMag<sup>™</sup>

➤ Annular Cutters: pages 58-68 ➤ Accessories: pages 70-75

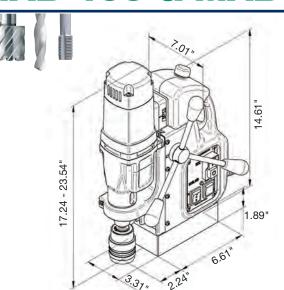


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## MAB 455 & MAB 455 SB







**Model MAB 455** & MAB 455 SB



Scan to **Learn More!** 

#### Model MAB 455 & MAB 455 SB Specifications

Motor Power	10.5 Amp / 110 Volt
Weight	29 lbs.
Hole Capacity	2 <sup>1</sup> / <sub>16</sub> " dia.
Twist Drill Capacity	7/8" dia.
Speed	250 / 450 RPM
Magnet Base Size	6 <sup>5</sup> /8" L x 3 <sup>1</sup> /3" W
Dimensions	17 <sup>1</sup> / <sub>4</sub> " H x 11 <sup>5</sup> / <sub>8</sub> " L x 7" W
Magnetic Force (1" plate)	3750 lbs.
Arbor Bore	<sup>3</sup> / <sub>4</sub> " Weldon Shank
Spindle	MT2
Automatic Lubrication	Included
Swivel Base	Order MAB 455 SB



### **Standard Equipment**

- 1 Magnetic drilling machine
- 1 Heavy-Duty Carrying Case
- 1 Quick-change arbor system KEYLESS Weldon 3/4"
- 1 Manual arbor with set screws, Weldon 3/4", MT2
- 1 Geared chuck, 3/4"
- 2 Pilot pins 1" and 2" depth
- 1 Safety chain
- 1 Drift key MT2
- 1 Warranty certificate





Shown with optional Pipe Saddle Clamp System for safe, secure drilling of pipes and tubular material. See page 71 for details.

➤ Annular Cutters: pages 58-68 ➤ Accessories: pages 70-75





## MAB 485 & MAB 485 SB



## Versatile for workshop and assembly applications



#### Powerful • Reliable

- 10.5 Amp doubleinsulated motor
- 17-1/4" high, 29 lbs.
- High-speed, variable-speed oilbath gearbox, ideal for annular cutters and twist drills
- Designed for continuous use
- Intelligent electronic torque control

#### Drill up to 2-1/16" dia. Tap up to 15/16" dia.

- Uses annular cutters up to 2-1/6" dia.
- Twist drilling capacity up to 7/8" dia.
- Tapping capacity 3/16" to 15/16" dia.
- Integrated cutting oil reservoir
- Automatic internal lubrication
- Swivel base (model MAB 485 SB)

#### **Keyless Cutter Mount**

- Quick-change keyless cutter system for 3/4" Weldon shank, standard
- Also includes manual arbor for 3/4" Weldon shank (MT2) with set screws



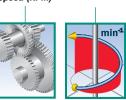
With included 3/4" chuck (IBC 22), this model easily converts to a standard drill press for conventional twist drills.





Model MAB 485 SB features a swivel base providing 20° movement left and right and 5/8" forward and backward.

Twist Drill / 2-gear Variable **Cutter Capacity** Ream / Stroke Countersink Tap (length) Speed (RPM)  $\emptyset 2^{1}/16$ ø 7/8" / ø 15/8 61/3" 50-250 ø 7/8" / ø 15/16" 100-450



Variable-speed

Control

**Electronics** 

STOP CoolMag™

**Overheat** 

Protection

Magnet Force

Indicator



Reversible

SafeMag<sup>™</sup>

➤ Annular Cutters: pages 58-68 ➤ Accessories: pages 70-75

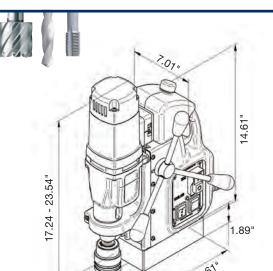


## MAB 485 & MAB 485 SB Specifications









**Model MAB 485** & MAB 485 SB







### Model MAB 485 & MAB 458 SB Specifications

Motor Power	10.5 Amp / 110 Volt
Weight	29 lbs.
Hole Capacity	2 <sup>1</sup> / <sub>16</sub> " dia.
Twist Drill Capacity	7/8" dia.
Speed	50-250 and 100-450 RPM
Magnet Base Size	6 <sup>5</sup> /8" L x 3 <sup>1</sup> /3" W
Dimensions	$17^{1}/_{4}$ " H x $11^{5}/_{8}$ " L x 7" W
Magnetic Force (1" plate)	3750 lbs.
Arbor Bore	<sup>3</sup> / <sub>4</sub> " Weldon Shank
Spindle	MT2
Automatic Lubrication	Included
Swivel Base	Order MAB 485 SB

### **Standard Equipment**

- 1 Magnetic drilling machine
- 1 Heavy-Duty Carrying Case
- 1 Quick-change arbor system KEYLESS Weldon 3/4"
- 1 Manual arbor with set screws, Weldon 3/4", MT2
- 1 Geared chuck, 3/4"
- 2 Pilot pins 1" and 2" depth
- 1 Safety chain
- 1 Drift key MT2

Tap collet adapters - 1/4", 3/8", 1/2" and 3/4"

1 Warranty certificate





Shown with optional Pipe Saddle Clamp System (part no. ZRO250 for safe, secure drilling of pipes and tubular material. See page 75 for details.

Annular Cutters: pages 58-68 > Accessories: pages 70-75





## MAB 525 & MAB 525 SB







#### Powerful • Reliable

- 14.5 Amp doubleinsulated motor
- 19" high, 35 lbs.
- High-speed, 2-speed oilbath gearbox, ideal for annular cutters and twist drills
- · Designed for continuous use
- Intelligent electronic torque control

#### Drill up to 2-1/2" dia. Tap up to 15/16" dia.

- Uses annular cutters up to 2-1/2" dia.
- Twist drilling capacity up to 1" dia.
- Tapping capacity up to 15/16" dia.
- Integrated cutting oil reservoir
- Automatic internal lubrication
- Swivel base (model MAB 525 SB)

#### **Keyless Cutter Mount**

- Quick-change keyless cutter system for 3/4" Weldon shank
- Also includes manual arbor for 3/4" Weldon shank (MT3) with set screws

#### **Integrated Safety**

- Green/Red LED magnetic force indicator for safe operation
- Internal cable routing
- Simple, ergonomic arrangement of controls for one-handed operation

Twist Drill /

Countersink

• Emergency-off function

Model MAB 525 SB features a swivel base providing 20° movement left and right and <sup>5</sup>/8" forward and backward.





**Cutter Capacity** 

ø 1" / ø 2"

ø 7/8" / ø 15/16"

Ream /

Тар



Stroke

(length)



180-580

2-gear Variable

Speed (RPM)

Variable-speed

Control

**Electronics** 



**Overheat** 

Protection

Magnet Force

Indicator

Reversible

(CW/CCW)

SafeMag<sup>™</sup>



➤ Annular Cutters: pages 58-68 ➤ Accessories: pages 70-75

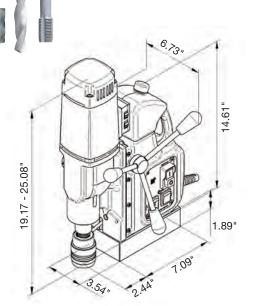


CoolMag™

## MAB 525 & MAB 525 SB Specifications







Model MAB 525 & MAB 525 SB





Scan to Learn More!



#### Model MAB 525 & MAB 525 SB Specifications

Motor Power	14.5 Amp / 110 Volt
Weight	35 lbs.
Hole Capacity	2 <sup>1</sup> / <sub>2</sub> " dia.
Twist Drill Capacity	1" dia.
Speed	70-280 and 180-580 RPM
Magnet Base Size	7 <sup>1</sup> /8" L x 3 <sup>1</sup> /2" W
Dimensions	19" H x 11 <sup>3</sup> / <sub>4</sub> " L x 6 <sup>3</sup> / <sub>4</sub> " W
Magnetic Force (1" plate)	4500 lbs.
Arbor Bore	<sup>3</sup> / <sub>4</sub> " Weldon Shank
Spindle	MT3
Automatic Lubrication	Included
Swivel Base	Order MAB 525 SB

### **Standard Equipment**

- 1 Magnetic drilling machine
- 1 Quick-change arbor system KEYLESS Weldon 3/4"
- 1 Manual arbor with set screws, Weldon 3/4", MT3
- 1 Geared chuck, 3/4"
- 2 Pilot pins 1" and 2" depth
- 1 Safety strap
- 1 Drift key MT3

Tap collet adapters - 1/4", 3/8", 1/2" and 3/4"

- 1 Heavy-Duty carrying case
- 1 Operating manual
- 1 Set of Allen Keys
- 1 Warranty certificate



See pages 58-68 for our Annular Cutters - HSS, Carbide-tipped, Armor Plated, & Cobalt. Available up to 6" Dia. and 10" Depth.





Annular Cutters: pages 58-68 > Accessories: pages 70-75





## MAB 825 KTS



## Versatile machine with adjustable X and Y positioning



#### Powerful • Reliable

- 16 Amp double-insulated motor
- 4-speed oilbath gearbox for applications requiring high power
- Designed for continuous use
- Infinitely variable torque control and full-wave control electronics
- Ideal for drilling, boring and slotting applications
- Includes servo-assisted drilling feature to help maintain feed pressure during operation



- Multi-axis positioning
- Uses annular cutters up to 3-1/8" dia.
- Twist drilling capacity up to 1-1/4" dia.
- 10" stroke
- Integrated cutting oil reservoir
- Automatic internal lubrication

#### **Integrated Safety**

- Simple, ergonomic arrangement of controls for one-handed operation
- Emergency-off function



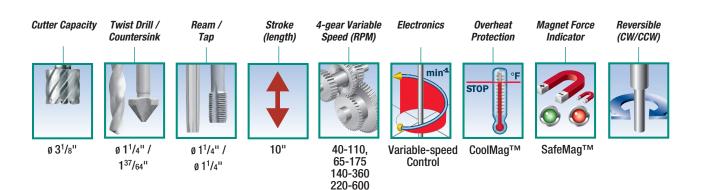






Model MAB 825 KTS features multiaxis positioning, allowing the drill to be adjusted up to 4-3/4" forward/ backward and up to 4-3/8" left/right after magnet is adhered to surface. Ideal for job site drilling, boring and slotting applications where dismantling is not feasible.

## 2021 REDDOT WINNER INNOVATIVE PRODUCT



➤ Annular Cutters: pages 58-68 ➤ Accessories: pages 70-75



## **MAB 825 KTS**

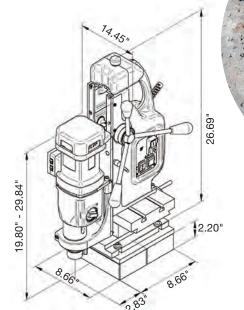




Cutter capacity 31/8" dia.







#### **Chuck Collet Tool Holder Set with Case**

Part No. ZSF 316 (included) can hold most standard end mills with shanks from 1/8" to 5/8" dia. (3mm to 16mm dia.). Kit includes:

- MT3 collet holder with threaded adapter piece
  - 15 collets for shanks diameters 1/8" to 5/8" (3 to 16mm)
    - 2 collet tightening spanner wrenches





Scan to **Learn More!** 

#### **Standard Equipment**

- 1 Magnetic drilling machine
- 1 Chuck collet tool holder set
- 1 Heavy-duty carrying case with wheels
- 1 Safety strap
- 1 Set of Allen Keys
- 1 Operating manual
- 1 Warranty certificate

### **Model MAB 825 KTS Specifications**

Motor Power	16 Amp / 110 Volt
Weight	99 lbs.
Hole Capacity	3 <sup>1</sup> / <sub>8</sub> " dia.
Twist Drill Capacity	1 <sup>1</sup> / <sub>4</sub> " dia.
Tapping Capacity	1 <sup>3</sup> /16" dia.
Speed	40-110, 65-175 140-360, 220-600 RPM
Magnet Base Size	8 <sup>11</sup> / <sub>16</sub> " L x 8 <sup>11</sup> / <sub>16</sub> " W
Dimensions	19 <sup>3</sup> / <sub>4</sub> " H x 13" L x 14 <sup>1</sup> / <sub>2</sub> " W
Magnetic Force (1" plate)	6600 lbs.
Arbor Bore	3/4" and 11/4", standard
Spindle	MT3
Automatic Lubrication	Included

Optional 3/4" geared chucks available (Part No. IBC 21)

➤ Annular Cutters: pages 58-68 ➤ Accessories: pages 70-75



# MAB 825/845, MAB 825 V/845 V SUNITED TO SUNI



## Ideal for steel engineering, plant construction and more



4 Gears

with Variable

Speed

**Twist Drilling** 

**Tapping** 

#### Powerful • Reliable

- 16 Amp double-insulated motor
- · 4-speed oilbath gearbox for applications requiring high power
- · Designed for continuous use
- Infinitely variable torque control and full-wave control electronics

#### Drill up to 4-1/16" dia. Tap up to 1-3/16" dia.

- Uses annular cutters up to 4-1/16" dia.
- Twist drilling and reaming capacities up to 1-1/4" dia.
- Tapping capacity up to 1-3/16" dia.
- Integrated cutting oil reservoir
- Automatic internal lubrication.
- Automatic feed (model MAB 825 V), ideal for production applications
- Swivel base (model MAB 845)

#### **Keyless Cutter Mount**

- Quick-change keyless cutter system for 3/4" Weldon shank
- Arbor for 1-1/4" Weldon shank
- Also includes manual arbor for 3/4" Weldon shank (MT3) with set screws

#### **Integrated Safety**

- Green/Red LED magnetic force indicator for safe operation
- Internal cable routing
- Simple, ergonomic arrangement of controls for one-handed operation
- Emergency-off function



#### MAB 825 MAB 825 V MAB 845

Standard model with 16 Amp motor

Includes automatic feed - ideal for production applications

Includes 30° movement left and right and 3/4" forward and backward

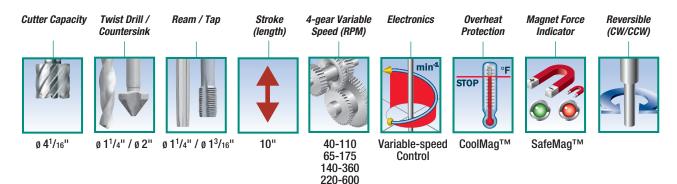
### **MAB 845 V**

Includes automatic feed & 30° movement left and right and 3/4" forward and

Reaming

**Countersinking** 

See pages 52 & 72-74 for Tap Holders and Accessories







## **Specifications**

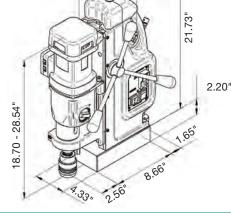






Model MAB 825, 825 V, 845, 845 V





With an optional 3/4" geared chuck (Part No. IBC 21), this model easily converts to a standard drill press for conventional twist drills.

Model MAB 825 & 845 Specifications			
Motor Power	16 Amp / 110 Volt		
Weight	55 lbs.		
Hole Capacity	4 <sup>1</sup> / <sub>16</sub> " dia.		
Twist Drill Capacity	1 <sup>1</sup> / <sub>4</sub> " dia.		
Tapping Capacity	1 <sup>3</sup> / <sub>16</sub> " dia.		
Speed	40-110, 65-175, 140-360, 220-600 RPM		
Magnet Base Size	8 <sup>5</sup> / <sub>8</sub> " L x 4 <sup>1</sup> / <sub>3</sub> " W		
Dimensions	18 <sup>5</sup> /8" H x 14 <sup>7</sup> /16" L x 9 <sup>7</sup> /16" W		
Magnetic Force (1" plate)	6600 lbs.		
Arbor Bore	$^{3}/_{4}$ " and $1^{1}/_{4}$ ", standard		
Spindle	MT3		
Automatic Lubrication	Included		
Automatic Feed Model	Order MAB 825 V, MAB 845 V		
Swivel Base Model	Order MAB 845, MAB 845 V		

### **Standard Equipment**

- 1 Magnetic drilling machine
- 1 Quick-change arbor system KEYLESS Weldon 3/4"
- 1 Manual arbor with set screws, Weldon 3/4", MT3
- 1 Arbor 1<sup>1</sup>/<sub>4</sub>" Weldon, MT3\*
- 4 Pilot pins 1", 2", 3" and 4" depth
- 1 Safety strap
- 1 Hexagon socket screw key SW 6
- 1 Drift key MT3
- 1 Operating manual
- 1 Set of allen keys
- 1 Warranty certificate
- 1 Heavy-Duty Carrying Case with wheels







Model MAB 845 & MAB 845 V features a swivel base providing 30° movement left and right and 3/4" forward and backward.

Model MAB 825 V & MAB 845 V features automatic forward and reverse motor for faster drilling, and increased cutter life. See page 48

#### **Rolling Transport Case**

Robust transport case with wheels, carrying handle and sturdy closures. Included with MAB 825/845 - protect your drill from waterand dust with this rugged case.



<sup>\*</sup> Optional accessory for MAB 825 V, MAB 845 V

Annular Cutters: pages 58-68 ➤ Accessories: pages 70-75





## MAB 1300 & 1300V



## Large holes – up to 6" diameter Tapping up to 15/8" diameter





#### Powerful • Reliable

- 20 Amp double-insulated motor
- 34-1/2" high, 112 lbs.
- 4-speed oilbath gearbox for applications requiring high power
- Designed for continuous use
- Infinitely variable torque control and full-wave control electronics

#### Drill up to 6" dia.\* Tap up to 1-5/8" dia.

- Uses annular cutters 7/16" to 6" dia., 1" and 2" depth 7/16" to 6" dia., 3" to 8" depth\*\*
- Twist drilling up to 1-3/4" uses MT4, countersinking up to 3" dia.
- Tapping up to 1-5/8"
- Reaming up to 2"
- Automatic internal lubrication

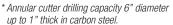
#### **Integrated Safety**

- Green/Red LED magnetic force indicator for safe operation
- Equipped with Electronic Safety Shutoff Sensor

• Emergency-off function

Ideal for use with TCT Carbide cutters up to 6" dia. - see pages 60-61.





\*\* 3" depth cutters or longer require purchase of ZIA 432 KN adapter.

**Cutter Capacity** 



Stroke 4-gear Variable (length) Speed (RPM)

3.35" (12" without retainer)



30-80 50-120 130-350

**Electronics Overheat** Protection



Magnet Force Indicator







**Twist Drilling** 



**Tapping** 



Reaming



Countersinking



**Optional Special-Purpose Cutting Tool** 

ø 6" up to 1" thick in carbon steel







ø 1<sup>3</sup>/<sub>4</sub>" " / ø 3"



Ream / Tap

ø 2" / ø 1<sup>5</sup>/8"





210-550



CoolMag™ Variable-speed Control





Reversible

(CW/CCW)

SafeMag™

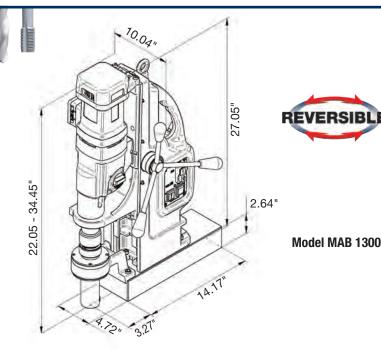


## **Specifications**















MODEL MAD 1000 & N	IAB 1000 V Opcomoduons
Motor Power	20 Amp / 110 Volt
Weight	112 lbs.
Hole Capacity	6" dia.*
Twist Drill Capacity	1 <sup>3</sup> / <sub>4</sub> " dia.
Tapping Capacity	1 <sup>5</sup> /8" dia.
Speed	30-80, 50-120, 130-350, 210-550 RPM
Magnet Base Size	14" L x 4 <sup>3</sup> / <sub>4</sub> " W
Dimensions	27.05" H x 19 <sup>1</sup> / <sub>2</sub> " L x 10" W
Magnetic Force (1" plate)	23,600 lbs.
Arbor Bore	1 <sup>1</sup> / <sub>4</sub> " ( <sup>3</sup> / <sub>4</sub> " adapter included)
Spindle	MT4

Model MAB 1300 & MAB 1300 V Specifications

Order MAB 1300 V

1-800-700-5919

Included

Standard Equipment
1 Magnetic drilling machine
1 Heavy-duty carrying case on wheels
1 Arbor adapter to 3/4" Weldon
1 Safety strap
1 Hexagon socket screw key SW 6
1 Drift key MT4
1 Operating manual
1 Set of allen keys
1 Warranty certificate



Learn More!



➤ Annular Cutters: pages 58-68 ➤ Accessories: pages 70-75



**Automatic Lubrication** 

**Automatic Feed Model** 

<sup>\*</sup> Annular cutter drilling capacity 6" diameter up to 1" thick in carbon steel. Use TCT cutters for large diameters - see p. 60-61

## MAB 1300 Accessories



### Tapping Accessories for MAB 1300, MAB 825, MAB 845 and CSU 100/3RL

#### Heavy-duty Tap Holders

• Positive, accurate driving of larger-sized taps

• No slippage or tap damage

• Tap shank square engages with square drive socket

• 3 set screws secure tap in holder

Morse Taper 3 3 3 3	Tap Size 5/8" 3/4" 7/8" 1" 1-1/8"	Tap Shank Diameter .480 .590 .697 .800 .896	<b>Tap Shank Square</b> .366 .442 .523 .600 .672
3	1-1/4" 1-1/2"	1.02	.765 .925
4 4 4 4 4 4 4	3/4" 7/8" 1" 1-1/8" 1-1/4" 1-3/8" 1-1/2" 1-5/8"	.590 .697 .800 .896 1.021 1.108 1.233 1.305	.442 .523 .600 .672 .766 .831 .925
	Taper 3 3 3 3 3 3 4 4 4 4 4 4 4	Taper 3ize 3 5/8" 3 3/4" 3 7/8" 3 1-1/8" 3 1-1/4" 3 1-1/2"  4 3/4" 4 7/8" 4 1-1/8" 4 1-1/4" 4 1-3/8" 4 1-1/2"	Taper         Size         Diameter           3         5/8"         .480           3         3/4"         .590           3         7/8"         .697           3         1"         .800           3         1-1/8"         .896           3         1-1/4"         1.02           3         1-1/2"         1.23           4         3/4"         .590           4         7/8"         .697           4         1"         .800           4         1-1/8"         .896           4         1-1/4"         1.021           4         1-3/8"         1.108           4         1-1/2"         1.233

Part No. **GSW 444** quick-change tapping chuck with MT4 connection (for MAB 1300). Collets not included. *GSW 444 and GSS.4xx collet set shown below.* 

Order Number	Tap Collet	Shank Diameter	Square Drive
GSS.420	20mm	16mm	12mm
GSS.422	22mm	18mm	14.5mm
GSS.427	27mm	20mm	16mm
GSS.433	33mm	32mm	20mm
GSS.442	42mm	32mm	24mm





#### Tap Collets and Reducing Adapters

**Tap Collets** with 3/4" or 1-1/4" Weldon shank all threads shown are ASA Standard (or DIN 376 for metric)

Thread	Order No.	Thread	Order No.
1/4	TCM 1/4	10mm	<b>ZGA</b> 010
5/16	TCM 5/16	12mm	<b>ZGA 012</b>
3/8	TCM 3/8	14mm	<b>ZGA 014</b>
7/16	TCM 7/16	16mm	<b>ZGA</b> 016
1/2	TCM 1/2	18mm	<b>ZGA</b> 018
9/16	TCM 9/16	20mm	<b>ZGA 020</b>
5/8	TCM 5/8	22mm	<b>ZGA 022</b>
11/16	TCM 11/16	24mm	<b>ZGA 024</b>
3/4	TCM 3/4	27mm	<b>ZGA 027</b>

1-1/4" Weldon shank: 1-1/4" Weldon shank: 1 TCM 1 33mm ZGA 033 1-1/4 TCM 1-1/4 42mm ZGA 042 **Bushing** – Reduces 1-1/4" Weldon shank to 3/4" Weldon shank Order No. **ZAP 200** 



#### **Reducing Sleeves**



Order No. **ZRH 430 for MT 4:3** (adapts MT4 to MT3)

# **Unibroach® Large-Hole Cutting**Cut holes up to 6" dia., 10" deep!

Available in TCT Carbide, HSS, Cobalt and ARMOR-PLATED Unibroach™



Drill perfect holes without runout

- Pilot pin included up to 4" depth\*
- Standard with <sup>3</sup>/<sub>4</sub>" or 1<sup>1</sup>/<sub>4</sub>" shank diameters
- More cutting teeth to distribute the load evenly increase tool life and achieve faster feed rates
- Use on milling machines, drill presses, CNC and other equipment





<sup>\*</sup> For sizes over 4" depth pilot pins can be purchased separately.

## Automatic Magnetic Drills



## **AutoMAB 350 & 450**

- Power feed controls drill pressure to maintain optimal RPM and feed rate
- Continuosly optimized drilling pressure for extend annular cutter life and reduced cutter breakage
- Increased productivity one operator can run multiple machines
- Manual drilling mode on all models



**Drilling capacity** 1 1/2" dia.





2" dia.



## MAB 825 V / MAB 845

- Drill up to  $4-\frac{1}{1}6$ " dia.\*, Tap up to  $1-\frac{1}{8}$ " dia, Ream up to 2" dia.
- Power feed controls drill pressure to maintain optimal RPM and feed rate
- Extend annular cutter life and reduce cutter breakage, reducing cutting tool cost
- Ideal for production applications
- Swivel base model available, order MAB 845 V. The largest capacity automatic-feed, swivel base magnetic drill in the industry.

See Pages 48-49 for Full Specifications







Drill manually

**AUTOMATIC FEED BOTH UP & DOWN** 

## **MAB 1300 V**

## Largest capacity automatic magnetic drill in the industry!

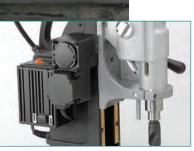


**AUTOMATIC FEED BOTH UP & DOWN** 



• Drill up to 6" dia.\*, Tap up to 1-5/8" dia, Ream up to 2" dia.

- Power feed controls drill pressure to maintain optimal RPM and feed rate
- Extend annular cutter life and reduce cutter breakage, while increasing productivity and profit
- Ideal for production applications



See Pages 50-51 for Full Specifications



**Drill automatically** 



Drill manually





## AIRBOR™ AB-4300

Motor and magnet are powered completely by compressed air

## Pneumatic power for hazardous environments

ATEX Certified

#### Safe • Reliable

 Inherently safer than electromagnetic drills in hazardous atmospheres and wet environments where electricity requires "hot work permits"

ATEX certified

 Industry's first completely air-operated magnetic drill – NO ELECTRICITY!

 Fail-safe permanent magnet is activated "on" and "off" by air pressure; in the event of a loss of air flow, the magnet will not disengage

• 1600 lbs. magnet holding strength

### Drill up to 2-1/16" dia.

- Uses annular cutters up to 2-1/16" dia.
- Twist drilling capacity up to 5/8" dia.
- Powerful 1.6 HP drill motor
- Long drill stroke up to 10<sup>1</sup>/<sub>4</sub>"

 Pressurized coolant system lubricates cutter and reduces risk of sparking





With a geared chuck adapter (Part No. IBC 18) and extra rack (Model No. AB-4300-2R), AIRBOR™ easily converts to a standard drill press with a 7¹/₂" stroke.

Pressurized lubrication system (Part No. 9 4002 0020 N)



Scan to Learn More!

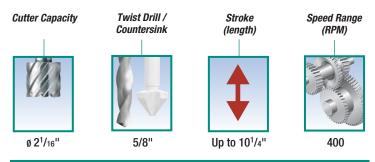




AB-4300-2R shown with extra rack up (left) and extra rack down (right).

#### **Model Comparison**

AB-4300-2R		AB-4300-2			
	Drill Stroke				
w/cutters w/chuck $10^{1}/4$ " $7^{1}/2$ "		w/cutters 47/8"	w/chuck 1 3/4"		
	Height				
closed 13 <sup>1</sup> /2"	open 22"	closed 13 <sup>1</sup> /2"	open 17 <sup>1</sup> /2"		
Weight					
43 lbs.	20 kg	38 lbs.	18 kg		



Motor Power (Pneumatic)	1.6 HP	
Air Consumption @ 90 PSI	64 CFM (1/2" NPT Air Connection)	
Hole Capacity	2 <sup>1</sup> / <sub>16</sub> " dia.	
No Load Speed	400 RPM	
Magnet Base Size	8 <sup>3</sup> / <sub>4</sub> " L x 3 <sup>1</sup> / <sub>2</sub> " W	
Dimensions	13 <sup>1</sup> / <sub>2</sub> " H x 12 <sup>1</sup> / <sub>2</sub> " L x 4 <sup>3</sup> / <sub>4</sub> " W	
Magnetic Force (1" plate)	1600 lbs.	
Arbor Bore	<sup>3</sup> / <sub>4</sub> " Weldon Shank	
Automatic Lubrication	Included	
Stroke Length 4 <sup>7</sup> /8"	Order Model AB-4300-2	
Stroke Length 10 <sup>1</sup> / <sub>4</sub> "	Order Model AB-4300-2R	
·	· · · · · · · · · · · · · · · · · · ·	

➤ Annular Cutters: pages 58-68 ➤ Accessories: pages 70-75



# HB 4400 for Subsea Drilling



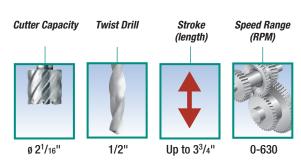
## Hydraulic for marine and construction – works underwater

#### Safe • Reliable

- Ideal for industrial, construction, marine and mining applications
- Drill structural steel and other metals
- Hydraulic motor safe for underwater use
- Manually operated permanent magnet with ratchet control has holding strength of 1300 lbs.

#### Drill up to 2-1/16" dia.

- Uses annular cutters up to 2-1/16" dia.
- Twist drilling capacity up to 1/2" dia.
- Automatic lubrication







Model HB 4400 Specifications		
Motor Power (Hydraulic)	1.5 HP	
Weight	48 <sup>1</sup> / <sub>2</sub> lbs.	
Hole Capacity	2 <sup>1</sup> / <sub>16</sub> " dia.	
Twist Drill Capacity	<sup>1</sup> /2" dia.	
No Load Speed, Variable	0-630 RPM	
Hydraulic Supply	Flow 6.5 GPM @ 2000 PSI	
Magnet Base Size	7 <sup>1</sup> / <sub>4</sub> " L x 3" W	
Dimensions	18 <sup>1</sup> / <sub>2</sub> " H x 12 <sup>1</sup> / <sub>2</sub> " L x 7" W	
Magnetic Force (1" plate)	1300 lbs.	
Automatic Lubrication	Included	

Hoses not included

➤ Annular Cutters: pages 58-68 ➤ Accessories: pages 70-75



Learn More!



# Model 2 1345 0020 - Hydraulic

## Ideal for use in Ex Zones and subsea applications

**ATEX Certified** 

#### Safe • Reliable

- Hydraulic motor safe for underwater use
- Ideal for industrial, construction, marine and mining applications
- ATEX Certified EX II 2Gc IIB T5
- Drill structural steel and other metals
- Manually operated permanent magnet with lever control has holding strength of 1874 lbs.

#### Drill up to 4" dia.

- Uses annular cutters up to 4" dia.
- Twist drilling capacity up to 1-1/4" dia.
- Tapping capacity up to 1" dia.



Scan to Learn More!



### Model 2 1345 0020 Specifications

Motor Power (Hydraulic)	3.4 HP	
Weight	50 lbs.	
Hole Capacity	4" dia.	
Twist Drill Capacity	1 <sup>1</sup> / <sub>4</sub> " dia.	
No Load Speed, Variable	40-250 RPM	
Hydraulic Supply	Flow 5.3 GPM @ 2000 PSI	
Magnet Base Size	11 <sup>11</sup> / <sub>16</sub> " L x 4" W	
Dimensions	$21^{1}/_{2}$ " H x $15^{7}/_{16}$ " L x $7^{3}/_{4}$ "	
Difficusions	W	
Magnetic Force (3/8" plate)	1874 lbs.	
Spindle	MT3	
Larger Magnet	Order Model 2 1345 0020 12.835" x 7.480" magnet 3,307 lbs. magnetic force	

#### Pipe Clamp - Model 2 1330 8500





Optional clamp allows right angle drilling of steel, cast iron, cement and plastic pipes up to 19-1/2" dia.

Extension chains available for pipes up to 43-1/4" dia. P/N 5 1201 9030\* – For pipes up to 31-1/2" (800mm) *P/N 5 1201 9020\* – For pipes up to 43-1/4" (1100mm)* 

\* 2 pieces needed for one clamp

Twist Drill / **Cutter Capacity** Countersink



Ø 11/4" / Ø 2"



ø 1<sup>1</sup>/8" / ø 1"

Ream / Tap



Stroke

(length)



Variable

Speed (RPM)



Reversible (CW/CCW)

> Standard Equipment includes hydraulic hose set, coolant bottle, arbor adapter to 3/4" Weldon, arbor adapter to 1-1/4" Weldon, safety chain, drift key, allen keys and carrying case.

➤ Annular Cutters: pages 58-68 ➤ Accessories: pages 70-75



## **Underwater Tools**

### Hydraulic- and air-powered tools for use in subsea applications

Over 50 models of underwater tools available visit csunitec.com/underwater learn more about CS Unitec's wide range of underwater tools

### **Grinders - Hydraulic**

1 1580 0060 N Underwater Hydraulic Horizontal Grinder, 1.3HP, 7000 RPM,

Twist throttle, straight grinding wheels

1 1585 0010 Underwater Hydraulic Angle Grinder, 1.3HP, 5500 RPM,

Lever throttle, grinding wheels up to 7"

1 5080 0020 Underwater Hydraulic Peanut Die Grinder, 1.0 HP,

11,500 RPM, Lever throttle, 1/4" collet

1 2060 0010 Underwater Hydraulic Vertical Grinder, 4.75 HP,

3600 RPM, grinding wheels up to 9"

#### Rotary Hammer Drills - Hydraulic and Pneumatic

2 2404 0030 Underwater Air Rotary Hammer Drill, SDS Plus, 1" cap. in concrete, 0-3000 BPM, .5 HP, 90 PSI / 21 CFM

2 2417 0010 Underwater Air Rotary Hammer Drill, SDS Max, 2" cap. in concrete, 0-2500 BPM, 1.2 HP, 90 PSI / 21 CFM

2 2426 0010 Underwater Hydraulic Rotary Hammer Drill, SDS Plus, 1" cap. in concrete, 0-3400 BPM, .8 HP; includes built-in pressure reducing valve

2 2418 0020 Underwater Hydraulic Rotary Hammer Drill, SDS Max, 2" cap. in concrete, 2500 BPM, 1.75 HP, includes pressure reducing valve

### **Core Drills - Hydraulic and Pneumatic**

2 1317 0030 Underwater Hydraulic Core Drill, 3" max. dia., 3.6 HP, 380/900/1800 RPM

2 1335 0010 Underwater Pneumatic Core Drill, 3" max. dia., 3.8 HP, 300/700/1350 RPM

### **Impact Wrenches - Hydraulic and Pneumatic**

6 1316 0070 3/4" Air Impact Wrench, 1-1/8" (M 30) max. bolt size, 995 ft-lbs. torque

6 1316 0060 1" Air Impact Wrench, 1-1/8" (M 30) max. bolt size, 995 ft-lbs. torque

6 1515 0010 3/4" Hydraulic Impact Wrench,

1" (M 27) max. bolt size, 1220 ft-lbs. torque

6 1520 0010 1" Hydraulic Impact Wrench,

1-3/8" (M 36) max. bolt size, 1840 ft-lbs. torque

**Woodboring Drills - Pneumatic** See page 81

Circular Saws - Hydraulic See page 110-111

Reciprocating Saws - Hydraulic and Air See page 112-113

Portable Band Saws - Air, Elelctric, Hydraulic See page 114-115

Hacksaws - Hydraulic See page 116-118

















Caution: User must follow all appropriate safety regulations when choosing a tool for their particular working environment.



## **Annular Cutters**

## Achieve burr-free finished holes, without predrilling or stepdrilling

Precision-ground flutes provide efficient chip clearance, increasing drilling productivity and decreasing cutter breakage





#### **Benefits of CS Unitec's Cutter Design:**

Double-action tooth geometry cuts, splits and ejects chips more efficiently,

- increasing cutting speed
- reducing tooth load
- minimizing tool wear
- lengthening cutter life

Engineered with a tapered inner wall for smooth, easy slug ejection.

Center hole for pilot pin accurately aligns the cutter, allows for internal lubrication and removes the slug.

Perfect drilling to close tolerances without runout.
The result: a burr-free finished hole.



Pilot Pin included with everv annular cutter up to 4" DOC

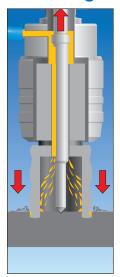
## **Pilot Pins: How they work...**

### 1: Centering



The pilot pin accurately centers cutter over area to be drilled.

#### 2: Oiling



During drilling, the pilot pin retracts and allows internal coolant to reach the cutting

#### 3: Ejecting



When hole is complete. the slug is automatically ejected from the cutter.

#### 6-Series HSS Unibroach™ Annular Cutters - Pages 60-61

Fully Ground Dual-Action, HSS Annular Cutters - Metric, Stack and 32nd Size Cutters also Available

Cutting depth: 1" 2" 3" 4" 6" 8" 7/16" - 5-1/8" 3/4" - 5-1/8" 3/4" - 6" Drilling ø: 7/16" - 5-1/8" 3/4" - 6" 3/4" - 6"

#### 8-Series ARMOR-PLATED Unibroach™ Annular Cutters – Pages 62-63

Fully Ground HSS with TiAIN Coating Annular Cutters - Metric, Stack and 32nd Size Cutters also Available

Cutting depth: Drilling ø: 7/16" - 5-1/8" 7/16" - 5-1/8" 3/4" - 5-1/8"

## 9-Series Unibroach™ TCT Hornet Annular Cutters – Pages 64-65

Annular Cutters with Sintered Tungsten Carbide Tips - Metric, Stack and 32nd Size Cutters also Available

Cutting depth: 2-3/8" 3-3/8" 4" 6" 8" 10"

1/2" - 2" 1/2" - 5-1/8" 3/4" - 5-1/8" 3/4" - 6" 3/4" - 6" 3/4" - 6" 3/4" - 6" Drilling ø:

\* 1-3/8" depth for diameters larger than 1-1/2"

#### 7-Series Cobalt Unibroach™ Annular Cutters – Page 66

Fully Ground High Cobalt Annular Cutters

Cutting depth: 1" 2" 3"

7/16" - 5" 3/4" - 5" Drilling ø: 7/16" - 5"

#### 4-Series TCT Rail Cutters - Page 68

Cut holes up to 1-11/16" dia. in railroad track

Cutting depth: 1-3/8" 3/4"- 1-11/16"

10-Series One-Touch TCT - Page 67

Drilling ø:

#### Compatible with Nitto Kohki & other auto-feed machines

Cutting depth: 1" 2" 3"

Drilling ø: 7/16" - 5" 7/16" - 5" 3/4" - 5" 3/4" - 5"



#### 47-Series Lightning Cobalt Rail Cutters - Page 68

Cut holes up to 1-11/16" dia. in railroad track

Cutting depth: 1-1/4"

Drilling ø: 3/4"- 1-11/16"

> 1 & 2 Series TCT Hole Saws for metal cutting available up to 4-1/2" diameter See page 69 for more information





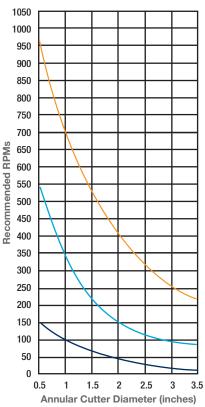
## **Unibroach® Annular Cutters**

### High-speed steel for drilling 3x faster than twist drills



Annular Cutter Recommended Revolutions Per Minute

Recommended Feed Rate: .002 - .004 inches per revolution



Annular Cutters are the standard hole-making drills in the industry. Ideal for heavy-duty use on-site or in the shop, our HSS Unibroach™ cutters are available in the following sizes:

Drill Depth	1"	2"	3"	4"	6"	8"
Diameter	to	ø <sup>7</sup> / <sub>16</sub> " to ø 5 <sup>1</sup> / <sub>8</sub> "	to	ø <sup>3</sup> /4" to ø 6"	ø <sup>3</sup> / <sub>4</sub> " to ø 6"	ø <sup>3</sup> /4" to ø 6"

Metric, Stack and 32<sup>nd</sup> Size Cutters also Available. *Every annular cutter up to 4*" *DOC includes a pilot pin.*\*

- CNC precision ground for fast penetration, accuracy and long life
- Flutes run the length of the cutter for efficient chip clearance, increased drilling productivity and decreased cutter breakage
- Drill holes 3 times faster than twist drills
- Produce reamed-quality, burr-free holes and solid slugs
- Reduce machine size and weight
- Cutting edges are resharpenable
- Eliminate time-consuming, costly pilot holes and step drilling

HSS Cutters must be used with lubricant. See page 70 for CS Unitec lubricants and cutting oil.



Aluminum 200 ft./min.

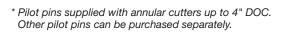
Mild Steel (Carbon) 80 ft./min.

High Tensile Steel (Stainless) 30 ft./min.



Scan to Learn More!

HSS Annular Cutter kits are also available



**Unibroach® Stack Cutters** are available in diameters from <sup>9</sup>/<sub>16</sub>" to 1 <sup>1</sup>/<sub>8</sub>" in 1", 2" and 3" depths. Drill multiple layers of steel without stopping to remove the center slug. Please contact us or consult our price list for more information.



## **6-Series HSS** Metric & Stack Sizes Available

1" Depth		2" Depth		3" De	3" Depth*	
Order No.	<b>D</b> iameter	Order No.	<b>D</b> iameter	Order No.	Diameter	
6-1-114	7/16"	6-1-214	7/16"	N/A		
6-1-116	1/2"	6-1-216	1/2"	N/A		
6-1-118	9/16"	6-1-218	9/16"	N/A		
6-1-120	5/8"	6-1-220	5/8"	N/A		
6-1-122	11/16"	6-1-222	11/16"	6-1-322	11/16"	
6-1-124	3/4"	6-1-224	3/4"	6-1-324	3/4"	
6-1-126	13/16"	6-1-226	13/16"	6-1-326	13/16"	
6-1-128	7/8"	6-1-228	7/8"	6-1-328	7/8"	
6-1-130	15/16"	6-1-230	15/16"	6-1-330	15/16"	
6-1-132	1"	6-1-232	1"	<u>6-1-332</u>	1"	
6-1-134	1-1/16"	6-1-234	1-1/16"	6-1-334	1-1/16"	
6-1-136	1-1/8"	6-1-236	1-1/8"	6-1-336	1-1/8"	
6-1-138	1-3/16"	6-1-238	1-3/16"	6-1-338	1-3/16"	
6-1-140	1-1/4"	6-1-240	1-1/4"	6-1-340	1-1/4"	
6-1-142	1-5/16"	6-1-242	1-5/16"	6-1-342	1-5/16"	
6-1-144	1-3/8"	6-1-244	1-3/8"	6-1-344	1-3/8"	
6-1-146	1-7/16"	6-1-246	1-7/16"	6-1-346	1-7/16"	
6-1-148	1-1/2"	6-1-248	1-1/2"	6-1-348	1-1/2"	
6-1-150	1-9/16"	6-1-250	1-9/16"	6-1-350	1-9/16"	
6-1-152	1-5/8"	6-1-252	1-5/8"	6-1-352	1-5/8"	
6-1-154	1-11/16"	6-1-254	1-11/16"	6-1-354	1-11/16"	
6-1-156	1-3/4"	6-1-256	1-3/4"	6-1-356	1-3/4"	
6-1-158	1-13/16"	6-1-258	1-13/16"	6-1-358	1-13/16"	
6-1-160	1-7/8"	6-1-260	1-7/8"	6-1-360	1-7/8"	
6-1-162	1-15/16" 2"	6-1-262	1-15/16"	6-1-362	1-15/16"	
6-1-164	2-1/16"	6-1-264	2-1/16"	6-1-364 6-1-366	2-1/16"	
6-1-166	2-1/10	6-1-266	2-1/10	0-1-300	2-1/10	
6-1-168	2-1/8"	6-1-268	2-1/8"	6-1-368	2-1/8"	
6-1-170	2-3/16"	6-1-270	2-3/16"	6-1-370	2-3/16"	
6-1-172	2-1/4"	6-1-272	2-1/4"	6-1-372	2-1/4"	
6-1-174	2-5/16"	6-1-274	2-5/16"	6-1-374	2-5/16"	
6-1-176	2-3/8"	6-1-276	2-3/8"	6-1-376	2-3/8"	
6-1-178	2-7/16"	6-1-278	2-7/16"	6-1-378	2-7/16"	
6-1-180	2-1/2"	6-1-280	2-1/2"	6-1-380	2-1/2"	
6-1-182	2-9/16"	6-1-282	2-9/16"	6-1-382	2-9/16"	
6-1-184	2-5/8"	6-1-284	2-5/8"	6-1-384	2-5/8"	
6-1-186	2-11/16"	6-1-286	2-11/16"	6-1-386	2-11/16"	
6-1-188	2-3/4"	6-1-288	2-3/4"	6-1-388	2-3/4"	
6-1-190	2-13/16"	6-1-290	2-13/16"	6-1-390	2-13/16"	
6-1-192	2-7/8"	6-1-292	2-7/8"	6-1-392	2-7/8"	
6-1-194	2-15/16"	6-1-294	2-15/16"	6-1-394	2-15/16"	
6-1-196	3"	6-1-296	3"	6-1-396	3"	
6 1 100	3-1/16"	6 1 000	3-1/16"	6 1 200	3-1/16"	
6-1-198 6-1-1100	3-1/16"	6-1-298 6-1-2100	3-1/16"	6-1-398 6-1-3100	3-1/16"	
6-1-1100	3-3/16"	6-1-2100	3-1/6"	6-1-3102	3-3/16"	
6-1-1104	3-1/4"	6-1-2104	3-1/4"	6-1-3104	3-1/4"	
6-1-1104	3-5/16"	6-1-2104	3-1/4	6-1-3106	3-5/16"	
6-1-1108	3-3/8"	6-1-2108	3-3/8"	6-1-3108	3-3/8"	
6-1-1110	3-7/16"	6-1-2110	3-7/16"	6-1-3110	3-7/16"	
6-1-1112	3-1/2"	6-1-2112	3-1/10	6-1-3112	3-1/2"	
6-1-1114	3-9/16"	6-1-2114	3-1/2	6-1-3112	3-9/16"	
6-1-1116	3-5/8"	6-1-2116	3-5/8"	6-1-3116	3-5/8"	
6-1-1118	3-11/16"	6-1-2118	3-11/16"	6-1-3118	3-11/16"	
6-1-1120	3-3/4"	6-1-2120	3-3/4"	6-1-3120	3-3/4"	
6-1-1122	3-13/16"	6-1-2122	3-13/16"	6-1-3122	3-13/16"	
6-1-1124	3-7/8"	6-1-2124	3-7/8"	6-1-3124	3-7/8"	
6-1-1126	3-15/16"	6-1-2126	3-15/16"	6-1-3126	3-15/16"	
6-1-1128	4"	6-1-2128	4"	6-1-3128	4"	
3 . 1125	-	J . L . L . L . L	-	3 1 3 1 2 0	·	



#### Shank size:

3/4" for cutters up to 3" dia. 1-1/4" for cutters 3-1/16 to 5-1/8" dia.

Pilot pin included with every annular cutter up to 4" DOC

#### **Cutter Kits**

Each HSS steel cutter kit comes with the following: 9/16",11/16", 13/16", 15/16", 1-1/16", pilot pins & carrying case.

Order No.	Description
6-1-001	1" depth Cutter Kit
6-1-002	2" depth Cutter Kit

#### Pilot Pins for 6-Series

Order No.	Description			
For 3/4" Shanks				
7-3-102	7/16" - 3" dia., 1" depth			
7-3-202	7/16" - 3" dia., 2" depth			
7-3-302	3/4" - 3" dia., 3" depth			
	For 1-1/4" Shanks			
7-3-1002	3-1/16" - 5-1/8" dia., 1" depth			
7-3-2002	3-1/16" - 5-1/8" dia., 2" depth			
7-3-3002	3-1/16" - 5-1/8" dia., 3" depth			
Option	n for Cutters 3" and 4" Depth			
7-3-402	2-piece pin for 3" and 4" depth cutters with 8mm pilot hole.			
7-3-402	2-piece pin for 3" and 4" depth			
7-3-402	2-piece pin for 3" and 4" depth cutters with 8mm pilot hole.			

Cutters with 3" depth have an 8mm dia. pilot hole.



Scan or visit www.csunitec.com to see all sizes available

4", 6", 8" depth HSS annular cutters also available.

Large diameter & custom sizes available with low MOQ.

Call today to speak to a CS Unitec specialist

➤ See pages 70-75 for Drill Accessories



See pages 70-73 for Drill Accessories

## **Unibroach® Annular Cutters**

## TiAIN Carbide coating for up to 4x tool life, less friction and more power

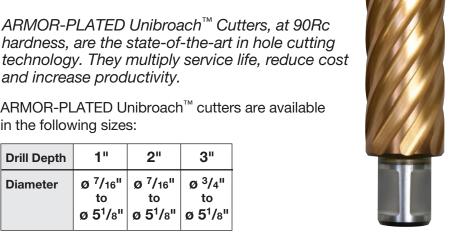
and increase productivity.

## Less Friction = Less Heat = More Holes!



ARMOR-PLATED Unibroach™ cutters are available in the following sizes: 2" 3" **Drill Depth** ø 7/16" Ø 7/16"  $0^{3/4}$ **Diameter** 

to ø 5<sup>1</sup>/8" ø 5<sup>1</sup>/8" ø 51/8"



Special sizes available; metric cutters available on request. Every annular cutter up to 4" DOC includes a corresponding pilot pin.

3 to 4 times longer tool life with TiAIN Carbide coating

ARMOR-PLATED Unibroach™ Cutters, at 90Rc

hardness, are the state-of-the-art in hole cutting

- Drill with less friction and more power
- Withstands higher working temperatures up to 1480°F (800°C)
- Dry drilling or lubricating with water simplifies working conditions and cleanup
- Prevents cold weld metal chips do not adhere to the cutter
- Ideal for structural steel and hard metal
- 3/4" dia. shank (11/4" dia. shank available)

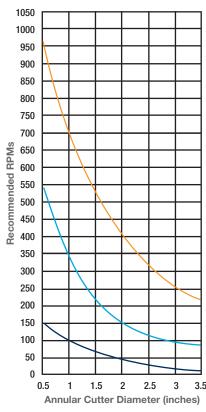
After the TiAIN Carbide coating is worn, lubricate with cutting oil



Learn More!

Annular Cutter Recommended **Revolutions Per Minute** 

Recommended Feed Rate: .002 - .004 inches per revolution





Mild Steel (Carbon) 80 ft./min.

**High Tensile** Steel (Stainless) 30 ft./min.





RMOR-PLATED Unibroach™ TiAIN Carbide-Coated Annular Cutter Starter Kits also available

Pilot pin included with every annular cutter up to 4" DOC

## 8-Series ARMOR-PLATED TIAIN

### ARMOR-PLATED = Less Friction = Less Heat = More Holes! Increase tool life and achieve faster feed rates



Shank size: 3/4" up to 3" dia.

ARMOR-PLATED Unibroach™ Cutters, at 90Rc hardness, are the state-of-the-art in hole cutting technology. They multiply service life, reduce cost and increase productivity.



#### Pilot pin included with every annular cutter up to 4" DOC

### 1" Depth

Order No.	Diameter
8-1-114 T	7/16"
8-1-116 T	1/2"
8-1-118 T	9/16"
8-1-120 T	5/8"
8-1-122 T	11/16"
8-1-124 T	3/4"
8-1-126 T	13/16"
8-1-128 T	7/8"
8-1-130 T	15/16"
8-1-132 T	1"
8-1-134 T	1-1/16"
8-1-136 T	1-1/8"
8-1-138 T	1-3/16"
8-1-140 T	1-1/4"
8-1-142 T	1-5/16"
8-1-144 T	1-3/8"
8-1-146 T	1-7/16"
8-1-148 T	1-1/2"
8-1-150 T	1-9/16"
8-1-152 T	1-5/8"
8-1-154 T	1-11/16"
8-1-156 T	1-3/4"
8-1-158 T	1-13/16"
8-1-160 T	1-7/8"
8-1-162 T	1-15/16"
8-1-164 T	2"
8-1-166 T	2-1/16"

#### 2" Depth

2 1	Jepui
Order No.	Diameter
8-1-214 T	7/16"
8-1-216 T	
8-1-218 T	
8-1-220 T	5/8"
8-1-222 T	
8-1-224 T	
8-1-226 T	13/16"
8-1-228 T	7/8"
8-1-230 T	
8-1-232 T	1"
8-1-234 T	
8-1-236 T	1-1/8"
8-1-238 T	1-3/16"
8-1-240 T	
8-1-242 T	
8-1-244 T	
8-1-246 T	
8-1-248 T	1-1/2"
8-1-250 T	1-9/16"
8-1-252 T	
8-1-254 T	
8-1-256 T	
8-1-258 T	
8-1-260 T	
8-1-262 T	
8-1-264 T	
8-1-266 T	2-1/16"

#### 3" Depth\*

Order No.	Diameter
N/A	
8-1-324 T	3/4"
8-1-326 T	13/16"
8-1-328 T	7/8"
8-1-330 T	15/16"
8-1-332 T	1"
8-1-334 T	1-1/16"
8-1-336 T	1-1/8"
8-1-338 T	1-3/16"
8-1-340 T	1-1/4"
8-1-342 T	1-5/16"
8-1-344 T	1-3/8"
8-1-346 T	1-7/16"
8-1-348 T	1-1/2"
8-1-350 T	1-9/16"
8-1-352 T	1-5/8"
8-1-354 T	1-11/16"
8-1-356 T	1-3/4"
8-1-358 T	1-13/16"
8-1-360 T	1-7/8"
8-1-362 T	1-15/16"
8-1-364 T	2"
8-1-366 T	2-1/16"

## **ARMOR-PLATED Cutter Kits**

Each armor-plated cutter kit comes with the following: 9/16",11/16", 13/16", 15/16", 1-1/16", pilot pins & carrying case.

Order No.	Description
8-1-001 T	1" depth Cutter Kit
8-1-002 T	2" depth Cutter Kit

#### Pilot Pins for 8-Series

Order No.	Description	
	For 3/4" Shanks	
7-3-102	7/16" - 3" dia., 1" depth	
7-3-202	7/16" - 3" dia., 2" depth	
7-3-302	3/4" - 3" dia., 3" depth	
Option for Cutters 3" and 4" Depth		
7-3-402	2-piece pin for 3" and 4" depth cutters with 8mm pilot hole.	

<sup>\*</sup> Cutters with 3" depth have an 8mm dia. pilot hole.

#### ARMOR-PLATED Unibroach™ TiAIN Carbide-Coated Cutters:

- Drill with less friction and more power
- Withstand higher working temperatures up to 1480°F (800°C)
- Dry drill or lubricate with water to simplify working conditions and cleanup\*\*
- Prevent cold weld metal chips do not adhere to the cutter
- Are ideal for structural steel and hard metal
- \*\* After the TiAIN Carbide coating is worn, lubricate with cutting oil

#### **Metric Sizes Available!**

#### 3"+ Diameter Cutters

Metric and larger diameter cutters available on request.



Scan or visit www.csunitec.com to see all sizes available

➤ See pages 70-75 for Drill Accessories

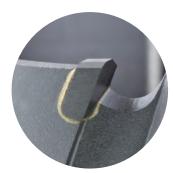


## **Unibroach® Annular Cutters**

## TCT Carbide Hornet – tungsten carbide-tipped for high-speed cutting



- Use high-speed RPM for best results and faster holemaking
- Ideal for drilling steel with rust or paint and bolting applications
- Will outlast High-speed Steel cutters
- · Leaves a burr-free finished hole
- Available in all sizes (fractional and metric)
- 2 flats
- 3/4" or 11/4" shank
- Pilot pins supplied with annular cutters up to 4" DOC



Closeup of tungstencarbide teeth.

Drill Depth	1"	1-3/8"	2-3/8"	3-3/8"	4"	6"	8"	10"
Diameter	ø <sup>1</sup> / <sub>2</sub> " to ø <b>1</b> <sup>1</sup> / <sub>2</sub> "	to	to	ø <sup>3</sup> / <sub>4</sub> " to ø 5 <sup>1</sup> / <sub>8</sub> "	to	ø <sup>13</sup> / <sub>16</sub> " to ø 6"	ø <sup>13</sup> / <sub>16</sub> " to ø 6"	ø <sup>13</sup> / <sub>16</sub> " to ø 6"

Metric, Stack and 32<sup>nd</sup> Size Cutters also Available

27/16" - 29/16"

25/8" - 23/4"

213/16" - 215/16"

 $3" - 3^{1/8}"$ 

33/16" - 33/8"

3<sup>7</sup>/16" - 3<sup>9</sup>/16"

358" - 33/4"

313/16" - 315/16"

4" - 45/16"

43/8" - 43/4"

413/16" - 51/8"



Armor plating available upon request.



Scan to Learn More!

#### **Cutter Stainless** Mild Iron Size & Alloy Steel Steel **Plate RPM RPM Diameter** RPM $\frac{1}{2}$ " - $\frac{5}{8}$ " 600 - 1000 800 - 1200 500 - 800 <sup>11</sup>/<sub>16</sub>" - <sup>13</sup>/<sub>16</sub>" 400 - 640 480 - 800 640 - 960 7/8" - 15/16" 330 - 530 400 - 660 530 - 800 1" - 1<sup>3</sup>/<sub>16</sub>" 270 - 420 320 - 530420 - 640 11/4" - 13/8" 230 - 370 270 - 460 360 - 550 1<sup>7</sup>/16" - 1<sup>9</sup>/16" 200 - 320 240 - 400 320 - 480 1<sup>5</sup>/<sub>8</sub>" - 1<sup>3</sup>/<sub>4</sub>" 180 - 280 210 - 350280 - 420 113/16" - 2" 160 - 260 190 - 320 260 - 380 2<sup>1</sup>/<sub>16</sub>" - 2<sup>3</sup>/<sub>16</sub>" 145 - 230 170 - 290 230 - 350 $2^{1/4}$ " - $2^{3/8}$ " 135 - 210 160 - 270 210 - 320

150 - 250

140 - 230

130 - 210

120 - 200

115 - 190

110 - 180

105 - 170

95 - 160

90 - 145

80 - 135

75 - 125

200 - 300

180 - 270

170 - 260

160 - 240

150 - 230

140 - 210

135 - 200

130 - 195

120 - 170

110 - 160

100 - 150

120 - 200

115 - 180

110 - 170

100 - 160

95 - 150

90 - 140

85 - 135

80 - 130

70 - 120

70 - 110

65 - 100

9-Series Annular Cutter Recommended RPM Rates

## 9-Series - TCT Carbide Hornet

## Metric & Stack Sizes Available

#### 1" Depth

Order No.	Diameter
9-1-116 C	1/2"
9-1-118 C	9/16"
9-1-120 C	5/8"
9-1-122 C	11/16"
9-1-124 C	3/4"
9-1-126 C	13/16"
9-1-128 C	7/8"
9-1-130 C	15/16"
9-1-132 C	1"

Order No.	Diameter
9-1-134 C	1-1/16"
9-1-136 C	1-1/8"
9-1-138 C	1-3/16"
9-1-140 C	1-1/4"
9-1-142 C	1-5/16"
9-1-144 C	1-3/8"
9-1-146 C	1-7/16"
9-1-148 C	1-1/2"
2-3/8	" Denth

Order No.

9-1-266 C

9-1-268 C

9-1-270 C

9-1-272 C

9-1-274 C

9-1-276 C

9-1-278 C

9-1-280 C

9-1-282 C

9-1-284 C

9-1-286 C

9-1-288 C

9-1-290 C

9-1-292 C

9-1-294 C

9-1-296 C

9-1-298 C

9-1-2100 C

9-1-2102 C

9-1-2104 C

9-1-2106 C

9-1-2108 C

9-1-2110 C

9-1-2112 C

Diameter

2-1/16"

2-1/8"

2-3/16"

2-1/4"

2-5/16"

2-3/8"

2-7/16"

2-1/2"

2-9/16"

2-11/16"

2-13/16"

2-15/16"

3-1/16"

3-1/8"

3-3/16"

3-1/4"

3-5/16"

3-3/8"

3-7/16"

3-1/2"

2-5/8"

2-3/4"

2-7/8"

### 1-3/8" Depth

Order No.	Diameter
9-1-150 C	1-9/16"
9-1-152 C	1-5/8"
9-1-154 C	1-11/16"
9-1-156 C	1-3/4"
9-1-158 C	1-13/16"
9-1-160 C	1-7/8"
9-1-162 C	1-15/16"
9-1-164 C	2"

Diameter

3-9/16"

3-11/16"

3-13/16"

3-15/16"

4-1/16"

4-1/8"

4-1/4"

4-3/8"

4-3/16"

4-5/16"

4-7/16"

4-1/2"

4-9/16"

1-5/QII

3-5/8"

3-3/4"

3-7/8"

Order No.

9-1-2114 C

9-1-2116 C

9-1-2118 C

9-1-2120 C

9-1-2122 C

9-1-2124 C

9-1-2126 C

9-1-2128 C

9-1-2130 C

9-1-2132 C

9-1-2134 C

9-1-2136 C

9-1-2138 C

9-1-2140 C

9-1-2142 C

9-1-2144 C

9-1-2146 C

0-1-21/19 0

	***		
M	TI Um		
1		U.	
1			

#### Shank size:

3/4" for cutters up to 3" dia. 1-1/4" for cutters 3-1/16 to 5-1/8" dia.

Pilot pin included with every annular cutter up to 4" DOC

#### Cutter Kits

Each hornet carbide cutter kit comes with the following: 9/16",11/16", 13/16", 15/16", 1-1/16", pilot pins & carrying case.

Order No.	Description
9-1-001 C	1" depth Cutter Kit
9-1-002 C	2-3/8" depth Cutter Kit

\*\*We also stock Metric Carbide cutters. Please call us for pricing and delivery. Larger diameters and special sizes are available upon request.

#### Order No. Diameter 9-1-216 C 1/2" 9/16" 9-1-218 C 9-1-220 C 5/8" 11/16 9-1-222 C 9-1-224 C 3/4" 9-1-226 C 13/16" 9-1-228 C 7/8" 9-1-230 C 15/16" 9-1-232 C 1-1/16" 9-1-234 C 9-1-236 C 1-1/8" 1-3/16" 9-1-238 C 9-1-240 C 1-1/4" 9-1-242 C 1-5/16" 9-1-244 C 1-3/8" 9-1-246 C 1-7/16 9-1-248 C 1-1/2" 9-1-250 C 1-9/16" 9-1-252 C 1-5/8" 9-1-254 C 1-11/16" 1-3/4" 9-1-256 C 9-1-258 C 1-13/16" 1-7/8" 9-1-260 C 9-1-262 C 1-15/16" 2" 9-1-264 C

Order No.

9-1-322 C 9-1-324 C

9-1-326 C 9-1-328 C 9-1-330 C 9-1-332 C 9-1-334 C 9-1-336 C 9-1-338 C

9-1-340 C 9-1-342 C

9-1-344 C 9-1-346 C 9-1-348 C 9-1-350 C 9-1-352 C 9-1-354 C 9-1-356 C 9-1-358 C 9-1-360 C

9-1-362 C

9-1-364 C

9-1-366 C

	<b>3-3</b> /8" l	Depth
Diameter	Order No.	Diameter
11/16"	9-1-368 C	2-1/8"
3/4"	9-1-370 C	2-3/16"
13/16"	9-1-372 C	2-1/4"
7/8"	9-1-374 C	2-5/16"
15/16"	9-1-376 C	2-3/8"
1"	9-1-378 C	2-7/16"
1-1/16"	9-1-380 C	2-1/2"
1-1/8"	9-1-382 C	2-9/16"
1-3/16"	9-1-384 C	2-5/8"
1-1/4"	9-1-386 C	2-11/16"
1-5/16"	9-1-388 C	2-3/4"
1-3/8"	9-1-390 C	2-13/16"
1-7/16"	9-1-392 C	2-7/8"
1-1/2"	9-1-394 C	2-15/16"
1-9/16"	9-1-396 C	3"
1-5/8"	9-1-398 C	3-1/16"
1-11/16"	9-1-3100 C	3-1/8"
1-3/4"	9-1-3102 C	3-3/16"
1-13/16"	9-1-3104 C	3-1/4"
1-7/8"	9-1-3106 C	3-5/16"
1-15/16"	9-1-3108 C	3-3/8'
2"	9-1-3010 C	3-7/16"
2-1/16"	9-1-3112 C	3-1/2"
	9-1-3114 C	3-9/16"

9-1-2148 C	4-5/8"
9-1-2150 C	4-11/16"
9-1-2152 C	4-3/4"
9-1-2154 C	4-13/16"
9-1-2156 C	4-7/8"
9-1-2158 C	4-15/16"
9-1-2160 C	5"
9-1-2162 C	5-1/16"
9-1-2164 C	5-1/8"
Order No.	Diameter
9-1-3116 C	3-5/8"
9-1-3118 C	3-11/16"
9-1-3120 C	3-3/4"
9-1-3122 C	3-13/16"
9-1-3124 C	3-7/8"
9-1-3126 C	3-15/16"
9-1-3120 0	4"
9-1-3130 C	4-1/16"
9-1-3132 C	4-1/8"
9-1-3134 C	4-3/16"
9-1-3136 C	4-1/4"
9-1-3138 C	4-5/16"
9-1-3140 C	4-3/8"
9-1-3142 C	4-7/16"
9-1-3144 C	4-1/2"
9-1-3146 C	4-9/16"
9-1-3148 C	4-5/8"
9-1-3150 C	4-11/16"
9-1-3152 C	4-3/4"
9-1-3154 C	4-13/16"
9-1-3156 C	4-7/8"
9-1-3158 C	4-15/16"
9-1-3160 C	5"
9-1-3162 C	5-1/16"
9-1-3164 C	5-1/8"

Pilot I	Pins for 9-Series	
Order No.	Description	
	For 3/4" Shanks	
9-3-101 C	1/2" - 1-1/2" dia., 1" depth	
9-3-102 C	1-9/16" - 2" dia., 1-3/8" depth	
9-3-202 C	1/2" - 3" dia., 2-3/8" depth	
9-3-302 C	3/4" - 3" dia., 3-3/8" depth	
	For 1-1/4" Shanks	
9-3-202A C	3-1/16" - 5-1/8" dia., 2-3/8" depth	
9-3-302 C-L	3-1/16" - 5-1/8" dia., 3-3/8" depth	
Option for Cutters 3-3/8" and 4" Depth		
=		
	2-piece pin for 3-3/8" and 4"	

7-3-402 depth cutters with 8mm pilot

#### Option for Cutters 6" and 8" Depth

9-3-602 C	Pin for 6" depth cutters with 8mm pilot hole.
9-3-802 C	Pin for 8" depth cutters with 8mm pilot hole.



Scan or visit www.csunitec.com to see all sizes available

4", 6", 8", 10" depth TCT annular cutters also available.

See pages 70-75 for Drill Accessories



# **Unibroach® 7-Series Cobalt Cutters**

1" D	epth	2" D	epth	3" D	epth*
Order No.	- Diameter	Order No.	- Diameter	Order No.	_ Diameter
7-1-114	7/16"	7-1-214	7/16"	N/A	
7-1-116	1/2"	7-1-216	1/2"	N/A	
7-1-118	9/16"	7-1-218	9/16"	N/A	
7-1-120	5/8"	7-1-220	5/8"	N/A	
7-1-122	11/16"	7-1-222	11/16"	N/A	
7-1-124	3/4"	7-1-224	3/4"	7-1-324	3/4"
7-1-126	13/16"	7-1-226	13/16"	7-1-326	13/16"
7-1-128	7/8"	7-1-228	7/8"	7-1-328	7/8"
7-1-120	15/16"	7-1-220	15/16"	7-1-320	15/16"
7-1-130	1"	7-1-230	1"	7-1-332	1"
7-1-134	1-1/16"	7-1-232	1-1/16"	7-1-332	1-1/16"
7-1-134	1-1/8"	7-1-234	1-1/8"	7-1-336	1-1/8"
7-1-138	1-3/16"	7-1-238	1-3/16"	7-1-338	1-3/16"
7-1-138	1-1/4"		1-3/16"	7-1-340	1-1/4"
	1-5/16"	7-1-240	1-1/4"		1-5/16"
7-1-142	1-3/8"	7-1-242	1-3/8"	7-1-342	1-3/8"
7-1-144		7-1-244		7-1-344	
7-1-146	1-7/16"	7-1-246	1-7/16"	7-1-346	1-7/16"
7-1-148	1-1/2"	7-1-248	1-1/2"	7-1-348	1-1/2"
7-1-150	1-9/16"	7-1-250	1-9/16"	7-1-350	1-9/16"
7-1-152	1-5/8"	7-1-252	1-5/8"	7-1-352	1-5/8"
7-1-154	1-11/16"	7-1-254	1-11/16"	7-1-354	1-11/16"
7-1-156	1-3/4"	7-1-256	1-3/4"	7-1-356	1-3/4"
7-1-158	1-13/16"	7-1-258	1-13/16"	7-1-358	1-13/16"
7-1-160	1-7/8"	7-1-260	1-7/8"	7-1-360	1-7/8"
7-1-162	1-15/16"	7-1-262	1-15/16"	7-1-362	1-15/16"
7-1-164	2"	7-1-264	2"	7-1-364	2"
7-1-166	2-1/16"	7-1-266	2-1/16"	7-1-366	2-1/16"
7-1-168	2-1/8"	7-1-268	2-1/8"	7-1-368	2-1/8"
7-1-170	2-3/16"	7-1-270	2-3/16"	7-1-370	2-3/16"
7-1-172	2-1/4"	7-1-272	2-1/4"	7-1-372	2-1/4"
7-1-174	2-5/16"	7-1-274	2-5/16"	7-1-374	2-5/16"
7-1-176	2-3/8"	7-1-276	2-3/8"	7-1-376	2-3/8"
7-1-178	2-7/16"	7-1-278	2-7/16"	7-1-378	2-7/16"
7-1-180	2-1/2"	7-1-280	2-1/2"	7-1-380	2-1/2"
7-1-182	2-9/16"	7-1-282	2-9/16"	7-1-382	2-9/16"
7-1-184	2-5/8"	7-1-284	2-5/8"	7-1-384	2-5/8"
7-1-186	2-11/16"	7-1-286	2-11/16"	7-1-386	2-11/16"
7-1-188	2-3/4"	7-1-288	2-3/4"	7-1-388	2-3/4"
7-1-190	2-13/16"	7-1-290	2-13/16"	7-1-390	2-13/16"
7-1-192	2-7/8"	7-1-292	2-7/8"	7-1-392	2-7/8"
7-1-194	2-15/16"	7-1-294	2-15/16"	7-1-394	2-15/16"
7-1-196	3"	7-1-296	3"	7-1-396	3"
		200			
7-1-198	3-1/16"	7-1-298	3-1/16"	7-1-398	3-1/16"
7-1-1100	3-1/8"	7-1-2100	3-1/8"	7-1-3100	3-1/8"
7-1-1102	3-3/16"	7-1-2102	3-3/16"	7-1-3102	3-3/16"
7-1-1104	3-1/4"	7-1-2104	3-1/4"	7-1-3104	3-1/4"
7-1-1106	3-5/16"	7-1-2106	3-5/16"	7-1-3106	3-5/16"
7-1-1108	3-3/8"	7-1-2108	3-3/10	7-1-3108	3-3/10
7-1-1110	3-7/16"	7-1-2110	3-7/16"	7-1-3110	3-7/16"
7-1-1110	3-1/2"	7-1-2110	3-1/10	7-1-3110	3-1/10
7-1-1112	3-9/16"	7-1-2114	3-1/2	7-1-3112	3-9/16"
7-1-1114	3-5/8"	7-1-2114	3-5/8"	7-1-3114	3-5/8"
7-1-1118	3-11/16"	7-1-2118	3-11/16"	7-1-3118	3-11/16"
7-1-1110	3-11/16	7-1-2110	3-11/10	7-1-3110	3-11/10
7-1-1120	3-13/16"	7-1-2120	3-3/4"	7-1-3120	3-3/4"
7-1-1122	3-13/16"	7-1-2122	3-13/16"	7-1-3122	3-13/16"
	3-7/8"		3-1/8"	7-1-3124	3-1/6"
7-1-1126	4"	7-1-2126	4"		4"
7-1-1128	4	7-1-2128	4	7-1-3128	-



#### Shank size:

3/4" for cutters up to 3" dia. 1-1/4" for cutters 3-1/16 to 5-1/8" dia.

Pilot pin not included with 7-series annular cutters

#### **Cutter Kits**

Each cobalt cutter kit comes with the following: 9/16",11/16", 13/16", 15/16", 1-1/16", pilot pins & carrying case.

Order No.	Description
7-1-002A	2" depth Cutter Kit

### Pilot Pins for 7-Series

Order No.	Description			
	For 3/4" Shanks			
7-3-102	7/16" - 3" dia., 1" depth			
7-3-202	7/16" - 3" dia., 2" depth			
7-3-302	3/4" - 3" dia., 3" depth			
	For 1-1/4" Shanks			
7-3-1002	3-1/16" - 5-1/8" dia., 1" depth			
7-3-2002	3-1/16" - 5-1/8" dia., 2" depth			
7-3-3002	3-1/16" - 5-1/8" dia., 3" depth			
	Option for Cutters 3"			
=				
7-3-402	2-piece pin for 3" cutters with 8mm pilot hole.			

<sup>\*</sup> Cutters with 3" depth have an 8mm dia. pilot hole.



Scan or visit www.csunitec.com to see all sizes available

For Larger Diameter up to 6", and longer lengths up to 10" please see our 9-series carbide annular cutters.

Call today to speak to a CS Unitec specialist!



## 10-Series One-Touch TCT

## Tungsten carbide-tipped with one-touch shank



- No-tool cutter replacement
- When holding with a set screw, tighten to weldon flat rather than dimple area
- Leaves a burr-free finished hole
- 3/4" shank
- Compatible with Nitto Kohki and other auto-feed machines
- Armor plating also available upon request



One-Touch TCT cutters are available in the following sizes:

1-3/8" drill depth – ø  $^{1}/_{2}$ " to ø 2"

2-3/8" drill depth –  $\emptyset$  <sup>1</sup>/<sub>2</sub>" to  $\emptyset$  2<sup>3</sup>/<sub>4</sub>"

3-3/8" drill depth –  $\emptyset$  <sup>11</sup>/<sub>16</sub>" to  $\emptyset$  <sup>1</sup>/<sub>16</sub>" 4" drill depth –  $\emptyset$  <sup>11</sup>/<sub>16</sub>" to  $\emptyset$  1 <sup>1</sup>/<sub>16</sub>"

#### **Every 10-Series annular cutter includes** a corresponding pilot pin.

• Metric cutters available on request

1-	.3	<b>/8</b> "	De	pth
	•	•		NLII.

Order No.	Diameter
10-1-116 C	1/2"
10-1-118 C	9/16"
10-1-120 C	5/8"
10-1-122 C	11/16"
10-1-124 C	3/4"
10-1-126 C	13/16"
10-1-128 C	7/8"
10-1-130 C	15/16"
10-1-132 C	1"
10-1-134 C	1-1/16"
10-1-136 C	1-1/8"
10-1-138 C	1-3/16"
10-1-140 C	1-1/4"
10-1-142 C	1-5/16"
10-1-144 C	1-3/8"
10-1-146 C	1-7/16"
10-1-148 C	1-1/2"
10-1-150 C	1-9/16"
10-1-152 C	1-5/8"
10-1-154 C	1-11/16"
10-1-156 C	1-3/4"
10-1-158 C	1-13/16"
10-1-160 C	1-7/8"
10-1-162 C	1-15/16"
10-1-164 C	2"

	2-0/0	Depui
Order No.	Diameter	Order No.
10-1-216 C	1/2"	10-1-26
10-1-218 C	9/16"	10-1-26
10-1-220 C	5/8"	10-1-27
10-1-222 C	11/16"	10-1-27
10-1-224 C	3/4"	10-1-27
10-1-226 C	13/16"	10-1-27
10-1-228 C	7/8"	10-1-27
10-1-230 C	15/16"	10-1-28
10-1-232 C	1"	10-1-28
10-1-234 C	1-1/16"	10-1-28
10-1-236 C	1-1/8"	0.0/0
10-1-238 C	1-3/16"	3-3/8
10-1-240 C	1-1/4"	Order No.
10-1-242 C	1-5/16"	10-1-32
10-1-244 C	1-3/8"	10-1-32
10-1-246 C	1-7/16"	10-1-33
10-1-248 C	1-1/2"	10-1-33
10-1-250 C	1-9/16"	
10-1-252 C	1-5/8"	<b>4</b> "
10-1-254 C	1-11/16"	Order No.
10-1-256 C	1-3/4"	10-1-42

1-13/16" 1-7/8"

1-15/16"

### 2-3/8" Denth

oraer No.	Diameter
10-1-266 C	2-1/16"
10-1-268 C	2-1/8"
10-1-270 C	2-3/16"
10-1-272 C	2-1/4"
10-1-274 C	2-5/16"
10-1-276 C	2-3/8"
10-1-278 C	2-7/16"
10-1-280 C	2-1/2"
10-1-282 C	2-5/8"
10-1-288 C	2-3/4"

#### 8" Depth

	•
Order No.	Diameter
10-1-322 C	11/16"
10-1-326 C	13/16"
10-1-330 C	15/16"
10-1-334 C	1-1/16"

#### Depth

Order No.	Diameter
10-1-422 C	11/16"
10-1-426 C	13/16"
10-1-430 C	15/16"
10-1-434 C	1-1/16"

Pilot pin included with every 10-Series annular cutter



Shank size: 3/4"

#### Pilot Pins for 10-Series

Description

Order No.

For 3/4" Shanks			
9-3-102 C	9/16" - 2" dia., 1-3/8" depth		
9-3-202 C	1/2" - 2-3/4" dia., 2-3/8" depth		
9-3-302 C	11/16" - 1-1/16" dia., 3-3/8" depth		



Scan or visit www.csunitec.com to see all sizes available

Accessories: pages 70-75



10-1-258 C

10-1-260 C 10-1-262 C

10-1-264 C

## Rail Cutters

## Cut holes up to 1-11/16" dia. in track rail

- Round, clean, burr-free hole better than spade drills
- 3/4" shank
- More cutting teeth to distribute the load evenly increase tool life and achieve faster feed rates
- Pilot pin included with each 4-Series cutter
- Armor plating available upon request

### 4-Series TCT Rail Cutters

 Carbide-tipped rail bits for long life and quick, efficient cutting through rust and corrosion

### 1-3/8" Depth

Order No.	Diameter	Order No.	Diameter
4-1-124 C	3/4"	4-1-140 C	1-1/4"
4-1-128 C	7/8"	4-1-142 C	1-5/16"
4-1-130 C	15/16"	4-1-144 C	1-3/8"
4-1-132 C	1"	4-1-146 C	1-7/16"
4-1-134 C	1-1/16"	4-1-148 C	1-1/2"
4-1-136 C	1-1/8"	4-1-152 C	1-5/8"
4-1-138 C	1-3/16"	4-1-154 C	1-11/16"



Scan or visit www.csunitec.com to see all sizes available







4-3-102 3/4" - 1-11/16" dia., 1-3/8" depth





## 47-Series Lightning Rail Cutters

- Cobalt rail bits for increased wear resistance
- Thick cutter wall for extra durability and extended tool life
- Turn-style mounting allows quick and easy installation without tools.



Scan or visit www.csunitec.com to see all sizes available

#### 1-1/4" Depth

Order No.	Diameter
47-1-124 C	3/4"
47-1-128 C	7/8"
47-1-130 C	15/16"
47-1-132 C	1"
47-1-134 C	1-1/16"
47-1-136 C	1-1/8"
47-1-138 C	1-3/16"

Diameter
1-1/4"
1-5/16"
1-3/8"
1-7/16"
1-1/2"
1-5/8"
1-11/16"











See pages 58-68 for our Annular Cutters - HSS, Carbide-tipped, Armor Plated, & Cobalt. Available up to 6" Dia. and 10" Depth.



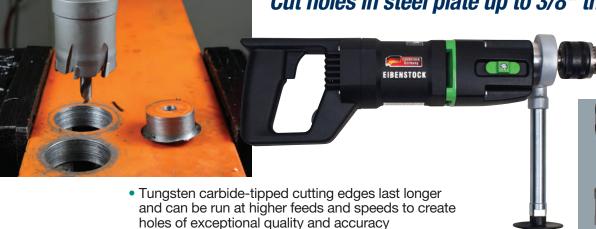
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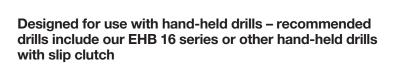
➤ Annular Cutters: pages 58-68 ➤ Accessories: pages 70-75



# Carbide-Tipped Hole Saws

## Cut holes in steel plate up to 3/8" thick





One-piece construction; diameters from <sup>9</sup>/<sub>16</sub>" to 4<sup>1</sup>/<sub>2</sub>"





#### 1-Series Carbide-Tipped **Hole Cutters**

1" effective length Center twist pilot drill fety Collar Stop

on cutters up to 3-1/4" dia. cutters 3-5/16" dia. and larger

			S	afety C
		3/8" shank on cutters		
ler No.	Diameter		Order No.	Diameter
1-118*	9/16"		1-1-166	2-1/16

1-1-118*	9/16"	1-1-166	2-1/16"
1-1-120*	5/8"	1-1-168	2-1/8"
1-1-122	11/16"	1-1-170	2-3/16"
1-1-124	3/4"	1-1-172	2-1/4"
1-1-126	13/16"	1-1-174	2-5/16"
1-1-128	7/8"	1-1-176	2-3/8"
1-1-130	15/16"	1-1-178	2-7/16"
1-1-132	1"	1-1-180	2-1/2"
1-1-134	1-1/16"	1-1-182	2-9/16"
1-1-136	1-1/8"	1-1-184	2-5/8"
1-1-138	1-3/16"	1-1-186	2-11/16"
1-1-140	1-1/4"	1-1-188	2-3/4"
1-1-142	1-5/16"	1-1-190	2-13/16"
1-1-144	1-3/8"	1-1-192	2-7/8"
1-1-146	1-7/16"	1-1-194	2-15/16"
1-1-148	1-1/2"	1-1-196	3"
1-1-150	1-9/16"	1-1-198	3-1/16"
1-1-152	1-5/8"	1-1-1100	3-1/8"
1-1-154	1-11/16"	1-1-1102	3-3/16"
1-1-156	1-3/4"	1-1-1104	3-1/4"
1-1-158	1-13/16"	1-1-1106	3-5/16"
1-1-160	1-7/8"	1-1-1108	3-3/8"
1-1-162	1-15/16"	1-1-1110	3-7/16"
1-1-164	2"	1-1-1112	3-1/2"
* These cutters do not include springs.			

<sup>1-1-1118</sup> 1-1-1120 1-1-1122 1-1-1124 1-1-1126 1-1-1128 1-1-1136 4-1/4" 1-1-1144 **4-1/2**"

Order No.

1-1-1114

1-1-1116

#### 1-Series Accessories

Diameter 3-9/16"

3-5/8"

3-3/4" 3-13/16"

3-7/8"

3-15/16"

3-11/16"

Order No.	Description
1-1-drill	Center Pilot Drill
1-1-spring	Spring
1-1-screw	Screw



5/8" effective length Spring-loaded Pilot Pin

Cutters feature milled, 3-flat shank designed to fit 1/2" chucks.

Order No.	Diameter
2-1-118	9/16"
2-1-120	5/8"
2-1-122	11/16"
2-1-124	3/4"
2-1-126	13/16"
2-1-128	7/8"
2-1-130	15/16"
2-1-132	1"
2-1-134	1-1/16"
2-1-136	1-1/8"
2-1-138	1-3/16"
2-1-140	1-1/4"
2-1-142	1-5/16"
2-1-144	1-3/8"





#### 2-Series Accessories

Order No.	Description
2-1-pilot	Pilot/Ejector Pin
2-1-screw	Screw

Scan or visit www.csunitec.com to see all sizes available



<sup>➤</sup> Annular Cutters: pages 58-68 ➤ Accessories: pages 70-75



## **Accessories**

## **Coolants and Cutting Pastes**

Coolant extends the life of cutting tools - Ideal for cutting steel, stainless steel and hard metals

#### **ProLube**<sup>™</sup>

Your cutting tools will work cooler, longer and more efficiently with ProLube™ Lubricants from CS Unitec.

- Prolong tool life by reducing friction and wear
- Unique composition provides excellent adhesion to cutting tools for maximum lubrication
- Corrosion inhibitor
- Non-toxic





Water soluble 16:1

ProLube™

Paste (12 oz. tub) - Part No. CS 7030-712 Liquid (1 gallon) - Part No. CS 7010-504



- High-performance
- Liquid coolant is concentrated for dilution with water
- Eco-friendly

Paste (tube) - Part No. ZHS 570 Paste (12-pack tubes) - Part No. ZHS 572 Paste (2.2 lb. tub) - Part No. ZHS 550 Liquid (1 quart) - Part No. ZHB 001

Upgrade your drill's cooling system: see page 71 for arbors with automatic cooling.

## **Cutting Oil**

- High-performance, biodegradable, non-hazardous oils and pastes
- Oils for heavy removal of metal, including stainless steel
- Chlorine-free (MSDS on bottle/tub)
- Not necessary to dilute with water

**Cutting Oil:** Part No. **ZHS 006** (quart) Part No. **ZHS 005** (gallon)





### Pressurized Coolant Bottle

Use with any automatic internal lubrication system. Part No. 9 4002 0020 N

### **Pilot Pins for Cutters**

- Milled channel efficiently supplies internal lubrication to cutting teeth
- Available for cutter diameters ranging from  $^{7}/_{16}$ " to  $5^{1}/_{8}$ " and up to 8" depth of cut
- See price list for part numbers



Shown at right: 2-piece pin for 3" and 4" depth cutters with 8mm pilot hole (Part No. 7-3-402).





## **Accessories**

### **Arbors for Annular Cutters**

- Use on any magnetic drill stand, drill press or shop equipment with a Morse Taper intake of No. 2, 3 or 4
- Available for Annular Cutter shank sizes of <sup>3</sup>/<sub>4</sub>" or 1<sup>1</sup>/<sub>4</sub>" Weldon
- Available for automatic internal cooling or manual cooling



### **Manual Cooling**

**ZIA 219M** – Morse Taper No. 2 <sup>3</sup>/<sub>4</sub>" arbor bore

**ZIA 319M** – Morse Taper No. 3 <sup>3</sup>/<sub>4</sub>" arbor bore

**ZIA 30/75** – Morse Taper No. 3 <sup>3</sup>/<sub>4</sub>" arbor bore, 3" depth

**ZIA 419M** – Morse Taper No. 4 <sup>3</sup>/<sub>4</sub>" arbor bore



### **Automatic Cooling**

**ZIA 219KN** – Morse Taper No. 2 <sup>3</sup>/<sub>4</sub>" arbor bore

**ZIA 319KN** – Morse Taper No. 3 <sup>3</sup>/<sub>4</sub>" arbor bore

**ZIA 30/32** – Morse Taper No. 3 1<sup>1</sup>/<sub>4</sub>" arbor bore

**ZIA 432 KN** – Morse Taper No. 4 1<sup>1</sup>/<sub>4</sub>" arbor bore

## **Quick-Lock Arbor with Automatic Internal Cooling**

- Keyless for fast, no-tools changeover for 3/4" dia. shank annular cutters
- Automatic internal cooling
- Turn, click... go!

ZSS 200 - Morse Taper No. 2 for 3/4" dia. shank annular cutters

ZSS 300 - Morse Taper No. 3 for 3/4" dia. shank annular cutters



### turn, click...



Keyless, quick-change system for annular cutters saves time and money.

Just twist and lock!



## **Drill Chucks for Straight-Shank Twist Drills**

- Two capacities: 1/2" and 3/4"; four chucks and adapters to fit all magnetic drills
- A) IBC 17  $^{1}/_{2}$ " chuck for CSU 32 & Magnetic Drills with  $^{1}/_{2}$ "x20 thread connections
- B) **IBC 18** 1/2" chuck with 3/4" shank for MABasic 200, MABasic 400 and AIRBOR<sup>TM</sup> (fits all drills with 3/4" arbor bore)
- C) **IBC 21** 3/4" chuck with MT3 shank for MAB 525, MAB 845 and RT5
- D) **IBC 22** 3/4" chuck with MT2 shank for MABasic 450, MAB 455, MAB 485 and AutoMAB 450









## Accessories

### Weldon Shank Twist Drill Bits NEW! Optimized for Increased Cutting Life in Magnetic Drills

- Made of M2 High Speed Steel (HSS) for increased durability
- Industry standard 3/4" weldon shank (19.05 mm) for fast, dependable securing to magnetic drills
- Increase versatility with easy, small hole drilling for magnetic
- 2" Depth of cut

**8-1-108S** – 1/4" Dia.

8-1-114S - 7/16"Dia.

8-1-110S - 5/16"Dia. Save Time, Easy Changeover, 8-1-112S - 3/8" Dia. No Chuck Adapter Needed!





RELIEF AREAS FOR OPTIMAL **CHIP FLOW** 

SHARPENED **EDGES** FOR FAST CUTTING

### **Extensions for Annular Cutters**

### Extra-long holders extend stroke of drills



- Extend cutter reach up to 18"
- Available for magnetic drills with <sup>3</sup>/<sub>4</sub>" arbor bore or MT3
- Also available with 3 flats for straight shank drill chucks and R8 shanks for drill presses
- Drill difficult-to-reach areas
- Extend cutter reach over the side or through an existing hole\*

**7-9-902** – 2" extension **7-9-903** – 3" extension

**7-9-904** – 4" extension **7-9-906** – 6" extension

**7-9-912** – 12" extension 7-9-918 - 18" extension

7-9-1146 - 6" extension, 1-1/4" male x 1-1/4" female shank

\* Hole diameter must be larger than 1 5/16" to accommodate width of extension



#### We also offer extensions with the following connections:

3 Flats for Geared Chucks x 3/4" arbor



7-9-100 - 2-1/8" length, 1/2" shank 7-9-200 - 2" length, 3/4" shank



**7-9-500** – R8, 1-3/4" length; 3/4" arbor bore **7-9-506** – R8, 6" length; 3/4" arbor bore **7-9-700** – R8, 2-3/4" length; 1-1/4" arbor bore

#### 2-in-1 Drill/Taps Drill and tap with one tool

National Coarse Threads (UNC) – sizes available:

CS500 - 1/2" x 13 UNC CS625 - 5/8" x 11 UNC CS875 - 7/8" x 9 UNC CS1000 - 1" x 8 UNC

CS750 - 3/4" x 10 UNC

**CSDT-UNCKIT N** - 1/2", 5/8", 3/4" & 1" drill/taps



### 82° and 90° Countersinks

- Manufactured of HSS with 5% cobalt
- 3/4" Weldon shank

Countersink hole sizes:

CTS 30 from 5/8" to 2" / 82° CTS 50 from 5/8" to 2 1/8" / 90°



### **Detachable Chip Guard**

Protects against flying chips when drilling

**ZSS 050** - MAB 485 and MAB 525 **ZSS 500** - MAB 825 and MAB 845





# **Accessories**

### **Quick-Change Tapping Chucks**

Part No. **GSW.830C** tapping chuck includes two variable clamp collets to tap  $^{3}/_{8}$ " to 1  $^{1}/_{8}$ ". It is the least expensive



system if you will tap more than 4 sizes. **GSW.830C** has an MT3 connection.

For use with all MT3 drills.

Variable clamp collets for use in tap chuck No. **GSW.830C:** 

Part No. **GST-160** for shanks  ${}^{3}/{8}" - {}^{5}/{8}"$ . Part No. **GST-230** for shanks  ${}^{5}/{8}" - {}^{7}/{8}"$ .





GSW 444
QuickChange
Chuck

Part No. **GSW 444** quick-change tapping chuck with MT4 connection (for MAB 1300). Collets not included.

Order Number	Tap Collet	Shank Diameter	Square Drive
GSS.420	20mm	16mm	12mm
GSS.422	22mm	18mm	14.5mm
GSS.427	27mm	20mm	16mm
GSS.433	33mm	32mm	20mm
GSS.442	42mm	32mm	24mm



GSS-4xx Collet

### **MobilCLAMP**

A true advance in magnetic drilling technology: MobilCLAMP converts a magnetic drilling machine into a portable drill press.

The magnetic drill can be mounted onto the MobilCLAMP with only the power of the machine's magnet - no screws, clamps or needed. Increasing the versatility of magnetic drills.

MobilCLAMF	
	,

Order No.	ZMC 200
Jaw Width	4" (100mm)
Clamping Range	4" (100mm)

ZMC 200 N includes ZMC 200 base, ZST 300 vise, (2 qty.) ZTN 100 screw and (2 qty.) ZSN 100 hexagon nut with collar







# Drilling stand and vise for hand drills



### Vise

Order No. **ZST 300** jaw width: 4" (100mm) clamping range: 4" (100mm)

### Accessories

Screws for T-Slots – Order No. **ZTN 100** Hexagon Nut with Collar – Order No. **ZSM 100** 

### **Drilling Pillar**

Order No. ZBS 100

- Industrial drilling pillar for commercial hand drills with 43mm chuck journal diameter.
- 8" Stroke
- Fits ZST 300 vise accessory



**Magnetic Drilling Pillar** 

Order No. MBS 300

For hand drills with a 1-11/16" collar diameter and 7" stroke.



Drill not included.



# **Vacuum Plates**

# For applications where drill alone will not adhere to surface

### **Vacuum Plate for Channeled Plates**

Order No. ZAV 301 (vacuum plate only)

Order No. **ZAV 310** (vacuum plate and vacuum pump, 110V)

Ideal for channeled plates. High-performance vacuum pump with circular oil lubrication. Clamping plate diameter: 11.8"



### **Vacuum Plate for Smooth Surfaces**

Order No. ZAV 401 (vacuum plate only)

Order No. **ZAV 410** (vacuum plate and vacuum pump, 110V)

Ideal for smooth surfaces. High-performance vacuum pump with circular oil lubrication. Clamping plates with two suction surfaces and cut-through drilling area.



## Metal Chip Cleanup Tools

- Easily clean up sharp-edged drill chips, screws and other metal parts
- Ideal for hard-to-reach spaces

### Power Worker - POW 200

Two-in-one tool for removing chips



- Hook pulls away metal swarf from drill
- Brush cleans fine chips



### Power Worker – POW 100

Simple cleanup of metal chips

- Items are safely ejected off of Power Worker without hand contact
- Rare earth magnet cleans metal parts and shavings





# Pipe Drilling Solutions NEW!

# Ensures safe, secure drilling of pipes and tubular material

- Ideal for drilling on pipe, flat or curved surfaces
- Easily attaches to pipe over 3" OD
- Strong magnets adhere to material as thin as 9/64" (3mm)
- Drilling up to 2-1/2" Dia. holes, tapping up to 15/16"
- Increased safety with patented permanant magnet system

See pages 38-39 for PipeMAB specifications

## **Pipe Saddle Clamps**



PipeMAB 200

### PipeMAB 525





Scan or visit www.csunitec.com to learn more



### **ZRO 250 Pipe Saddle Clamp**

Pipe diameters  $3^{1}/4$ " - 10" Chain length:  $35^{1}/2$ "

If using on pipe larger than 10", need 1 qty. ZRO 001

extension chains.

For models: MABasic 200, MABasic 400, MABasic 450, MAB 455, MAB 465, MAB

485 & CSU 32



**ZRO 500 Pipe Saddle Clamp** 

Pipe diameters 6" - 20" (extension chain available)

Chain length: 65"

If using on pipe larger than 20", need 2 qty. ZRO 001

extension chains.

For models: MABasic 850, MAB 525, MAB 825, MAB 845, AB-4300-2 and HB 4400



### 2 1330 8500 Pipe Saddle

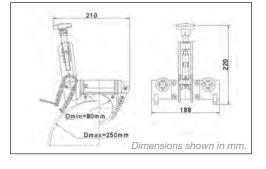
Pipe diameters 6" - 19.5" (extension chain available)

Chain length: 65"

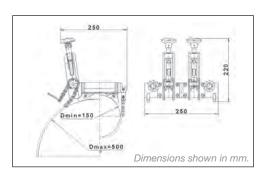
If using on pipe larger than 19.5", order 5 1201 9030 extension chains up to 31.5"OD, 5 1201 9020 for extension

chains up to 43.25"0D

For models: 2 1345 0020



Order No. **ZRO 001** extension chain for ZRO 250 and ZRO 500 pipe saddle clamps. 35" length.



# **Electric Drills and Drive Units**

# High-torque, multi-geared and variable-speed motors





Model

EAU 36/4 R R/L CB



- High-torque output
- Variable-speed, two- and four-geared drills for optimum speed selection
- Reversible motors and electronic torque control on selected models
- Ideal for special applications including valve turning, tube rolling and other jobs
- Safety slip clutch on 1<sup>1</sup>/<sub>4</sub>" capacities to protect operator and tool
- Drilling capacities up to 1<sup>1</sup>/<sub>4</sub>" in steel
- Special OEM motors available on request
- One-year warranty



**Learn More** 



				5 Max.				n A
Model No.	Motor Power (Amps)	Voltage	Load Speed (RPM)	Drilling Capacity in Steel	Torque Output (ft./lbs.)	Reversible	Chuck/Arbor	Weight (lbs.)
EHB 16/2.4 S/RL	10	110V	0-430/0-760	5/8"	19	YES	5/8" Geared	7
EHB 16/2.4 S R/L C with slip clutch	10	110V	0-430/0-760	5/8"	19	YES	5/8" Geared	7
EAW 16/2 R/L	9	110V	510/950	N/A	8	YES	<sup>5</sup> /8" X 16 UN	7
EHB 20/2.4	10.5	110V	250/450	3/4"	32	NO	MT2	9.2
EHB 32/4.2	15.5	110V	110/175/245/385	1 <sup>1</sup> / <sub>4</sub> "	112	NO	MT3	15.2
EAU 34/4 CB**	20	110V	80/130/360/570	_	203	YES	MT3	19.5
EAU 36/4 R R/L CB** with 4-speed gearbox and variable speed	22	110V	50-120 80-190 110-270 180-420	_	187	YES	МТ3	20

<sup>\*</sup> All units available in 220 Volt / 50Hz

<sup>\*\*</sup> EAU 34/4 CB and EAU 36/4 R R/L CB include control box Special Motors available upon request.

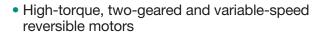


Model

EAU 34/4 CB

# **Electric Drills and Drive Units**

# Slow Speed: two-geared, variable-speed reversible motors



- Ideal for drilling, reaming and tapping steel
- Driving applications include mills, spindles, bar boring, pipe beveling and valve turning
- Perfect for tube rolling and expanding for fire tube and water tube boilers
- Mechanical safety clutch prevents operator injury or damage to the tool
- Morse Taper #3 arbor
- One-year warranty





**Drilling** 

Capacity

in Steel

11/4"

N/A



Model ETE 32/2.3 R/RL (shown with optional

Square Drive adapter)

*Up to 1<sup>1</sup>/<sub>4</sub>" twist drill capacity* 

Load

Speed

(RPM)

60-140/

200-470 30-75/

90-230

1/2" and 3/4" Square Drive accessories allow motor compatibility for various drive applications.\*

	pplications.*			6	
Tube Rolling (max.)	Reversible	Torque Output (ft./lbs.)	Torque Control	Arbor	Weight (lbs.)
2"	YES	95 max.	YES	МТ3	14
			1		

No

MT3

15

174 max.

Model No.

EHB 32/2.2 R/RL

ETE 32/2.3 R/RL

Motor

**Power** 

(Amps)

15

15

Voltage\*\*

110V

110V

YES



<sup>\*\*</sup> All units available in 220 Volt / 50Hz

<sup>\*\*\*</sup> With Expander (Up to 2 1/2" with Bead Roller)

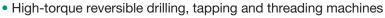
<sup>\* 1/2&</sup>quot; Square Drive with MT3 – Part No. 830-1230-050

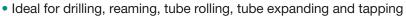
<sup>&</sup>lt;sup>3</sup>/<sub>4</sub>" Square Drive with MT3 – Part No. 830-1230-075

# **Pneumatic Drills and Drive Units**

## High-torque reversible drilling and tapping machines

ATEX









- Special applications include mills, spindles, slides, controllers, pipe tapping, valve turning and more
- Drill chucks and Morse Taper arbors
- Hammer drills for drilling concrete with up to 2200 blows per minute
- Special OEM air motors available on request
- 6-month warranty

### **D-handle Drills**





See page 80 for Rotary Hammer Drills

# Model 2 2089 0030

Morse Taper Drills w/ Feed Spindle

### **Pneumatic Hammer Drills**



### Pneumatic Pistol Drills

with reverse and safety twist throttle



Model No.	Motor Power (HP)	Load Speed (RPM)	Reversible	Chuck/ Arbor	Drilling Capacity in Steel	Tube Rolling Capacity	Torque Output (ft./lbs.)	CFM at 90 PSI	Length	Feed Length	Weight (lbs.)
Pistol Drills											
2 1261 0010	0.7	850	NO	<sup>1</sup> / <sub>2</sub> " Chuck	1/2"	N/A	7 max.	21	93/4"	N/A	4.6
Hammer Dril	ls (for co	oncrete	and underv	vater applica	tions)						
2 1266 0010	0.75	950	NO	<sup>1</sup> / <sub>2</sub> " Chuck	1/2"	N/A	7 max.	21	12"	N/A	6.7
D-Handle Dri	ills										
2 1310 0010	0.8	650	NO	<sup>1</sup> / <sub>2</sub> " Chuck	1/2"	N/A	8 max.	24	12 <sup>1</sup> / <sub>2</sub> "	N/A	12
2 1311 0010	0.8	650	NO	MT1	5/8"	N/A	8 max.	24	11"	N/A	12
Morse Taper	Drills w	/ Feed S	Spindle								
2 2089*	1.7	250	YES	MT3	1 <sup>1</sup> / <sub>4</sub> "	1"	36 max.	24	261/2"	<b>1</b> <sup>5</sup> /8"	28
2 2506*	2.5	220	YES	MT3	1 <sup>1</sup> / <sub>4</sub> "	2"	63 max.	70	26 <sup>1</sup> / <sub>2</sub> "	21/2"	32
2 2502*	2.5	80	YES	MT4	2"	21/2"	173 max.	70	26 <sup>1</sup> / <sub>2</sub> "	2 <sup>1</sup> /2"	37

<sup>\*</sup> The last four digits of the Model No. identify the type of throttle.

Please specify the four digits when ordering: 0010 for Lever Throttle or 0030 for Safety Twist Throttle.



# **Corner Drills and Drives**

Pneumatic, electric and hydraulic: high-torque drilling, reaming and driving units

Scan to Learn More





### **Corner Drills and Bridge Reamers**

- Small side-to-side distance for tight spaces
- Self-closing roll throttle
- Built-in oiler for motor
- Ideal for bridge reaming and drilling applications
- 6-month warranty
- · Visit www.csunitec.com for dimensions



- Ideal for heavy-duty reaming, tube expanding and tapping
- Perfect for special driving applications, including pipe tapping and valve turning

### **Square Drive Accessories**

2 2089 7020 - <sup>7</sup>/<sub>8</sub>" Male Sq. Drive to <sup>3</sup>/<sub>4</sub>" Male Sq. Drive 6 1016 7940 - <sup>7</sup>/<sub>8</sub>" Male Sq. Drive to 1 " Male Sq. Drive with retaining pin

Pneumatic Corner Drill Model No.	Morse Taper	Drilling (in steel)	Reaming (in steel)	Tube Rolling Capacity	Torque Output (ft./lbs.)	Load Speed (RPM)	Motor Power (HP)	CFM at 90 PSI	Length	Weight (lbs.)
Nonreversibl	e									
2 1602 0030	#1	5/8"	1/2"	N/A	7	500	0.7	21	12.5"	7
2 1701 0030	#2	7/8"	5/8"	N/A	35	270	1.8	49	20.9"	19
2 1801 0030	#3	<b>1</b> <sup>1</sup> / <sub>4</sub> "	1"	N/A	53	260	2.6	63	22.5"	25
Reversible										
2 2104 0030	#4	21/8"	2"	2"	86	21/2"	3.0	71	23.8"	37

Model No. 2 1602 0030 has a  $^3$ /s" NPT air inlet.  $^1$ /2" (13mm) hose is recommended. All other models have  $^3$ /4" NPT air inlet. A  $^1$ /2" (13mm) hose is recommended for model 2 1701 0030. A  $^5$ /8" (15mm) hose is recommended for models 2 1801 0030 and 2 2104 0030.

Hydraulic Corner Drill Model No.	Morse Taper	Drilling (in steel)	Reaming (in steel)	Tube Rolling Capacity	Torque Output (ft./lbs.)	Load Speed (RPM)	Motor Power (HP)	Oil Flow/PSI	Length	Weight (lbs.)
2 1806 0010	#3	1 <sup>1</sup> / <sub>4</sub> "	1"	N/A	60	220	3.8	4 GPM @ 2000	21"	25

Electric Drill Model No.	Motor Power (Amps)	Volt- age	Load Speed (RPM)	Drilling (in steel)	Tube Rolling Capacity	Revers- ible	Torque Output (ft./lbs.)	Torque Control	Arbor	Weight (lbs.)
EHB 32/2.2 R/RL	16.3	110	60-140, 200-470	<b>1</b> <sup>1</sup> / <sub>4</sub> "	2"	Yes	92 max.	Yes	MT3	14

Pneumatic Drive Unit Model No.	Square Drive ID	Torque Output (ft./lbs.)	Load Speed (RPM)	Revers- ible	Tube Rolling Capacity	Tapping Capacity	Motor Power (HP)	CFM at 90 PSI	Height x Length	Weight (lbs.)
2 2081*	<sup>13</sup> / <sub>16</sub> "	413	20	YES	3"	1 <sup>1</sup> /2"	1.35	53	10.9" x 26.5"	29
2 2087*†	7/8"	413	5/8"	N/A	3"	11/2"	1.35	53	10.9" x 26.5"	29
2 2087*†	7/8"	138	2"	2"	2"	3/4"	1.35	53	10.9" x 26.5"	29

<sup>\*</sup> The last four digits of the Model No. identify the type of throttle. † Square drive accessories available (see above). Please specify the four digits when ordering: 0010 for Lever Throttle or 0030 for Safety Twist Throttle.



# **SDS Rotary Hammer Drills**

Pneumatic and hydraulic: powerful percussion drilling for concrete and masonry

- SDS Plus or SDS Max models
- Safety clutch protects against overloading and jamming
- · Hammer drill holes in concrete, brick and masonry
- Rotary drilling mode for straight drilling of steel and wood
- Open center hydraulic standard, closed center optional

### SDS Max - Modes of Operation

2" bit capacity for drilling concrete and masonry

Hammer with Rotation

Ideal for concrete drilling

Rotation Only For drilling steel and wood (not reversible)





Second handle position SAE #8 port for hydraulic hose connection



### SDS Plus - Hammer and Drill

1" bit capacity for drilling concrete and masonry

Drill concrete anchor holes, thru holes, piping and mechanical openings for construction and repair work. Switches to rotary drilling mode for steel and wood.



# Closed Center Flow Control Valve

Optional accessory - Part No. 38632



### **SDS Drill Bits**

Small Masonry Bits SDS Plus up to 1" dia. Large Masonry Bits SDS Max up to 2" dia. 2 2409 8999 1/2" Chuck for SDS PLUS XRDCMKL12 1/2" Chuck for SDS MAX

### **Hydraulic Pressure Reducing Valves**

CS 70350 for reducing earth moving equipment 5000 psi to 2000 psi 2 2406 9900 reduces 5075 psi to 1160 psi 2 2406 9700 reduces 2000 psi to 1160 psi



Pneumatic Hammer Drill Model No.	Blows/ Minute (BPM)	Drill Speed (RPM)	Solid Bit Capacity (concrete)	Core Bit Capacity (concrete)	Twist Drill (wood)	Motor Power (HP)	CFM at 90 PSI	Tool System	Dimensions (inches)	Weight (lbs.)
2 1266 0010*	0-2000	0-950	<sup>1</sup> / <sub>2</sub> " dia.	1" dia.	<sup>3</sup> /8" dia.	0.75	21	1/2" Chuck	12 x 8 <sup>1</sup> / <sub>2</sub> x 4	7
2 2404 0010	0-3000	0-625	1" dia.	3" dia.	<sup>3</sup> / <sub>4</sub> " dia.	0.70	21	SDS Plus	16 x 8 <sup>1</sup> / <sub>2</sub> x 4	11
2 2404 0030*	0-3000	0-625	1" dia.	3" dia.	<sup>3</sup> / <sub>4</sub> " dia.	0.70	21	SDS Plus	16 x 8 <sup>1</sup> / <sub>2</sub> x 4	11
2 2417 0010*	0-2500	0-250	2" dia.	6" dia.	1 <sup>1</sup> / <sub>4</sub> " dia.	1.60	53	SDS Max	19 <sup>1</sup> / <sub>2</sub> x 9.8 x 4 <sup>1</sup> / <sub>2</sub>	26

<sup>\*</sup> Underwater model – optional underwater air tool line conditioner to displace moisture, Part No. MS 9109. See page 123.

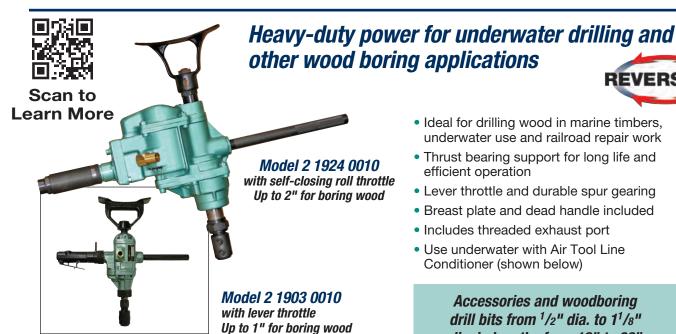
Hydraulic Hammer Drill Model No.	Blows/ Minute (BPM)	Drill Speed (RPM)	Solid Bit Capacity (concrete)	Core Bit Capacity (concrete)	Twist Drill (wood)	Motor Power (HP)	Oil Flow/PSI	Tool System	Dimensions (inches)	Weight (lbs.)
2 2426 0010**	0-3400	0- 625	1" dia.	3" dia.	<sup>3</sup> / <sub>4</sub> " dia.	0.8	5.8-13.2 GPM @ 1160 PSI	SDS Plus	18 x 10 <sup>1</sup> / <sub>4</sub> x 4	15
2 2418 0020**	0-2500	0- 250	2" dia.	6" dia.	1 <sup>1</sup> / <sub>4</sub> " dia.	1.8	2.6-13.2 GPM @ 1160 PSI	SDS Max	16 x 8 <sup>1</sup> / <sub>2</sub> x 4	31

<sup>\*\*</sup>Includes 2 2406 9700 Pressure Reducing Valve for 2000 PSI.

<sup>\*</sup> Hydraulic Hammer Drills operate at hydraulic pressures of 1160 PSI max. Pressure reducing valves are available to reduce pressure from 2000 PSI or 5000 PSI. See above. Available with optional closed center.



# Woodboring Air Drills, Reversible



· Ideal for drilling wood in marine timbers, underwater use and railroad repair work

- Thrust bearing support for long life and efficient operation
- Lever throttle and durable spur gearing
- Breast plate and dead handle included
- Includes threaded exhaust port
- Use underwater with Air Tool Line Conditioner (shown below)

Accessories and woodboring drill bits from 1/2" dia. to 11/8" dia. in lengths from 12" to 36"

Specifications	Model 2 1903 0010	Model 2 1924 0010	Model 2 1932 0010 N
Capacity in Wood	1" Diameter	2" Diameter	3" Diameter
Reversible	Yes	Yes	Yes
Power	2 HP	3 HP	3 HP
Chuck Style	<sup>1</sup> / <sub>2</sub> " Woodboring	<sup>1</sup> / <sub>2</sub> " Woodboring	<sup>1</sup> / <sub>2</sub> " Woodboring
Spindle	Stub Taper	#2 Morse Taper	#3 Morse Taper
Free Speed	750 RPM	700 RPM	380 RPM
Recommended Hose Size	1/2"	1/2"	1/2"
Overall Height	17 <sup>1</sup> /2"	18 <sup>1</sup> /2"	18 <sup>1</sup> / <sub>2</sub> "
Weight	14 <sup>1</sup> / <sub>2</sub> " lbs.	24 <sup>3</sup> / <sub>4</sub> " lbs.	24 <sup>3</sup> / <sub>4</sub> " lbs.
Air Inlet Thread	1/2" ID	<sup>1</sup> / <sub>2</sub> " ID	1/2" ID
Air Exhaust Thread	1/2" NPT	<sup>1</sup> / <sub>2</sub> " NPT	<sup>1</sup> /2" NPT
Air Consumption at 90 PSI	39 CFM	39 CFM	39 CFM
Optional Geared Drill Chuck	Part No. DE-99C	Part No. IBC 22 (MT2)	Part No. IBC 21 (MT3)

# AirPac Extends life of pneumatic power tools Tool Accessories

See page 123 for all Air & Hydraulic



- Removes moisture and dirt from air lines; a float valve automatically ejects water and dirt
- Includes automatic oiler; prevents tools from freezing in cold environments
- Eliminates air motor downtime caused by water and dirt
- Connections for two tools; max. air flow 185 CFM

### Air Tool Line Conditioner

Underwater air tool conditioner for marine applications. Displaces moisture and inhibits rust/corrosion of air motors.

9109 - 5 Liters





# Pneumatic and hydraulic: ideal for turning valves, tightening, tapping, reaming, pipe beveling, expanding and more

• Worm gear drive provides high torque – up to 554 ft.-lbs.

• Lightweight and reversible

Compact angle head allows access to confined spaces



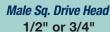
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Model numbers pictured above (listed from top to bottom): 6 1055 0075 (with male drive), 6 1055 0010 (female), 6 1014 0075 (with male drive)

### Available with Male or Female Square Drives, in a variety of sizes







Female Sq. Drive Head 3/4" or 7/8"

### **Square Drive Accessories**

**6 1015 7030** – <sup>3</sup>/<sub>4</sub>" Male Square Drive with retaining hole (included with model numbers 6 1014 0075, 6 1055 0075 and 6 1056 0075)

6 1017 7940 – 3/4" Male Square Drive with retaining pin



6 1018 7940 – 1/2" Male Square Drive with retaining pin (included with model numbers 6 1014 0099,6 1055 0099 and 6 1056 0099)

6 1016 7940 - 1" Male Square Drive

Pneumatic Nut Runner Model No.	<b>Square Drive</b> F=Female M=Male	Stall Torque at 90 PSI (ft-lbs.)	Free Speed (RPM)	Load Speed (RPM)	Power (HP)	CFM at 90 PSI	Side to Center Distance	Length	Weight (lbs.)	Air Connection	Hose ID
6 1014 0075*	3/4" M	95	200	100	0.9	46	1"	22"	11	3/8" NPT	1/2"
6 1014 0099	1/2" M	95	200	100	0.9	46	1"	22"	11	3/8" NPT	1/2"
6 1055 0075*	3/4" M	405	40	22	0.9	46	1"	21"	10	3/8" NPT	1/2"
6 1055 0099	1/2" M	405	40	22	0.9	46	1"	21"	10	<sup>3</sup> /8" NPT	1/2"
6 1056 0075*	<sup>3</sup> / <sub>4</sub> " M	133	120	67	0.9	46	1"	21"	11	<sup>3</sup> /8" NPT	1/2"
6 1056 0099	1/2" M	133	120	67	0.9	46	1"	21"	11	<sup>3</sup> /8" NPT	1/2"
6 1057 0075*	<sup>3</sup> /4" M	73.5	250	125	0.9	46	1"	21"	11	<sup>3</sup> /8" NPT	1/2"
6 1057 0099	1/2" M	73.5	250	125	0.9	46	1"	21"	11	<sup>3</sup> /8" NPT	1/2"
6 1061 0010	<sup>7</sup> /8" F	405	40	22	0.9	46	1"	21"	11	<sup>3</sup> /8" NPT	1/2"

<sup>\*</sup> Also available with 3/4" Female Square Drive – use 0010 instead of 0075 in model number.

Hydraulic Nut Runner Model No.	<b>Square Drive</b> F=Female M=Male	Drive Torque (ft-lbs.)	Free Speed (RPM)	Load Speed (RPM)	Power (HP)	Oil Flow (GPM)	Oil Pressure (PSI)	Side to Center Distance	Length	Weight (lbs.)	Connection Quick Couplers
3 6242 0010*	<sup>3</sup> / <sub>4</sub> " F	369	40	22	1.6	4-13	90-2000	1"	20"	22	1/2" FF
3 6243 0010*	3/4" F	125	180	90	1.6	4-13	1300-2000	1"	20"	22	1/2" FF

<sup>\*</sup> Also available with 1/2" (3 6242 0099) and 3/4" (3 6242 0075) Male Square Drive

# ATEX Directive

### ATEX classified power tools ensure a high level of safety in explosive atmospheres

ATEX Directive 94/9/EC defines requirements for controlling explosive atmospheres, as well as the standards for the equipment used in them. An explosive atmosphere is an atmosphere where enough flammable gas, mist, vapor or dust is mixed with air to cause an explosion if ignition occurs.

### What is ATEX?

ATEX (ATmospheres EXplosibles) is a directive for those who design, manufacture or sell any equipment intended for use in potentially explosive atmospheres. Technical and quality objectives must be certified by a third-party certification association. The ATEX directive has been a legal requirement for all European Union States since July 2003. The ATEX symbol is recognized internationally, providing assurance to users around the world that the product was manufactured to high levels of safety.

### How are ATEX tools classified?

Five elements are used to ensure that a specific piece of equipment is appropriate for its intended purpose and can be safely used in a particular application. These five elements are: 1. Industrial or Mining Application; 2. Equipment Category; 3. Atmosphere; 4. Gas; and 5. Temperature (see chart below).

### What types of tools receive ATEX certification?

Pneumatic, hydraulic and electric power tools for construction and industry can be ATEX certified. CS Unitec offers a comprehensive line of power tools for the oil, gas and energy industries. ATEX certified power tools from our line include select models of reciprocating saws, hacksaws, rotary hammer drills, impact wrenches, portable band saws, nut runners, magnetic drills, axial fans and more.

### How can I tell if my tool is ATEX certified?



The tool will be marked with the appropriate ATEX classification label and Ex symbol

	Equipment Group	Equipment Category	Atmosphere	Gas Groups	Temperature (tool surface temp. does not exceed)
ATEX 94/9/EC	Surface Industry  IM  Mining Applications (underground and above-ground facilities)	Very High Level of Protection [Zone 0, 1, 2 or 20, 21, 22]  2 High Level of Protection [Zone 1, 2 or 21, 22]  3 Normal Level of Protection [Zone 2 or 22]	Gc Atmosphere Containing Gas, Vapors or Mist Dc Atmosphere Containing Dust	Propane (acetone, petroleum fuel, ammonia, ethane, methanol, carbon monoxide, propane, n-butane, ethanol, diesel fuel, kerosene, avgas fuel, ethyl nitrite)  IIB* Ethylene (coal gas, ethylene, ethyl oxide, hydrogen sulphide)  * I/A and I/B are in increasing order of sensitivity to ignition sources, so equipment designed for use in I/B is also safe to use in I/A.	T1 842°F/450°C  T2 572°F/300°C  T3 392°F/200°C  T4 275°F/135°C  T5 212°F/100°C  T6 185°F/85°C

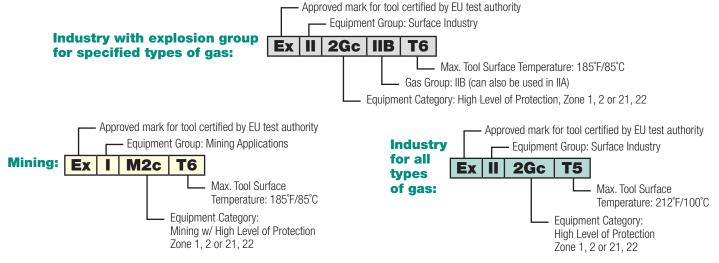
CAUTION: The user is responsible for following all safety regulations (OSHA, etc.) when choosing the appropriate tool for the hazards present.

For ATEX information, visit: http://ec.europa.eu/growth/sectors/mechanical-engineering/atex/

For more information and product specifications on CS Unitec's ATEX classified industrial power tools, call 1-800-700-5919 (203-853-9522 international) or email <a href="mailto:info@csunitec.com">info@csunitec.com</a>.

For a FREE poster explaining Ex zones, visit <u>www.csunitec.com/poster</u>.

### **Tool Classification Examples:**



For a complete list of CS Unitec's ATEX tools, visit: www.csunitec.com/specialty/atex-power-tools





The value is in the engineering... the payback is in the performance.™

CS United offers high-performance power tools and abrasive accessories for surface finishing on **STEEL, STAINLESS STEEL, ALUMINUM** and other metals, as well as rigid plastics and wood.

### Innovation is the engine of efficiency!™

Innovations in machine design, abrasive materials and production methods have led the way to:



# Hollow-core abrasives for linear grinding

The PTX Eco Smart is a linear surface finishing machine with a finned shaft for quick abrasive changing – simply slide on the abrasives and they secure automatically. This saves time and the abrasive wheels cost less. (Patented!)

Belts with buttonhole fastening system for grinding and polishing closed pipe constructions. (Patented!)





5/8"-11 SPEED NUT changeover (P/N 65008-1) The EASY-LOCK SPEED NUT allows you to change flap discs in seconds, without tools. It is easily hand tightened and eliminates the need for wrenches or expensive hubs. (Patented!)



### Important advancements in flap disc technology

- PLANTEX® high-tech hemp fiber compound (Patented!)
- POLY-MAGIC-WHEEL for dry polishing inside corners
- MAGNUM® FLEECE TOP for surface conditioning, fine finishing and polishing

### Safer and more efficient!

CS Unitec is the source for flap discs and abrasives that are free of fiberglass, mineral fibers and epoxy resin. They offer superior material removal, longer service life and smoother ergonomic handling.



Industrial hemp fiber is an almost ideal base material for backing plates of flap discs... and it is a renewable resource!

### Better for the environment!

The fiber in the high-tech PLANTEX® compound is derived from the hemp plant – a sustainable raw material which counteracts greenhouse emissions as it grows. The PTX hollow-core abrasives not only improve production efficiencies, but also minimize pollution from production to waste disposal... no plastic insert!

### Better for your bottom line!

In addition to their time-saving features and high quality, flap discs and abrasives from CS Unitec can save you money – their cost of production is lower, their quality is among the best and they offer superior service life. Hollow-core abrasive wheels from CS Unitec are more affordable than traditional solid-core abrasives since they can be produced from less raw material. These new hollow-core abrasive wheels can also be used on traditional finishing machines with the aid of a simple core adapter (see page 86.)





View product demonstrations at www.csunitec.com.



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_	
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### Safety Guidelines

Use all products according to the safety regulations of OSHA and directives by ANSI (American National Safety Institute) B7.1, European DIN EN 13743 and all other applicable international safety standards.



# **PTX ECO SMART**

The professional linear finishing system for hard, continuous use.

A revolution in linear grinding! Simply slide on the abrasives and they secure themselves automatically when the machine turns. Fast and easy!



Press the spindle lock and simply slide on the abrasive wheels or brushes, turning in the correct direction onto the finned shaft. They will be secured automatically.



Grinding in corners is easy – simply slide the abrasive wheel on the finned shaft a little towards the outside.



Even narrow abrasive wheels can be used on the PTX Eco Smart and positioned freely on the finned shaft (no spacer rings required).



Adjustable handle for right and left-handed users. Anti-vibration handle for comfortable, fatigue-free working.



Simple speed control during operation. Tachogenerator for stable speeds.



QUICK-LOCK cable for fast, easy replacement if cable is damaged. 13 ft., included. Part Number: 52004-2



Infinitely adjustable cover guard with securing points for the extraction cover.

Part Number: 40005







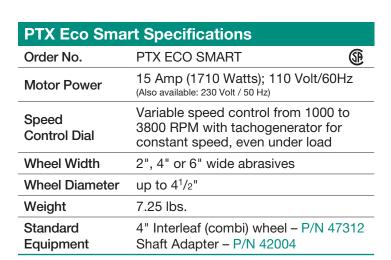
# Perfect finishes on large surfaces, with no shadows or streaks. www.csunitec.com



New abrasive mounting system saves time, reduces cost and eliminates vibration.

PTX Eco Smart is a multi-functional grinding and polishing system for flat surfaces and open or closed pipe constructions.

- · Grind from coarse to shadow-free matte finish, up to a mirror polish
- Remove welds, deep scratches, oxidation and rust
- Ideal for stainless steel, steel and nonferrous metals including aluminum, brass, bronze and copper, as well as wood and rigid plastic
- Complete line of grinding wheels, belt sleeves, special brushes, polishing and maintenance abrasives available
- Balanced straight-line handling, high torque and electronic speed control
- Abrasive mounting system allows quick changeover, vibration-free operation and 100% concentricity
- Core-free abrasives save money and produce less waste





Satin finishing using interleaf fleece wheel.



A wide selection of hollow-core abrasives is available for the PTX Eco Smart. The lack of a core insert means that the abrasives are lighter, easier to use and less expensive.

### Accessories

### **Hollow-core Shaft Adapter**

Allows user to utilize more economical hollow-core abrasives on traditional surface finishers. Fits 3/4" dia. x 4" long shaft and 1/4"

keyway(s). Overall diameter of adapter is 1-3/4" (45mm) Part Number: 42004



A range of professional PTX Eco Smart kits is available for a variety of applications. See page 88 for more information.



Scan to Learn More

### PTX Eco Smart Kits

### **PTX Professional Kit For Metalworking**

This set comes in a strong, impact-resistant transport case and contains everything you need for shadow-free industrial finishes. Match or create any finish up to a mirror finish on metals. Prevent marks and fingerprints with newly developed cleaning products and preservatives.

Part Number 47004A





### PTX Professional Kit for Metalworking includes:

- 1 PTX Eco Smart machine
- 1 Professional Case (P/N 80002)
- 1 40 grit flap wheel, 4" x 4-1/8" (P/N 47211)
- 1 80 grit Interleaf (Combi) wheel, 4" x 4-1/8" (P/N 47312)
- 1 Expansion roller, 3-1/2" x 4" (P/N 47005)
- 2 80 grit grinding belt sleeve, 3-1/2" x 4" (P/N 42080)
- 1 Fine fleece (Nonwoven) sleeve, 3-1/2" x 4" (P/N 42012)
- 1 Medium fleece (Nonwoven) sleeve, 3-1/2" x 4" (P/N 42011)
- 2 A45 TZ Pyramid sleeves, 3-1/2" x 4" (P/N 42245)
- 2 A30 TZ Pyramid sleeves, 3-1/2" x 4" (P/N 42230)
- 2 A16 TZ Pyramid sleeves, 3-1/2" x 4" (P/N 42216)
- 2 A06 TZ Pyramid sleeves, 3-1/2" x 4" (P/N 42206)
- 3 SuperPolish sleeves, 3-1/2" x 4" (P/N 42013N)
- 1 Belt driving roller (P/N 47006)

- 2 80 grit grinding belts, 1.2" x 24" (P/N 49080)
- 1 Medium fleece (Nonwoven) belt, 1.2" x 26" (P/N 49002)
- 2 A45 TZ Pyramid belts, 1.2" x 24" (P/N 49345)
- 2 A30 TZ Pyramid belts, 1.2" x 24" (P/N 49330)
- 2 A16 TZ Pyramid belts, 1.2" x 24" (P/N 49316)
- 2 A06 TZ Pyramid belts, 1.2" x 24" (P/N 49306)
- 3 SuperPolish belts, 1.2" x 26" (P/N 49004N)
- 1 Mini high gloss polishing paste, pink (P/N 40015T)
- 2 Big polishing pastes, white and blue [P/N 40013 (white) P/N 40014 (blue)]
- 1 PTX Brightex® scatter can (P/N 40029)
- 5 Microfiber cloths (P/N 40031)
- 1 Brilliance-Clean spray bottle (P/N 40050)
- 1 INOX-Protect spray bottle (P/N 40040)

### **PTX Basic Kit for Metal**

Basic set for coarse finishing to #4 finish on flat surfaces and pipes.

### Part Number 47003A

### PTX Basic Kit for Metal includes:

- 1 PTX Eco Smart machine
- 1 Carrying Case (P/N 40008)
- 1 60 grit flap wheel, 4" x 4-1/8" (P/N 47212)
- 1 80 grit Interleaf (Combi) wheel, 4" x 4-1/8" (P/N 47312)
- 1 Expansion roller, 3-1/2" x 4" (P/N 47005)
- 1 Medium fleece (Nonwoven) sleeve, 3-1/2" x 4" (P/N 42011)
- 1 Belt driving roller (P/N 47006)
- 1 80 grit grinding belt, 1.2" x 24" (P/N 49080)
- 1 Medium fleece (Nonwoven) belt, 1.2" x 26" (P/N 49002)
- 1 40 grit grinding belt, 3.6" x 4" (P/N 42040)
- 1 60 grit grinding belt, 3.6" x 4" (P/N 42060)
- 1 80 grit grinding belt, 3.6" x 4" (P/N 42080)
- 1 120 grit grinding belt, 3.6" x 4" (P/N 42120)

### **PTX Kit For Woodworking**

The complete set for treating wooden surfaces. Strong transport case with PTX Eco Smart and a range of brush wheels for various wood structures. Suction cover for extracting grinding dust particles.

Part Number 40004-3A



### PTX Basic Kit for Woodworking includes:

- 1 PTX Eco Smart machine
- 1 Carrying Case (P/N 40008)
- 1 Suction cover (P/N 40005)
- 1 Spacer ring (P/N 40007)
- 1 PTX stranded wire wheel (P/N 46301)
- 1 Bristle wheel (P/N 46101)
- 1 Fiber wheel (P/N 46400)



# PTX Grinding Wheels for Coarse and Fine Finishing

PTX abrasives from CS United are made according to high quality standards. A unique production process guarantees high concentricity for vibration-free grinding – ideal for fatigue-free working and perfect surface finishes with no transitions or shadows. **Simply try it!** You will be surprised how much smoother a PTX grinding wheel or brush wheel is.



### PTX FLEECE (Nonwoven) Wheel

Flexible nylon fleece impregnated with abrasives for a first-class finish. Produces shadow-free matte, satin and polished finishes. For removing oxidation on stainless steel and nonferrous metals and also suitable for smoothing wooden surfaces. Very high fleece content by fleece compression.

Diameter: 4" Width: 2", 4-1/8" or 6" Grit: 60, 80, 180, 280, 400, 600



### PTX Interleaf (Combi) Wheel

Nylon fleece combined with abrasive flaps for matte finishing, burnishing and removing light scratches, oxidation and handling marks on stainless steel and all metals. For removing old paint on wood while smoothing at the same time.

> Diameter: 4" Width: 2", 4-1/8" or 6" Grit: 60, 80, 180



### **PTX Flap Wheel**

With radial abrasive cloth flaps in various grit sizes for removing rust, oxidation layers, minor scratches and for the regraining and burnishing of metals.

Diameter: 4"
Width: 2" or 4-1/8"
Grit: 24, 40, 50, 60, 80, 120, 180, 240



### **PTX CLEAN Wheel**

Made of hard-textured, nonwoven fleece for cleaning and descaling welds, pore-deep removal of rust, oxidation and coatings, cleaning beams, bricks, etc. Produces an effective linear finish on stainless steel.

Diameter: 4" Width: 2" or 4" Grit: Medium



### **PTX GUM Wheel**

Soft rubber impregnated with abrasive grit for the removal of minor scratches. Ideal for a bright, decorative linear finish on stainless steel and nonferrous metals and for smoothing wooden fibers.

Diameter: 4" Width: 2" or 4" Grit: 60, 180

### **HOLLOW-CORE ABRASIVES HAVE MANY ADVANTAGES:**

- Easy to mount simply slide on and off
- 100% concentricity no vibration
- Lower cost and higher productivity!

We continue to carry abrasives with core inserts.

Contact us for more information.

PTX Fleece Nonwoven Wheels					
Part No.	Grit	Size (dia. x width)			
47411	60	4" x 4 <sup>1</sup> / <sub>8</sub> "			
47412	80	4" x 4 <sup>1</sup> / <sub>8</sub> "			
47413	180	4" x 4 <sup>1</sup> /8"			
47414	280	4" x 4 <sup>1</sup> / <sub>8</sub> "			
47415	400	4" x 4 <sup>1</sup> / <sub>8</sub> "			
43601*	600	4" x 4 <sup>1</sup> / <sub>8</sub> "			
47401	60	4" x 2"			
47402	80	4" x 2"			
47403	180	4" x 2"			
47404	280	4" x 2"			
47405	400	4" x 2"			
47422	80	4" x 6"			
47423	180	4" x 6"			

<sup>\*</sup> Keyed shaft

PTX Interleaf (Combi) Wheels				
Part No.	Grit	Size (dia. x width)		
47311	60	4" x 4 <sup>1</sup> / <sub>8</sub> "		
47312	80	4" x 4 <sup>1</sup> / <sub>8</sub> "		
47313	180	4" x 4 <sup>1</sup> / <sub>8</sub> "		
47301	60	4" x 2"		
47302	80	4" x 2"		
47303	180	4" x 2"		
47322	80	4" x 6"		
47323	180	4" x 6"		

PTX Flap Wheels					
Part No.	Grit	Size (dia. x width)			
47211	40	4" x 4 <sup>1</sup> / <sub>8</sub> "			
47212	60	4" x 4 <sup>1</sup> / <sub>8</sub> "			
47213	80	4" x 4 <sup>1</sup> / <sub>8</sub> "			
47214	120	4" x 4 <sup>1</sup> / <sub>8</sub> "			
47215	180	4" x 4 <sup>1</sup> / <sub>8</sub> "			
47201	24	4" x 2"			
47202	40	4" x 2"			
47204	60	4" x 2"			
47205	80	4" x 2"			
47206	120	4" x 2"			
47207	180	4" x 2"			
47208*	240	4" x 2"			

<sup>\*</sup> Keyed shaft

PTX CLEAN Wheels						
Part No.	Grit	Size (dia. x width)				
47511	Medium (black)	4" x 4"				
40018A*	Medium (black)	4" x 2"				

<sup>\*</sup> Keyed shaft

PTX GUM Wheels					
Part No.	Grit	Size (dia. x width)			
45061*	60	4" x 4 <sup>1</sup> / <sub>8</sub> "			
45181*	180	4" x 4 <sup>1</sup> / <sub>8</sub> "			
45180*	180	4" x 2"			

<sup>\*</sup> Keyed shaft



# Q

# **Expansion Roller**

Use with sanding belts, fleece and felt sleeves. The sleeves are simply pushed over the expansion roller and held securely in place by the centrifugal force. 3-1/2" dia. x 4" wide – Part Number: 47005

### ■ TIPS & TRICKS

### **Expansion Roller - Hard Rubber**

Internal expansion slots now allow easier sleeve replacement and improved adjustment to the workpiece, as well as vibration absorption and concentricity.

Part Number: 47005







# **Belt Sleeves for Expansion Roller**



PTX Zirconium Grinding Belt Sleeve Made of zirconium. Removes deep scratches and grinds weld seams on metals. Far less rework is required as a result of using the time-saving linear grinding technique.

3-1/2" dia. x 4" wide Grit: 40, 60, 80, 120, 150, 180

### Part No. Grit Size (dia. x w) Quantity 3<sup>1</sup>/<sub>2</sub>" x 4" 42040 40 10 per pack 42060 60 3<sup>1</sup>/<sub>2</sub>" x 4" 10 per pack 42080 80 3<sup>1</sup>/<sub>2</sub>" x 4" 10 per pack 120 3<sup>1</sup>/<sub>2</sub>" x 4" 10 per pack 42120 150 3<sup>1</sup>/<sub>2</sub>" x 4" 10 per pack 42150 3<sup>1</sup>/<sub>2</sub>" x 4" 42180 180 10 per pack

**PTX Zirconium Grinding Belt Sleeves** 



### PTX Ceramic Grinding Belt Sleeve

High-performance ceramic aluminum oxide grain. Increased removal rate and longest life for highest productivity. Excels in all metals.

3-1/2" dia. x 4" wide Grit: 40, 60, 80

### PTX Ceramic Grinding Belt Sleeves

Part No.	Grit	Size (dia. x w)	Quantity
42440	40	3 <sup>1</sup> / <sub>2</sub> " x 4"	10 per pack
42460	60	3 <sup>1</sup> / <sub>2</sub> " x 4"	10 per pack
42480	80	3 <sup>1</sup> / <sub>2</sub> " x 4"	10 per pack

### **PTX TZ Pyramid Sleeve**

New abrasive cloth with pyramidshaped grit structure. High material removal while producing a very fine finish, reducing the amount of work required when compared to grinding belt sleeves and fleece sleeves. Ideal for pre-polishing for fine mirror finishes and removing scratches and spot welds. Even roller scale can be removed easily.

3-1/2" dia. x 4" wide Grit: A65/280, A45/400, A30/600, A16/1200, A06/2000

### **PTX TZ Pyramid Sleeves**

Part No.	Grit	Size (dia. x w)	Quantity
42270	A100/220	3 <sup>1</sup> / <sub>2</sub> " x 4"	10 per pack
42265	A65/280	3 <sup>1</sup> / <sub>2</sub> " x 4"	10 per pack
42245	A45/400	3 <sup>1</sup> / <sub>2</sub> " x 4"	10 per pack
42230	A30/600	3 <sup>1</sup> / <sub>2</sub> " x 4"	10 per pack
42216	A16/1200	3 <sup>1</sup> / <sub>2</sub> " x 4"	10 per pack
42206	A06/2000	3 <sup>1</sup> / <sub>2</sub> " x 4"	10 per pack

TZ PYRAMID GRIT COMPARISON TABLE					
Corresponds	A65	A45	A30	A16	A06
to grit size	280	400	600	1200	2000



### PTX Fleece "Nonwoven" Sleeve

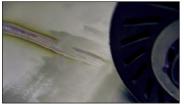
Nylon impregnated with abrasive grit for removing minor to medium scratch marks and oxidation coatings, matte and satin finishing and deburring applications.

3-1/2" dia. x 4" wide Grit: Coarse, Medium, Fine, Superfine

### PTX Fleece "Nonwoven" Sleeves

Part No.	Grit	Size (dia. x w)	Quantity
42010	coarse (brown)	31/2" x 4"	4 per pack
42011	medium (red)	3 <sup>1</sup> / <sub>2</sub> " x 4"	4 per pack
42012	fine (blue)	3 <sup>1</sup> / <sub>2</sub> " x 4"	4 per pack
42009	superfine (grey)	3 <sup>1</sup> / <sub>2</sub> " x 4"	4 per pack

	FLEECE COMPARISON TABLE					
Corresponds to grit size	Coarse (brown)	Medium (red)	Fine (blue)	Superfine (grey)		
to grit size	80	180	280	400		



The expansion roller is helpful when grinding large areas and removing large welds.



### ■ TIPS & TRICKS

To remove the grinding sleeve, place the expansion roller on a round object that is slightly smaller than the roller. Then push the sleeve down slightly using both hands.



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# Special Brushes for Metals, Wood and Hard Plastics



### **PTX Stranded Wire Wheels**

Sturdy steel wire brush. For deburring, rust removal, roughing and cleaning metal. For brushing out soft annual rings on timber, leaving a rough rustic effect.

4" dia. x 2-7/8" wide - Part No. 46301\* 4" dia. x 1" wide - Part No. 47702\*

\* Requires spacer ring 40007



### **PTX Bristle Wheel**

Elastic nylon brush impregnated with abrasive grit. For roughing and deburring metal, as well as creating a rustic effect with even annual ring transitions on timber.

4" dia. x 2-7/8" wide - Part No. 46101\* 4" dia. x 1" wide - Part No. 46102N\*

\* Requires spacer ring 40007



### **PTX Stainless Steel Wire Wheels**

Elastic stainless steel wire brush. For cleaning welds, deburring, removing rust, roughing and removing coatings.

4" dia. x 2-7/8" wide - Part No. 47721\* 4" dia. x 1" wide - Part No. 46202N\*

\* Requires spacer ring 40007



### **PTX Fiber Wheel**

Elastic fiber brush. For polishing stained wood, satin finishing, pore-deep dust removal and cleaning applications.

4" dia. x 4" wide - Part No. 46400

Note: Above wheels are configured for keyed shaft. Hollow-core shaft adapter not necessary.



Stranded wire wheel for creating a rustic effect on wood



### Cotton Buffing Wheel

Cotton varn wheel for use with compounds. Produces a very bright high mirror finish. Use on flat, contoured or irregular surfaces.



\* Requires spacer ring 40007

# Abrasives for Polishing to High-Gloss and Mirror Finish



- Julian

### **PTX Felt Sleeve**

Made of soft merino (endless) for polishing large stainless steel and nonferrous surfaces quickly to a mirror finish. Also suitable for hard plastics. Must be used with the expansion roller.

3-1/2" dia. x 4" wide (4 per pack) Part No. 42013

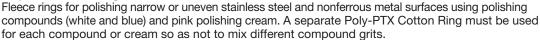


### PTX SuperPolish Sleeve

Revolutionary special fleece produces perfect brilliant, shadow-free mirror finishes on stainless steel and nonferrous metal surfaces using polishing compounds (white and blue) and pink polishing cream. SuperPolish fleece is absorbent, does not smear and saves significant work time. Must be used with the expansion roller.

3-1/2" dia. x 4" wide (4 per pack) Part No. 42013N







100mm x 12mm (4" dia. x 1/2" wide), 8 per pack, Medium Part No. 40019M

100mm x 12mm (4" dia. x 1/2" wide), 8 per pack, Soft Part No. 40019-T

For polishing aluminum, brass and other nonferrous metals:

100mm x 12mm (4" dia. x 1/2" wide) Part No. 250 521

See page 92 for pre-grinding and polishing compounds, mirror finish creams, cleaners and protective sprays for finished metal surfaces.









# Polishing and Maintenance Products (cont'd)



PTX Pre-grinding & Polishing Compound Essential for polishing all metals, including stainless steel, aluminum, etc.

PTX WHITE pre-polishing compound (23 oz.) – Part No. 40013
PTX BLUE finishing compound (23 oz.) – Part No. 40014
PTX WHITE and BLUE mini pastes (approx 4.2 oz. ea.) –
Part No. 40009



**PTX Brightex® Softclean Powder** (non-caustic)
For removing cream and compound residues. Scatter on the surface and wipe off with a microfiber cloth.

Aluminum scatter container with Brightex® (approx. 7 oz.) – Part No. 40029
Bag, 2.2 lbs. – Part No. 40028
Scatter container only – Part No. 40020



### PTX Polishing Cream, Pink

For high reflective finishing. Produces a perfect mirror finish on stainless steel and nonferrous metals when used with the SuperPolish Sleeve or Belt.

Miniature tube, 2 oz. – Part No. 40015T Can, 2.2 lbs. – Part No. 40015

### **Microfiber Cloths**

For pore-deep cleaning and even distribution of maintenance products and polishes. Our microfiber cloths produce a top finish on all materials.

Size: 13" x 14", package of 25 - Part No. 40031



INOX-Protect (hard sealant)
Protects finished and polished metal surfaces (stainless steel, steel, aluminum, brass, copper, etc.) with a clear, dry adhesive film. Removes fingerprints and other dirt.

Canister (w/ spray bottle), 1.3 gal. – Part No. 40041



Part No. 40051

### **Brilliance-Clean**

For streak- and residue-free cleaning of all surfaces, including stainless steel, steel, aluminum, brass and copper. Brilliance-Clean is not harmful to plastics, wood or coated surfaces. Remove fingerprints, dust, compound residue, minor oil and grease marks and adhesive residue. Evaporates quickly without leaving residue.

Canister (w/ spray bottle), 1.3 gal. -



POLY Protection (oil film)
For cleaning and preserving
finished and polished stainless
steel and nonferrous metal
surfaces. Protects against
shadows and finger and water
marks for a long time. Spray on
and rub off with a microfiber
cloth. Produces a darker effect on
finished surfaces.

Canister (w/ spray bottle), 1.3 gal. – Part No. 40012

Spray bottle, 17 oz. - Part No. 40011



### A perfect mirror finish on stainless steel

The newly developed grinding and polishing system, featuring special **TZ Pyramid** and **SuperPolish** fabrics from CS Unitec, produces a perfect mirror finish quickly and in just a few steps.



Step 1 - Pre-grinding Prepare with TZ Pyramid sleeve grit A45 (possibly A65) to remove mill skin, scratches and minor unevenness.



Spray bottle, 17 oz. - Part No. 40050

Step 2 - Intermediate grinding
Rework with TZ Pyramid A30 and complete with
TZ Pyramid A16. Use very little grinding pressure
and grind perpendicular and diagonally.

Tip: After each step, remove the compound residue from the workpiece with PTX Brightex® Softclean Powder and a microfiber cloth.



Step 3 - Mirror finish polish

Use the SuperPolish sleeve with white polishing paste, then with blue polishing paste. Use a different sleeve for each paste grit. Polish diagonally. For a high-gloss finish, use the SuperPolish sleeve with the pink high-gloss polishing cream. Polish in one direction only.

The result... a brilliant mirror finish!



# Maintain and protect finished or polished stainless steel surfaces.

Compound and cream residues can be removed using **PTX Brightex**® Softclean powder. Simply scatter on the softclean powder and wipe it off using a microfiber cloth.

Compound residues, fingerprints, dust, minor oil and grease marks and adhesive residue can be removed effortlessly with **Brilliance-Clean**. Any residue will evaporate immediately.

To protect finished or polished metal surfaces, spray **INOX-Protect** on the surface, rub off with a microfiber cloth, wipe the surface dry and then polish briefly. The surface will be protected by a dry, invisible film for several weeks. Polished finishes will not be darkened by this product.

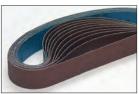
# Abrasives for Pipe Constructions – Open or Closed



### PTX Grinding Belt Roller with stainless steel flanges

For use with grinding, fleece, SuperPolish and felt belts. The belt roller is made of wear-resistant soft Vulculan with stainless steel discs on the sides. The surface is grooved to ensure that the abrasive belt does not slip.

Diameter: 3.5" x 2.8" Part No. 47006



# PTX Grinding Belt in high-quality aluminum oxide (closed)

For coarse and initial grinding, rust removal and smoothing round metal pipes. For use with grinding belt rollers. For use on closed pipe constructions, see TIPS & TRICKS below. **Dimensions: 1.2" x 24"** 

Grit: 40, 60, 80, 120, 150, 180, 240 See ordering information at right.



### PTX TZ Pyramid Belt (closed)

Abrasive fabric with pyramid-shaped grit structure for removing scratches, roller scale and spot welds. TZ Pyramid belts allow high material removal while producing a very fine finish. They are ideal for initial grinding before polishing to a mirror finish. Because grit fineness is increased slowly, it is possible to omit several operations. Use with grinding belt rollers. For use on closed pipe constructions, see TIPS & TRICKS below. Dimensions: 1.2" x 24", Grit: A65, A45, A30, A16, A06 See ordering information at right.

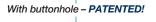


### **PTX Fleece Nonwoven Belt (open)**

Buttonhole fastening system for fine grinding and pre-polishing open and closed pipe constructions and handrails. The fleece belt can be opened and closed as often as necessary. For use with grinding belt rollers. International patent and design protected.

Dimensions: 1.2" x 26", Grit: coarse, medium, fine,

Dimensions: 1.2" x 26", Grit: coarse, medium, fine superfine. See ordering information at right.





### PTX Felt Belt (open)

Made of merino felt with buttonhole fastening system for polishing open and closed pipe constructions and handrails. The polishing belt can be opened and closed as often as necessary. Use with grinding belt rollers and our polishing compounds and creams. Use a separate felt belt for each compound and cream grit - do not mix grits. International patent and design protected.

1-800-700-5919

Dimensions: 1.2" x 26" Part No. 49004

### **PTX Grinding Belts (Aluminum Oxide)**

Part No	o. Gri	t Size	(w x l)	Quantity
49040	40	1.2"	x 24" 10	0 per pack
49060	60	1.2"	x 24" 10	0 per pack
49080	) 80	1.2"	x 24" 10	0 per pack
49120	120	0 1.2"	x 24" 10	0 per pack
49150	150	0 1.2"	x 24" 10	0 per pack
49180	180	0 1.2"	x 24" 10	0 per pack
49240	) 240	0 1.2"	x 24" 10	0 per pack

### **PTX TZ Pyramid Belts**

	Part No.	Grit	Size (w x I)	Quantity
	49365	A65/280	1.2" x 24"	10 per pack
	49345	A45/400	1.2" x 24"	10 per pack
	49330	A30/600	1.2" x 24"	10 per pack
	49316	A16/1200	1.2" x 24"	10 per pack
Ì	49306	A06/2000	1.2" x 24"	10 per pack

### PTX Fleece Nonwoven Belts (open)\*

Part No.	Grit	Size (w x I)	Qty.
49001	coarse (brown)	1.2" x 26"	1
49002	medium (red)	1.2" x 26"	1
49003	fine (blue)	1.2" x 26"	1
49007	superfine (grey)	1.2" x 26"	1

<sup>\*</sup> Feature buttonhole fastening system



### **PTX Special Adhesive Tape**

Integrated glass fabric for joining grinding belts. Strong, heat-resistant adhesive. Join PTX grinding and TZ Pyramid belts for use on closed pipe constructions. Wrap tape around

entire length of grinding belt, overlapping approximately 370°. Dimensions: 1" x 165' Part No. 49000



### **INOX Miter Tape**

Protect adjacent finishes when grinding. Self-adhering 304 Stainless tape for use when creating distinct edges on finishes. Excellent for creating mitered corners. Easily cut with scissors, fast application and residue-free removal.

Minimal thickness for accurate grinding lines.

Dimensions: One roll measures 6" x 8.2 ft. Part No. 40070



### PTX SuperPolish Belt (closed)

For a perfect mirror finish on pipe constructions and handrails. SuperPolish is a new, special micro fleece that produces a perfect, brilliant mirror finish on stainless steel and nonferrous metals. Smears and shadows are eliminated when used with our polishing compounds (white and blue) and pink cream. SuperPolish is absorbent and saves time. Use with grinding belt rollers. Dimensions: 1.2" x 26" (not available with buttonhole fastening system) Part No. 49004N

# TIPS & TRICKS Grinding and polishing closed pipe constructions Fleece and felt belts with the patented buttonhole fastening system are ideal for working on closed pipe constructions and handrails. The grinding belt can be placed over the pipe and closed or opened again in a twist using the buttonhole system. Changing a belt is quick and easy. The belt can be opened and closed as often as required. Closed belts such as the high-quality aluminum oxide belt or the TZ Pyramid belt must be cut open to work on closed pipe constructions. Place the belt over the pipe and join using our special adhesive tape (P/N 49000) over the entire length (approx. 370°).

# VARILEX® 1802 HT Professional

The most powerful speedcontrolled angle surface finishing and blending tool in its class.

Variable speed from 2400 to 8900 RPM, 15 Amp (1710 W) power, disc change in seconds without tools. For disc diameters up to 7".







# INDUSTRY'S MOST POWERFUL BLENDING & FINISHING TOOL!

Optimal speed setting for a range of grinding and polishing applications, yielding perfect results every time!



**FLEXIBLE SHAFT** - The new flexible drive shaft can now upgrade the VARILEX<sup>®</sup> to a powerful professional drive motor for all applications. See page 95 for details.



# More than just an angle grinder - the most powerful single-handed multi-function machine available!

### Change discs in seconds, without tools.

The VARILEX® has an infinitely adjustable speed between 2400 and 8900 RPM, for applications from grinding to blending, pre-polishing and polishing

- · Ideal for use with both flap discs and polishing discs, as well as grinding and cutting wheels
- Balanced handle ensures fatigue-free grinding
- Tachogenerator keeps speed constant, even when grinder is operating at full load or low speeds
- Variable-speed control doubles disc service life, prevents glazing of disc and workpiece heat deformation and reduces noise level
- Motor design allows exceptional performance at low RPM - without motor overheating or burnout
- EASY-LOCK clamping nut and spindle lock allows disc changeover in seconds



### **VARILEX®** Specifications Order No. 65030U 15 Amp (1710 Watts); 110 Volt/60Hz **Motor Power** (Also available: 230 Volt / 50 Hz) Speed Infinitely adjustable from 2400 to 8900 RPM Control Dial 4" to 7" Wheel Diameter Spindle Thread 5/8"-11 UNC 7/8" **Arbor Size** Weight 6.2 lbs.

### Use with various discs and safety guards

Available with optional 7" safety guard for use with various-size grinding discs from 4" to 7" diameter (typical disc diameters are 4", 4-1/2", 5", 6" and 7").

The VARILEX® is not designed for continuous use at low speed for polishing paint in the automotive trade.

### **FIX Hook & Loop Kits for VARILEX®** System

Two versatile FIX Hook & Loop System kits for polishing up to a #8 mirror finish!

- Changeove in seconds between abrasives
- Wide selection available

See pages 98-101 for kits & abrasive accessories.



### 5/8"-11 EASY-LOCK SPEED NUT Clamping System



Using the EASY-LOCK SPEED NUT. you can change the abrasive disc on the VARILEX® in a matter of seconds without tools!

Easy hand tightening eliminates the need for wrenches and expensive 5/8"-11 hubs. Part No. 65008-1

### Ŋ TIPS & TRICKS



### **Flexible Shaft Ordering Information**

Item	Part No.
Flexible shaft with 5/16" steel wire and 5/8" thread	10015
Separate 1/8" collet for flexible shaft	10011A
Separate 1/4" collet for flexible shaft	10011B
Machine holder (powder-coated steel) incl. clamping screw for VARILEX®	10008



# PLANT Flap Discs

# NDUSTRY FIRST! NEW ECO-FRIENDLY **PLANTEX DISCS WITH INDUSTRIAL** PROTECTED HEMP BACKING



# **SUPERIOR PERFORMANCE**

Made in Germany



- Internationally Patented Unique Formula: Optimal grinding, blending, & finishing
- Eco-Friendly: 50% less energy is used in production of PLANTEX Discs
- 100% Usable flaps, down to the backing **COMPETITIVELY PRICED**

High performance, patented grain & design that excels on stainless steel, carbon steel, & heat sensitive alloys providing extra long-life.

(Type 29)





Part No.	Diameter	Arbor	Grit	QTY
93520	4-1/2"		Multigrain 40/60	
93519	4-1/2"	5/8" x 11	80	
93521	5"	Spin On	Multigrain 40/60	10 Pack
93523	5"		80	
93516	6"	7/8"	Multigrain 40/60	
93517	6"	7/8"	80	

A premium zirconia grain for use on carbon steel and stainless steel. High metal removal rates and long life. (Type 29)

		,	<u>, , , , , , , , , , , , , , , , , , , </u>	
Part No.	Diameter	Arbor	Grit	QTY
93564	4-1/2"		40	
93566	4-1/2"		60	1
93568	4-1/2"		80	1
93569	4-1/2"	5/8" x 11	120	1
93574	5"	Spin On	40	
93576	5"		60	10 Pack
93578	5"		80	10 Pack
93579	5"		120	
93499	6"		40	
93500	6"	7/8"	60	
93501	6"	//6	80	
93502	6"		120	







A zirconia grain for use on carbon steel & stainless steel, overhang excels for corners & tight areas, for fast cut & long-life- an excellent value. (Type 29)

Part No.	Diameter	Arbor	Grit	QTY
93485	4-1/2"		Multigrain 40/60	
93486	4-1/2"	5/8" x 11	80	40 D
93488	5"	Spin On	Multigrain 40/60	10 Pack
93489	5"		80	

A special grain & formula to grind & blend aluminum and other non-ferrous materials while minimizing loading and providing long-life.

(Type 29)

Part No.	Diameter	Arbor	Grit	QTY
93854	4-1/2"		40	
93856	4-1/2"		60	
93858	4-1/2"		80	
93859	4-1/2"	5/8" x 11	120	10 Pack
93864	5"	Spin On	40	10 Pack
93866	5"		60	
93868	5"		80	
93869	5"		120	





# FIX HOOK & LOOP SYSTEM

Highly flexible backing disc for high-quality finishes. Ideal for surface conditioning and polishing up to a mirror finish.

The FIX Hook & Loop system takes advantage of a flexible backing pad and allows a disc to be changed in seconds without tools.

The FIX Hook & Loop system is a good fit wherever disc flexibility and frequent changeover are required. It will save time in industrial metalworking applications such as car body shops and repair shops.

The system requires a speed-controlled angle grinder, such as the VARILEX<sup>®</sup>. A wide range of abrasives are available for all steps – from rough grinding up to a mirror finish.

The FIX Hook & Loop's "green" backing disc is made of natural materials. The flexibility of the abrasives allows you to achieve results similar to stationary grinding machines.

The FIX family of abrasives must be used with the FIX original backing pads.



The FIX Hook & Loop system is an essential surface finishing and polishing system for all sheet metal applications.

# **FIX Hook & Loop System Kits**

### **FIX Starter Kit**

This kit includes a range of FIX Hook & Loop components, as well as a VARILEX $^{\otimes}$  WSF 1802 Angle Grinder. Part No. 80050U

- 1 VARILEX® WSF 1802 HT, 110V, 5/8" spindle
- 1 Carrying case
- 1 FIX backing pad 4-7/16"
- 1 Wheel guard for discs up to 5"
- 3 FIX fleece discs 4-1/2" (1 each coarse, medium, fine)
- 1 EASY-LOCK SPEED NUT
- 2 FIX FLEECE TOP 4-1/2" (1 each grit 80, 180)
- 2 FIX flap discs 4-1/2" (1 each grit 40, 60)
- 2 FIX SuperPolish discs 4-1/2"
- 1 FIX clean 4-1/2"
- 1 PTX Brightex® Softclean Powder scatter can
- 4 FIX Zirconium discs 4-1/2" (1 each grit 40 120)
- 2 Mini-polishing pastes, white and blue

### **FIX Test Kit**

This kit contains all the FIX Hook & Loop System components to go from rough grinding up to a mirror finish. Part No. 80051U

- 1 Carrying case
- 1 FIX backing pad
- 8 FIX Zirconium discs 4-1/2" (2 each - 40, 60, 80, 120 grit)
- 10 FIX TZ Pyramid discs 4-1/2"
  - (2 each 280, 400, 600, 1200, 2000 grit)
- 8 FIX Surface Conditioning discs 4-1/2" (2 each coarse, medium, fine, superfine)
- 6 FIX SuperPolish discs 4-1/2"
- 2 Mini-polishing pastes, white and blue
- 1 PTX polishing cream pink
- 1 PTX Brightex® Softclean Powder scatter can
- 2 PTX microfiber cloths
- 1 Sample size PTX Poly Protection
- 1 Sample size PTX Brilliance Clean



### **▼ TIPS & TRICKS**

### Perfect mirror finish on stainless steel and nonferrous metals

The new TZ Pyramid and SuperPolish discs for the FIX Hook & Loop system can be used with an angle grinder to create perfectly polished finishes on stainless steel and nonferrous metals.

**Pre-grinding** to remove scratches and level welds using TZ Pyramid discs with grit A30.

Fine grinding using TZ Pyramid discs with grit A16.

These two stages prepare the surface for polishing. TZ Pyramid is an aggressive abrasive, so there is no need to slowly increase the grit fineness. Use only contact pressure to grind – the weight of the grinder is generally sufficient.

Pre-polish with SuperPolish disc and white polishing compound.

Main polish with SuperPolish disc and blue polishing compound.

Perfect mirror finish with SuperPolish disc and pink cream.

Use a separate SuperPolish disc for each step – the different compound grits must not be mixed. Remove compound and cream residues after each stage using PTX Brightex® Softclean Powder and a microfiber cloth.



# Abrasives for the FIX Hook & Loop System

The FIX family of abrasives must be used with the FIX original backing disc.



### **FIX Backing Pads with Centering Pin**

For use with the FIX Zirconium, FIX TZ and FIX SuperPolish discs. The backing disc is made of special elastic with a centering pin for perfect alignment.

### Without Foam:

Diameter: 4.5" with 5/8"-11 thread – Part No. 80115U Diameter: 6" with 5/8"-11 thread – Part No. 80150U

### With 1/4" PUR Foam absorptive coating:

Diameter: 4.5", 5/8"-11 thread – Part No. 80115UF Diameter: 6", 5/8"-11 thread – Part No. 80150UF



### **FIX Zirconium Disc**

Abrasive disc with Hook & Loop fastening and an outstanding grinding capacity. Ideal for body shops and car workshops.

FIX Zirc	onium Disc	
<b>Ordering</b>	<b>Information</b>	ı

Part No.	Diameter	Grit	Quantity
80904		40	
80906	41/2"	60	50 pook
80908	4.72	80	50 pack
80909		120	
80914		40	
80916	6"	60	FO pook
80918		80	50 pack
80919		120	



### **FIX Fleece (Nonwoven) Disc**

Versatile disc for fine surface conditioning and pre-polishing.

### FIX Fleece (Nonwoven) Disc Ordering Information

Part No.	Diameter	Grit	Quantity
80615		coarse (brown)	
80616	4 <sup>1</sup> / <sub>2</sub> "	medium (red)	10 pack
80617	4.72	fine (blue)	TO Pack
80618		superfine (grey)	
80650		coarse (brown)	
80651	6"	medium (red)	10 pook
80652	O	fine (blue)	10 pack
80653		superfine (grey)	



### **FIX (Nonwoven) Disc**

The new FIX-Klett disc is a superfine soft nylon-fleece material for pre-polishing aluminum or other soft, nonferrous materials to a mirror finish.

Diameter: 4-1/2"; Superfine grit, Part No.80680 (10 pack) Diameter: 6": Superfine grit, Part No. 80690 (10 pack)



### **FIX TZ Pyramid Disc**

Abrasive fabric with pyramid-shaped grit structure for high material removal while producing a very fine finish. FIX TZ Pyramid discs reduce the amount of work required compared to grinding belt and

fleece sleeves. Ideal for pre-polishing for mirror finishes and for removing scratches and spot welds. An additional coating dramatically reduces the grinding temperature and protects the Hook & Loop components and workpiece.

# FIX TZ Disc Ordering Information

Part No.	Diameter	Grit/ Equivalent	Quantity
80932		A65/280	
80940		A45/400	
80960	41/2"	A30/600	10 pack
80970		A16/1200	
80980		A06/2000	
80985		A65/280	
80986		A45/400	
80987	6"	A30/600	10 pack
80988		A15/1200	
80989		A06/2000	

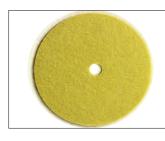


### **FIX SuperPolish Disc**

SuperPolish is a special needle fleece that produces a perfect, brilliant mirror finish on stainless steel and nonferrous metals. Use with our polishing compounds (white and blue)

and pink cream to avoid smears and shadows. SuperPolish is absorbent, does not smear and saves time.

Diameter: 4-1/2"; Thickness: 1/4", Part No. 80715N (10 pack)
Diameter: 6": Thickness: 1/4", Part No. 80750N (10 pack)



### FIX SuperPolish Felt Disc

Special merino wool felt that produces a perfect, brilliant mirror finish on stainless steel and nonferrous metals. Use with our polishing compounds (white and blue) and pink cream to avoid smears and shadows.

Diameter: 4-1/2"; Thickness: 1/4", Part No. 80715 (10 pack)
Diameter: 6"; Thickness: 1/4", Part No. 80750 (10 pack)

When polishing with FIX SuperPolish Discs, use a separate SuperPolish disc for each compound and cream. The different compound grits must not be mixed. Remove compound and cream residues from the workpiece after each stage using PTX Brightex® Softclean Powder and a microfiber cloth.





# Polishing corner welds with the POLY-MAGIC-WHEEL

Obtaining good polish quality when finishing corner welds is difficult, especially for the fabrication of railings. The POLY-MAGIC-WHEEL was designed to help you more easily produce a truly perfect finish in these applications. This highly compacted fleece disc was designed specifically for grinding and polishing bead and corner welds.

Carry out the initial grinding and leveling of welds with the red disc, grit A (80 grit).

Then polish to a mirror finish using the POLY-MAGIC gray disc, grit B (900 grit). These discs are very aggressive and improve productivity. No polishing compounds or creams are required for polishing with the POLY-MAGIC-WHEEL (dry polish).

# POLY-MAGIC UNITZED WHEEL

# Dry polish stainless steel in corners up to a mirror finish!

The POLY-MAGIC-WHEEL is designed for finishing and dry polishing in corners, producing up to a perfect mirror finish in just two steps. These discs are composed of highly compressed fleece material, made by compressing single flaps that are then impregnated with foam for greater strength. This special process allows considerably more abrasive material to be used than on conventionally wound "unitized wheels and discs."

The POLY-MAGIC-WHEEL is ideal for grinding and polishing bead and corner welds. It may only be used frontally.

POLY-MAG	ilC-WHEEL
Dimensions	6 <sup>1</sup> / <sub>2</sub> " dia. x 7/8" arbor
Max. Speed	5000 RPM
Ideal Speed	3000 to 4000 RPM
Grits	<b>A/80 (light gray)</b> : for initial grinding and leveling welds (P/N 96720, 5 pk.)
	<b>B/900 (dark gray):</b> for polishing to a perfect mirror finish (P/N 96721, 5 pk.)

### Mirror finish in 2 steps:





POLY-MAGIC-WHEEL A (80 grit)

POLY-MAGIC-WHEEL B (900 grit)









## **MAGNUM® TOPMIX**

### Increased material removal, longer service life.

The MAGNUM® TOPMIX was developed to increase material removal during finishing while also improving service life. The 80 combination grit is much more aggressive than our MAGNUM® FLEECE TOP 80 grit (see next page). Individual flaps with foamed and compressed fleece offer a much higher removal capacity, making it ideal for removing spot welds and deep scratches on stainless steel, steel and nonferrous metals. The coordinated fleece combination additionally ensures that a good finish is achieved. The MAGNUM® TOPMIX also offers excellent service life, making deburring and cleaning of cast parts and welds a breeze.

Ideal for speed-controlled angle grinders.

MAGNUM®	ТОРМІХ
Dimensions	5 dia. x 7/8" arbor
Max. Speed	6000 RPM
Ideal Speed	2000 to 4500 RPM
Grits	<b>40/80</b> (P/N 96705, 5 pk.)



## **MAGNUM® FLEECE TOP**

# Made of foamed, compressed grit, interspersed nonwoven fleece.

The MAGNUM® FLEECE TOP is a versatile fleece disc for surface conditioning, fine finishing and polishing, offering up to 8x the service life of traditional fleece and surface conditioning discs. The FLEECE TOP is an ideal disc for metalworking that requires fine grinding and pre-polishing to a uniform clean finish. It is effective at descaling and removing oxidation, scratches, rust, burrs and paint. It replaces a wire brush, abrasive paper and grinding rubbers and is self cleaning, with a special mixture that prevents glazing and loading. The foamed fleece ring is approx. 5/8" thick. This highly compressed quantity of fleece material ensures an extra-long service life.

Ideal for speed-controlled angle grinders.

MAGNUM®	FLEECE TOP
Dimensions	4 <sup>1</sup> / <sub>2</sub> " dia. x 7/8" arbor
Max. Speed	8000 RPM
Ideal Speed	2000 to 4500 RPM
Grits	<b>80</b> (P/N 96710, 5 pk.)
	<b>180</b> (P/N 96711, 5 pk.)
	<b>280</b> (P/N 96712, 5 pk.)
	<b>400</b> (P/N 96713, 5 pk.)
	<b>600</b> (P/N 96714, 5 pk.)
	<b>900</b> (P/N 96715, 5 pk.)











## **MAGNUM® CLEAN**

# For pore-deep cleaning of metals (sandblasting effect).

MAGNUM CLEAN® is a flexible cleaning disc for the pore-deep cleaning of metals. This flexible coarse fleece disc is interspersed with silicon carbide grit and cleans without harming the base material. The disc itself is iron free, which means that there is no risk of corrosion. The coarse fleece material will not glaze or load, even if exposed to heavy contamination. MAGNUM CLEAN® is the ideal cleaning disc for pore-deep removal of paint, rust, scale and oil smears, as well as for cleaning and exposing without material removal. It is ideal for use in body shops (cleans thin sheet metal with no material removal) and in the automotive industry, and it is also suitable for undersealing, renovating, painting and building work. MAGNUM CLEAN® is particularly good for removing paint and other coatings on wood, stone and metal (including window frames, doors and frames, furniture, house facades, graffiti, railings, fences, supports and machines).

Ideal for speed-controlled angle grinders.

MAGNUM® CLEAN		
Dimensions	5 dia. x 7/8" arbor	
Max. Speed	5000 RPM	
Ideal Speed	2000 to 4500 RPM	
Grits	<b>Medium</b> (P/N 96700, 5 pk.)	







# **PIPE-MAX**Pipe Belt Grinder

# Combination pipe belt sander and grinder for diameters up to 14"

Follow contours to grind and polish pipes and handrails up to a high-gloss finish

- Grinds weld seams on flat surfaces leaves no edges
- Belt wraps around pipe and requires only a few steps to polish entire circumference
- Powerful 15 Amp motor and variable-speed control from 950 to 3500 RPM
- Quick and easy changing of sanding belts
- Ideal for stainless steel, aluminum and high-quality metals
- Patented damping concept with gas pressure damper enables maxiumum "pipe enclosure" with minimal effort.

• Tachogenerator provides constant speed, even under load







The new contour concept with the elastic return roller allows the grinding and polishing belts to conform around the external diameter of the pipes with light, uniform pressure.



Gas pressure cylinder allows belt to conform to contour of pipe with proper pressure.



Additional handle for comfortable, overhead working.



The drive roller with the rubber rings ensures that the grinding belts will not slip.





The soft grinding roller made of PUR material also allows comfortable longitudinal grinding of flat surfaces, for example to remove spot welds or eliminate deep scratches.



Scan to Learn More

### PIPE-MAX Specifications

Order No.	38502A
Belt Size	30.7" L x 1.5" W*
Power	15 Amp (1710 W) / 110V
Pipe ø Max.	14"
Weight	11.25 lbs.

230V models also available

### Standard Equipment

1 PIPE-MAX basic machine, 110V	2 PIPE-MAX SC-fleece belts, medium	
1 QUICK-LOCK cable, 13 feet	2 PIPE-MAX SC-fleece belts, fine	
1 additional handgrip	3 spare rubber rings	
PIPEMAX grinding belts, 2 each grits 40, 60, 80 and 120		

The King-Boa, Pipe-Max & Gladius all use the same abrasives. To see the abrasives offered see page 105



# **KING-BOA NEW!**

Blend, finish and polish up to a mirror finish For use on all metal handrails, railing, tubing and pipe

### **LET THE KING-BOA DO THE WORK FOR YOU!**

- Fast, efficient and uniform blending and finishing on round handrails and pipe up to 5" dia.
- Wraps around the workpiece 270° rotate slightly for 360° all-around finish.
- Increase productivity and reduce fatigue ergonomic design and optimal belt tension requires minimal user pressure.
- Planetary gearbox engineered for 50% more torque

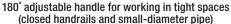


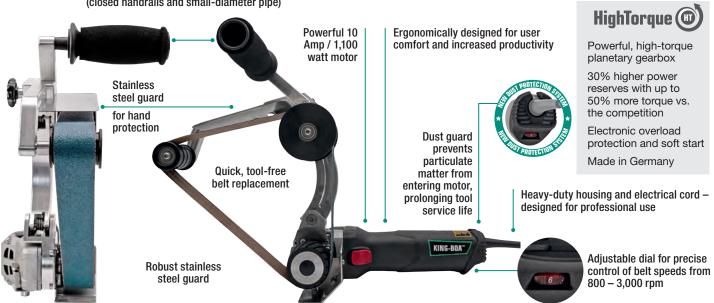




# IDEAL FOR USE IN NARROW SPACES

180° adjustable top handle and compact head fit in narrow areas between walls and floors





See KING-BOA Abrasives & Specifications on Next Page



# **KING-BOA NEW! SPECIFICATIONS**

KING-BOA™ Specifications		
Part No.	38810U	
Power	10 Amp / 1,100 watt	
<b>Belt Speed</b>	800-3000 RPM	
<b>Belt Size</b>	30.7" x 1.5" (780mm x 40mm)	
Weight	9 lbs.	
Capacity	3/4" to 3-1/4" (Ideal Pipe Dia.)	
	5" (Maximum Pipe Dia.)	

230V models also available



- 1 KING-BOA Railing Belt Sander
- 1 Motor Protection Dust Guard
- 6 Zirconium Belts (2 ea. 60, 80, & 120 Grit)
- 2 SC Fleece Belts (1 medium & 1 fine)



# Gladius® Multifunctional Grinder NEW!

Ideal for hard-to-reach areas such as corners, angles and tight spaces.

- Grind, deburr, blend and polish ferrous and nonferrous metals, wood and plastic
  Tachogenerator provides constant speed, even under
- load
- Fast changing of belts
- Abrasive guide extension arm consists of a new special alloy for significantly reduced grinding temperatures



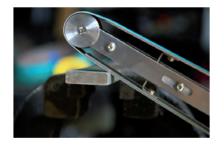
Gladius® Specifications		
Order No.	38901U	
Belt Size	30.7" L x 1.5" W*	
Power	15 Amp / 110V	
Speed	820 - 3800 RPM	
Weight	10 lbs.	



Scan to **Learn More** 

### **Standard Equipment**

- 1 pre-installed fine dust protective cap
- 4 premium zirconia belts
- 5 replacement rubber O-rings







# **Abrasives & Accessories for PIPE-MAX,** KING-BOA & GLADIUS

### **Abrasive Grinding Belts**

10 Belts per package

Grit	Part No.	
24	38523	
40	38524	
50	38525	
60	38526	
80	38528	
120	38529	

### **Ceramic Grinding Belts**

10 Belts per package

Grit	Part No.	
24	38124	
36	38136	
60	38160	
80	38180	
100	38100	

### **Surface Conditioning Fleece Belts**

4 Belts per package

Grit	Part No.	
Coarse (brown)	38531	
Medium (red)	38532	
Fine (blue)	38533	
Superfine (grey)	38534	

### **TZ Pyramid Belts**

10 Belts per package

Grit	Part No.
A100/220	38544
A65/280	38545
A45/400	38546
A30/600	38547
A16/1200	38548





### **Polishing Compounds**

PTX Pre-grinding & Polishing Compound

Essential for polishing all metals.

PTX WHITE pre-polishing (23 oz.) – Part No. 40013

PTX BLUE finishing (23 oz.) - Part No. 40014

**PTX Polishing Cream. Pink** 

High reflective finishing – perfect mirror finish on stainless steel and nonferrous metals. Use with SuperPolish Belt.

Miniature tube (2 oz.) - Part No. 40015T

Can (2.2 lbs.) - Part No. 40015

### SuperPolish Belt

4 Belts per package 38850 Part No.



PTX Brightex® Softclean Powder (non-caustic) Remove cream and compound residues.

Microfiber cloths, 25 qty. (13" x 14") - Part No. 40031 Aluminum scatter container w/ Brightex® (approx.

70z.) - Part No. 40029

Bag (2.2 lbs.) - Part No. 40028



### Cleaners/Sealants also available

**Brilliance-Clean** 

Streak- and residue-free cleaning

**POLY Protection** (oil film) Clean and preserve finished and polished metal surfaces. **INOX-Protect** (hard sealant)

Protect finished/ polished metal surfaces.

Scan QR Code for all polishing and maintenance products



Speak to one of our technical specialists for assistance with your metal finishing applications

Can also be used on its side with roller tables for large thin sheets.





Machine stand - Part No. 30320 Spare flap wheels for sheet Strong steel machine stand with metal deburring machine BE 5 black powder coating



Dust extraction port (end and bottom views shown above) Part No. 30330

# **ROLEI® BE 5 Sheet Metal Deburring** Machine - 2 Speeds

Double-sided deburring of sheet metal up to 0.2" thick can be achieved in a single operation with no additional treatment. The machine's flap wheels can be easily adjusted as they wear. One set of wheels lasts for approximately 6500 feet of stainless steel sheet. Supplied standard with two 80 grit flap wheels, the ROLEI® BE 5 can be used with other optional grits to suit the facet width and materials of your particular application.

### Features two-speed operation:

Speed 1: fine deburring, 600 RPM Speed 2: standard deburring, 1200 RPM

**Learn More** Optional accessories:

- Spare flap wheels (40, 60, 80, and 120 grit)
- · Machine stand, made from strong steel
- Port for industrial dust extractor (Part No. 30330)

ROLEI® BE 5 Specifications			
Order No.	30310A (220 Volt) 30310 (380 Volt)		
Motor	220V 3-phase, 2 speeds, .2 KW, 0.9 Amp 380V 3-phase, 2 speeds, .2 KW, 0.45 Amp		
Dimensions	19.7" x 12.8" x 7.9"		
Weight	64 lbs		
Options	Machine stand, dust extractor connection port, teflon tape		

### ROLEI® BE 5 Flap Wheels

Part No.	Grit	Qty.
37040	40	2 discs per pack
37060	60	2 discs per pack
37080	80	2 discs per pack
37120	120	2 discs per pack



Teflon protective tape - self-adhesive (2 required)

Part No. 30341 (27.5" L x 3/4" W) For extension rail to protect from scratching the workpiece



Grit 40, 60, 80, 120

# ROLEI® EF 115 Hand-held Deburring and Faceting Machine

This handy deburring machine is designed for awkward, heavy parts, such as machine tables, frame constructions or large sheets of metal. Easy to handle, with good edge control. The EF 115 is also ideal for chamfering welds. Fixed beveling angle of 45°, infinitely adjustable facet width from 0" to 3/8".





**ROLEI® EF 115 Flap Discs** 

Part No.	Grit	Quantity
21050A	50	10 discs per pack
21060A	60	10 discs per pack
21080A	80	10 discs per pack
21120A	120	10 discs per pack

Simple disc changing!



### **ROLEI® EF 115 Specifications**

Order No.	30116
Universal Motor	15 Amp (1710 W) 110/60 Hz (230V / 50 Hz, 1600 W also available)
Speed	Infinitely adjustable from 2000 to 7600 RPM
Weight	9 lbs
Options	Sliding Guide rail, plastic (Part no. 30117, 2-piece set)





# ROLEI® PEF 500

### **ROLEI® PEF 500 Specifications**

Order No.	30201 (220 Volt) 30200 (380 Volt)	
Motor	220V single-phase or 380V 3-phase	
Dimensions	20" x 14" x 14"	
Weight	88 lbs.	
Options	Machine stand, extraction port for dust extractor connection	

Supplied as standard with 80 grit disc. Optional discs include 60 grit (36060) and 120 grit (36120)



# ROLEI® EF 165

### **ROLEI® EF 165 Specifications**

Order No.	30101 (220 Volt) 30100 (380 Volt)
Motor	220V single-phase or 380V 3-phase
Dimensions	14" x 13" x 12"
Support Table	5" x 13"
Weight	40 lbs.
Options	Table extension, machine stand, extraction port for dust extractor connection

Supplied as standard with 80 grit disc. Optional discs include 60 grit (36060) and 120 grit (36120)



# **Multipurpose Beveling Machines**

Bevel, deburr and chamfer edges of steel plate faster and cleaner than angle grinders.

- Bevel 30°, 45°, 2.5mm or 1.6mm radius on steel, stainless, nonferrous metals, brass and plastics
- Deburr and chamfer; straighten edges, internal and external radii; and countersink holes from 7/8" dia.
- · Carbide inserts are indexable, all sides can be used, extending life
- Fine adjustment feature for slight chamfers when deburring for the preparation of weld seams
- Ideal for: Boiler and process plant construction (prepare weld seams on heat exchangers); Mechanical engineering (deburr machine parts, chamfer edges to protect against paint peeling and create visible edges); Sheet metal (deburr cut edges); Moldmaking (straighten edges, internal and external radii and countersink holes from 7/8" dia.)



### **Three Milling Options**



Milling cutter 30°, Chamfer 0 - 1/4"



Milling cutter 45°, Chamfer 0 - 1/4"



Milling cutter 2.5mm radius (0.098")





0-1/4" beveling width Three Models:

EKF 300.3 - 30°

EKF 450.3 - 45° EKF 452.3 - 2.5R

Also available: 1.6mm / 0.063" cutting inserts (SHM 201). Contact us for details.



of chamfer when

deburring for weld

seam preparation

0-9/16" (15mm) beveling width Two Models: FKF 630 - 30°

EKF 630 - 30° EKF 645 - 45°

Standard equipment includes milling head and two inserts, SW22 key, carrying case and user's manual. See our Price List for available accessories.

Specifications	Model EKF 300.3*	Model EKF 450.3*	Model EKF 452.3*	Model EKF 630	Model EKF 645
Beveling Angle	30°	45°	2.5mm (0.098")	30°	45°
Bevel Width (max.)***	1/4"	1/4"	1/4"	9/16"	<sup>9</sup> /16"
Motor Power	13.5 Amp/110V**			15 Amp/110V**	
Cutting Speed	3000 SFPM			1200-1500 SFPM	
Cutting Inserts Qty.	3			10	
Available Inserts (Sold as pack of 10)	SHM200; SHM 200-E (for stainless steel); SHM 202 (2.5mm radius); SHM 201 (1.6mm radius)			SHM 900	
Dimensions	12 <sup>1</sup> / <sub>2</sub> " L x 5 <sup>1</sup> / <sub>2</sub> " W x 11 <sup>5</sup> / <sub>8</sub> " H			15 <sup>3</sup> / <sub>4</sub> " L x 13 <sup>13</sup> / <sub>16</sub>	s" W x 11 <sup>13</sup> /16" H
Weight	10.5 lbs.			22.5	lbs.

<sup>\*</sup>Heads are interchangeable \*220 V / 50 Hz also available

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<sup>\*\*\*</sup>Max bevel width may require several passes, depending on material hardness

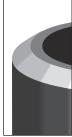
### SKF Beveling Machine for Plates and Pipes

Fast, easy preparation of weld seams and bevels on plate or pipe.

- Bevel 15° to 60° angles and land width up to 3/4" on steel, stainless steel, aluminum and nonferrous metal plates and pipe
- Work on welding angles and weld preparation on pipes/tubes with a minimum OD of 6-1/4" (160mm) with built-in pipe roller guide; ideal for beveling pipe 6-1/4" OD and larger
- · Robust design, single operator control and easy handling
- Anti-vibration system for operator comfort







**Standard equipment** includes one milling head, 10 sintered carbide reversible cutting inserts, tools for assembly, built-in pipe roller guide, steel carrying case and user's manual. Please see our Price List for available accessories.

Cutting Plates - Sold as pack of 20
Part No. SHM 800 N: For beveling carbon and
stainless steel



SKF Portable Beveler Specifications			
Order No.	SKF 025		
Beveling Width	3/4" max.*		
Motor Power	15 Amp		
Voltage	110V (220V / 50 Hz also available)		
Cutting Speed	1800 SFPM		
Cutting Inserts	10		
Dimensions	16 <sup>1</sup> / <sub>2</sub> " L x 13" H		
Weight	43 lbs.		

<sup>\*</sup>Max bevel width may require several passes, depending on material hardness





Scan to Learn More

### **Portable Saws and Accessories**

### Saws for Pipes, Structural Steel, Profiles and more p. 110-123

Dry Cutting Circular Saws - Pneumatic & Hydraulic p. 110-111
Portable Reciprocating Saws and Blades - Pneumatic, Hydraulic p. 112-113
Portable Band Saws and Blades - Pneumatic, Electric, Hydraulic p. 114-115
Power Hacksaws and Blades - Pneumatic, Electric, Hydraulic p. 116-118
Pipe Cutting Machine - Pneumatic, Hydraulic p. 119-121
Electric Nibblers p. 122
Hydraulic & Air Tool Accessories p. 123

### 7-1/2" dia. Heavy-Duty Dry Cutting Air Saw

Cut up to 2-1/2" depth at 90° and 1-1/2" at 45°

Air power ideal for petrochemical, marine, demolition and fabrication industries





- Heavy-duty air-powered circular saw, ideal for wet and dirty conditions
- Pneumatic power eliminates burn out from stalls
- 7-1/2" max. blade capacity
- D-handle design with inside trigger and safety lock button to prevent accidental starting



Optional Carbide-Tipped 7" (180mm) Dry Cut Saw Blade

P/N 9 2503 0120, 36T, for standard use - dry cuts metal, plastics and wood

# 7-1/2" dia. Heavy-Duty Dry Cut Air Saw Order No. 5 1116 0020 Motor Power 1.7 HP (1.3 kW) Blade Diameter 7-1/2" (190mm) Max. Depth of Cut 2-1/2" at 90° / 1-1/2" at 45° Speed (Free) 3,200 RPM

 Speed (Free)
 3,200 RPM

 Air Consumption
 53 CFM at 90 PSI

 Air Connection
 1/2" NPT

 Vibration
 <2.5 m/s²</td>

 Length, Weight
 13-1/2", 14 lbs.

\* Model 5 1116 0020 also accepts 7-1/4" dia. blades Standard equipment includes rip fence and blade wrench. Blade not included.

### 9" dia. Dry Cutting Air Saw for 90° and 45° Cuts

Dry cut up to 3-1/4" depth and 3/8" thick steel plate



### ATEX Certified



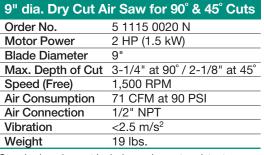
9" diameter

Standard Ultra-thin blade blade .073" (P/N 722-23060)

.055" (1.4mm) thickness

- Cut steel, nonferrous metal, plastic, grating, composite and corrugated materials
- Cuts at 90° and 45° angles
- Ideal for petrochemical, marine, demolition and fabrication applications





Scan to

Standard equipment includes an impact-resistant carrying case and Ultra-Thin LBS blade (P/N 722-23060).

### **Dry Cutting TCT Saw Blades**

9" Laser Beam Saw (LBS) ultra-thin blade for all-purpose use features:

- Thinner than conventional saw blades: LBS = .055" vs. Std. = .073" thickness
- Shock-resistant, less vibration
- Produces 35% fewer chips



Tungsten Carbide-Tipped Dry Cutting Blades, 9" dia., .073" thick for Model 5 1115 0020

P/N 721-23048, 48T, for standard use P/N 721-23068, 68T, for thin-wall metal P/N 721-23060, 60T, for aluminum P/N 721-23084, 84T, for sheet metal



### **Dry Cutting Circular Saws - Pneumatic**

Cut I-beams, 3/8" thick steel plate, insulation boards, sandwich panels, aluminum, plastics and more

- Heavy-duty air-powered circular saw
- Pneumatic power eliminates burn out from stalls and dusty jobsite conditions
- Powerful 2.4 HP motor for demanding applications
- Suction nozzle and internal chip collector for clean operation
- D-handle design with inside trigger and safety lock button to prevent accidental starting
- Ideal for steel construction, demolition and more

### 4-3/4" max. cutting depth; Cuts 3/8" thick steel plate





earn More

Guide Rail Clamping System Available (P/N 608275 SET) Rail provides straight edge length up to 55" (1,400mm).

12-5/8" Dry Cutting Saw Blade included (P/N 608276).

P/N 608276, 84T for standard use P/N 608276SI, 84T for stainless steel

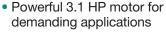
#### 12-5/8" dia. Dry Cut Air Saw Order No. 5 1117 0020 N Motor Power 2.4 HP (1.8 kW) Blade Diameter 12-5/8" 4-3/4" Max. Depth of Cut 1,200 RPM Speed (Free) 71 CFM at 90 PSI Air Consumption Air Connection 1/2" NPT Vibration <2.5 m/s<sup>2</sup> Weight 24 lbs.

#### **Circular Saws - Hydraulic** Cuttina



**ATEX Certified** 

### Up to 4-3/4" depth; Cut up to 3/8" thick steel plate



- Ideal for EX zone. underwater, construction and universal use
- D-handle design with inside trigger and safety lock button to prevent accidental starting
- Up to 45° miter adjustment
- Suction nozzle and internal Weight chip collector for clean operation



7" dia. Dry Cut Air Saw		
Order No.	5 1128 0010	
Motor Power	3.1 HP (2.3 kW)	
Blade Diameter	7" (180mm)	
Max. Depth of Cut	2-1/2" at 90° / 1-1/2" at 45°	
Speed (Free)	3,200 RPM	
Motor Specifications	5.25 GPM at 2000 PSI	
Coupling	1/2" FF (HTMA)	
Vibration	<2.5 m/s <sup>2</sup>	

<sup>\*</sup> Model 5 1128 0020 also accepts 7-1/4" dia. blades Standard equipment includes rip fence and blade wrench. Blade not included.

22.5 lbs.



12-5/8" dia. Dry Cut Air Saw				
Order No.	5 1127 0010			
Motor Power	3.1 HP (2.3 kW)			
Blade Diameter	12-5/8"			
Max. Depth of Cut	4-3/4"			
Speed (Free)	1,800 RPM			
Motor specifications	5.25 - 6 GPM at			
wotor specifications	2000 PSI			
Couplings	1/2" FF (HTMA)			
Vibration	<2.5 m/s <sup>2</sup>			
Weight	27 lbs.			

608276 12-5/8" Dry cutting saw blade included Available: P/N 608276, 84T for standard use, P/N 608276SI, 84Tfor stainless steel



### Portable Reciprocating Saws Air • Hydraulic • Electric

### Hand-held or clamp-on cutting in tough environments

Ideal for a wide range of industries, including subsea, gas utilities, offshore oil, petrochemical, power generation, industrial plant maintenance and construction



Scan to Learn More

- Fast cutting of pipe, structural steel, bolts, nails, pallets and other material
- The best power-to-weight ratios in the industry; compact size for cutting in confined spaces

#### **CHEETAH** Model 5 1217 0020

1.7 HP, Cuts steel pipe and channel 1/2" to 6" dia., plastic pipe to 8" dia.





#### **SHARK** Model 5 1219 0010

2 HP, cuts pipe up to 6" dia., wood up to 8" dia., metal plate up to 3/4" dia.



#### **FOX** Model 5 6002 0000

12 Amp, cuts pipe up to 6" dia., wood up to 8" dia., metal plate up to 3/4" dia.



#### Also Available

Model 5 6002 6000 (variable speed with dial) Model 5 6002 7000 (variable speed with trigger)

Model Number	Motor Specifications	Stroke Length	Strokes per Minute	Connection	Length	Weight (lbs.)
CHEETAH - P	neumatic					
5 1217 0020	1.7 HP, 51 CFM @ 90 PSI	1-1/8"	0-2300	1/2" NPT (ID)	18.5"	9.9
SHARK - Hydr	aulic					
5 1219 0010	2 HP, Oil Pressure 2000 PSI, Oil Flow 6 GPM (up to 13 GPM)	1-1/8"	1500	M 18 x 1.5 Female	18"	13.2
FOX - Electric						
5 6002 6000 5 6002 7000 5 6002 0000	12 Amp, 110V (220V Available)	1-1/8"	0-2200	Standard 15A Plug US	19"	6

For the models above, pipe clamp Model 5 1217 9910 available for use up to 6" pipe, contact a CS Unitec specialist for details.

### Low Vibration/Low Air Volume - Compact, Quiet & Reliable

Workhorses for use in the fabrication, shipbuilding, ship repair, oil and petrochemical, boat building and aircraft maintenance fields, as well as by fire and rescue professionals

- Piston air motors use low air volume while maintaining cutting speed
- Heavy-duty cast steel and aluminum saw bodies; built-in motor lubrication
- Safety STOP/Isolator button disconnects air supply







For use in hazardous areas and around gas and other flammable materials



Optional inside trigger for hand-held use only. Add FT to Model No.

Model No.	Motor Power (@ 90 PSI)	Stroke Length	Strokes per Minute	Dimensions (LxHxW)	Weight (lbs.)	Connection	Noise Level dB(A)	Levels m/s <sup>2</sup>
PL905	1 HP, 4 CFM	7/8"	2000	11 <sup>3</sup> / <sub>4</sub> " x 5 <sup>1</sup> / <sub>4</sub> " x 1 <sup>5</sup> / <sub>8</sub> "	5.25	1/4" NPT ID	69	1.73
CL50	1 HP, 5.75 CFM	1-3/4"	1200	15 <sup>3</sup> /4" x 5 <sup>1</sup> /4" x 1 <sup>5</sup> /8"	5.5	1/4" NPT ID	83	3.69
CL75	1 HP, 5.75 CFM	1-3/4"	1200	15 <sup>3</sup> / <sub>4</sub> " x 5 <sup>1</sup> / <sub>4</sub> " x 1 <sup>5</sup> / <sub>8</sub> "	5.5	1/4" NPT ID	83	3.69

Optional inside trigger for handheld use only, add FT to Model # ex: PL905FT Pipe clamps available, contact CS Unitec for details.



### **Reciprocating Saw Blades & Accessories**

Super quick and precise for pipe, steel, plastic, etc.

Saw Blades for Quick Connect Blade Holders & Allen Style Blade Holders

### Mega Sharp M-Tooth Saw Blades for Freehand Cutting, Single Tang

CUTS 2x FASTER THAN ORDINARY BLADES! M42 Bi-metal for cutting steel and stainless steel Universal 1/2" single tank for easy mounting to quick change and allen blade holders.

The teeth of the patented M-Tooth saw blade cut on the forward and back strokes, saving time.

#### Metal up to 1/8" Thick

No. 006/150	M-Tooth	6" L x 3/4" W x .035" T
No. 006/200	M-Tooth	7" L x 3/4" W x .035" T

<sup>\* 007</sup>D/200 extra thick for heavier-duty cutting

#### Metal 1/8" and Thicker

No. 007/150	M-Tooth	6" L x 3/4" W x .035" T
No. 007/200	M-Tooth	8" L x 3/4" W x .035" T
No. 007/280	M-Tooth	12" L x 3/4" W x .035" T
No. 007D/280*	M-Tooth	8" L x 1" W x .5" T



### General-Purpose Blades, Single Tang

General Purpose Blades - These bi-metal saw blades are made to meet demanding cutting applications in metal and more! Universal 1/2" single tank for easy mounting to quick change and allen blade holders.

#### Metal 1/8" and Thicker

No. 3013/150	14 TPI	6" L x 3/4" W x .035" T
No. 3013/200	14 TPI	8" L x 3/4" W x .035" T
No. 3018/280	10 TPI	12" L x 3/4" W x .035" T

#### Metal up to 1/8" Thick

#### Metal up to 1/8" Thick (For Curved Cuts)

No. 3017/90	18 TPI	6" L x 3/4" W x .035" T

### Cast Steel, Ductile Iron, Ceramics & Fiberglass

No. D12/200 Tungsten Carbide	6" L x 3/4" W x .035" T
------------------------------	-------------------------

#### Plastic, Wood, Plasterboard

No. 3021/150	6 TPI	6" L x 3/4" W x .035" T
No. 3021/225	6 TPI	8" L x 3/4" W x .035" T
No. 3021/300	6 TPI	12" L x 3/4" W x .035" T

#### All Woods w/ Embedded Nails

No. 810C/150	8/10 TPI	6" L x 3/4" W x .035" T
No. 810C/225	8/10 TPI	9" L x 3/4" W x .035" T

### **Saw Blades for Allen Style Blade Holders**

#### Extra-Thick Blades, Dual Tang\*

**Heavy-duty Blades –** These blades are much thicker than standard blades and have a stronger double-tang mount for heavy-duty cutting, either free-hand or with a clamp.

No. 1001	Cuts pipe up to 2"	8 TPI	6" L x 1" W x .060" T
No. 1002	Cuts pipe up to 4"	8 TPI	8" L x 1" W x .060" T
No. 007D/200*	Cuts pipe up to 4"	M-Tooth	8" L x 1" W x .050" T

007D/200 has universal 1/2" single tang

1001

Ask for special blades to cut steel.

#### Heavy-Duty HSS Bi-metal Blades, Dual Tang

Made of tough, resilient steel with 10/14 variable tooth pitch. Large blade width and double-shank mount deliver excellent cutting performance and durability.



No. 1005	10/14 TPI	6" L x 1" W x .035" T
No. 1003	10/14 TPI	8" L x 1" W x .035" T
No. 1004	10/14 TPI	12" L x 1" W x .035" T

### Air Saw Blades for PL905, CL50, CL75

### 1/2" Wide Bi-metal Blades (CL50 / PL905) 3/4" Wide Bi-metal Blades (CL75)

HB300/18	Hand	18 TPI	12" L
HB300/24	Hand	24 TPI	12" L
HB300/32	Hand	32 TPI	12" L
MC220/18	Machine	18 TPI	8 <sup>3</sup> / <sub>4</sub> " L
MC220/24	Machine	24 TPI	8 <sup>3</sup> / <sub>4</sub> " L
MYN150/18	Notched Yellow	18 TPI	6" L
MYT150/18	Tapered Yellow	18 TPI	6" L

MB150/18	Machine	18 TPI	6" L
MB200/10-14	Machine	10/14 TPI	8" L
MB200/18	Machine	18 TPI	8" L
MB200/24	Machine	24 TPI	8" L
MB250/18	Machine	18 TPI	10" L
MB250/24	Machine	24 TPI	10" L
MB300/10-14	Machine	10/14 TPI	12" L
MB300/18	Machine	18 TPI	12" L





### Portable Band Saws Electric • Air • Hydraulic

### Fast, on-site cutting of pipe up to 8" diameter

Cold cutting saws for industry, including refineries, chemical plants, utilities, construction, offshore oil, mining, marine and demolition

#### **Electric Band Saws**



Deep Throat™: Cut 7" round or 7" x 7" Wide Mouth™: Cut 8" round or 9" x 8 1/2"

#### Pneumatic AirBand™ Saws



**Standard:** Cut 4<sup>3</sup>/<sub>4</sub>" round or 4<sup>1</sup>/<sub>2</sub>" x 4<sup>3</sup>/<sub>4</sub>"



ATEX Certified

**BELOW MODELS ONLY** 



Cut 4" round or 4" x 4"

Includes stationary cutting table and vise



Deep Throat ™: Cut 7" round or 7" x 7"

Wide Mouth™: Cut 8" round or 9" x 8 <sup>1</sup>/<sub>2</sub>"

#### **Hydraulic Band Saws**



ATEX Certified



Cut 4" round or 4" x 4"

Deep Throat ™: Cut 7" round or 7" x 7"

Wide Mouth™:

Cut 8" round or 9" x 8 1/2"

#### Fast, deep, cold cutting of pipe, conduit, bolts, cable, angle iron, structural steel, chain and more

- Cut steel, stainless steel, Inconel, chrome, Hastelloy, aluminum, copper, iron, fiberglass, plastics, wood and more
- Vise clamps available for straight cutting of round, square and angular materials



Scan to Learn More

#### **Electric Band Saws**

6 Amp, 220VAC

Model No.	<b>Cutting Capacity</b>	Blade Speed (ft/sec)	Overall Length	Wt. (lbs.)
Deep Throat™ – Stair	nless Steel housing			
5 6078 0010-220	7" od / 7" x 7"	5.5-6.8*	29"	31
Wide Mouth <sup>™</sup> – Stainless Steel housing				
5 6079 0010-220	$7$ " OD $7$ " x $9$ $^{1}/_{2}$ "	5.6-6.8*	31 <sup>1</sup> /2"	32

variable speed.

#### **Pneumatic Band Saws**

Model No.	<b>Cutting Capacity</b>	Motor Power (90 PSI)	(ft/sec)	Overall Length	Wt. (lbs.)
Standard AirB	Standard AirBand <sup>TM</sup> – Aluminum Housing; 1/4" NPT ID Air Connection; 3/8" Air Hose				
5 6003 0011	4 <sup>3</sup> / <sub>4</sub> " OD / 4 <sup>1</sup> / <sub>2</sub> " x 4 <sup>3</sup> / <sub>4</sub> "	20 CFM	2.2-3.3*	211/2"	14
5 6093 0010	4" OD / 4" x 4"	19 CFM	5.75	25"	17*
Deep Throat™	Deep Throat <sup>™</sup> AirBand – Stainless Steel housing; 1/2" NPT ID Air Connection; 1/2" Air Hose				se
5 6031 0010 N	7" od / 7" x 7"	43 CFM	4.0-4.9*	28 <sup>3</sup> / <sub>4</sub> "	28
Wide Mouth™ AirBand – Stainless Steel housing; 1/2" NPT ID Air Connection; 1/2" Air Hose					
5 6062 0010	7" OD / 7" x 9 <sup>1</sup> / <sub>4</sub> "	43 CFM	4.0-4.9*	31"	35

 $5\;6093\;0010\;model\;weight\;is\;only\;of\;the\;saw,\;weight\;is\;48\;lbs\;with\;stationary\;cutting\;table\;and\;vise.$ 

### **Hydraulic Band Saws**

1.6 HP; Oil Flow: 4 GPM @ 2000 PSI; 1/2" FF (HTMA) Couplings

Model No.	<b>Cutting Capacity</b>	Blade Speed (ft/sec)	Overall Length	Wt. (lbs.)
Standard - Stainl	ess Steel housing			
5 6043 0010	4" OD / 4" x 4"	4.2	22"	23
Deep Throat™	- Stainless Steel housing			
5 6041 0010	7" od / 7" x 7"	4.2	28 <sup>3</sup> / <sub>4</sub> "	30
Wide Mouth™ – Stainless Steel housing				
5 6054 0010	7" OD / 7" x 9 <sup>1</sup> / <sub>2</sub> "	4.2	33"	36

Optional blade guards available for CS Unitec Band Saws P/N 1 1022 0196





### Portable Band Saw Blades and Accessories

### M42 Cobalt Steel SuperBand™ Saw Blades

#### Blades for Models 5 6093 0010 (3/pk.)

Exact blade dimensions: 1335mm L x 13mm W x .65mm T

No. 9 2506 0690	24 TPI	Cuts material <sup>1</sup> / <sub>8</sub> " - <sup>1</sup> / <sub>4</sub> " thick
No. 9 2506 0680	18 TPI	Cuts material <sup>3</sup> / <sub>16</sub> " - <sup>1</sup> / <sub>2</sub> " thick
No. 9 2506 0660	10/14 TPI*	Cuts material <sup>3</sup> / <sub>16</sub> " - <sup>1</sup> / <sub>2</sub> " thick
No. 9 2506 0650	8/12 TPI*	Cuts material <sup>1</sup> / <sub>2</sub> " and thicker



#### Blades for Model 5 6003 0011 and 5 6043 0010 (per pc.)

Blade dimensions:  $44^{7}/8$ " L x  $^{1}/2$ " W x .025" T

No. 9 2506 0010	18 TPI	Cuts material 1/8" - 1/4" thick
No. 9 2506 0020	14 TPI	Cuts material <sup>3</sup> / <sub>16</sub> " - <sup>1</sup> / <sub>2</sub> " thick
No. 9 2506 0030	10/14 TPI*	Cuts material <sup>3</sup> / <sub>16</sub> " - <sup>1</sup> / <sub>2</sub> " thick
No. 9 2506 0040	8/12 TPI*	Cuts material <sup>1</sup> / <sub>2</sub> " and thicker



### Deep Throat™ Blades (Models 5 6031 0010, 5 6078 0010-220 and 5 6041 0010) (per pc.)

Blade dimensions: 66" L x 5/8" W x .025" T

No. 9 2506 0230	10/14 TPI*	Cuts material <sup>3</sup> / <sub>16</sub> " - <sup>1</sup> / <sub>2</sub> " thick
No. 9 2506 0240	8/12 TPI*	Cuts material 1/2" and thicker



### Wide Mouth™ Blades (Model Nos. 5 6062 0010, 5 6079 0020-220 and 5 6054 0010) (per pc.)

Blade dimensions: 71" L x  $\frac{5}{8}$ " W x .025" T

No. 9 2506 0350	10/14 TPI*	Cuts material <sup>3</sup> / <sub>16</sub> " - <sup>1</sup> / <sub>2</sub> " thick
No. 9 2506 0340	8/12 TPI	Cuts material 1/2" and thicker
No. 9 2506 0330	6/10 TPI	Cuts material 3/4" and thicker



<sup>\*</sup> Variable tooth pitch (10/14 TPI and 8/12 TPI) saw blades cut faster and last longer than standard pitch blades. Varying tooth size and gullet depth reduce harmonic vibration for quieter, more efficient cutting.

### **Vise Clamps for Accurate Cuts**

- · Securely clamp to round, square and angular materials for straight cutting
- Easily attach to CS United Portable Band Saws

### Clamp-on vise for 4-3/4" Band Saws Model No. 5 6030 9000

(for saw 5 6043 0010)

Max. material size – rounds:  $4^3/4$ "; squares:  $4^1/2$ "; angles:  $4^1/2$ "

### Clamp-on vise for 7" Deep Throat™ Band Saws Model No. 5 6031 9400

(for saw 5 6031 0010, 5 6078 0010-220 and 5 6041 0010) Max. material size – rounds: 7"; squares: 5"; angles: 5"



AIR

### Power Hacksaws Air • Electric • Hydraulic

## Cold cutting of large pipe up to 30" diameter and structural steel – on site

Ideal for a wide range of industries, including refineries, chemical plants, utilities, construction, offshore oil, mining, marine and demolition

• Cold cutting of large pipe, structural steel, tanks, profiles and more

ATEX Certified

Compact size for cutting in confined spaces







Model	5 1220 0050
HYDRA	III IC
IIIDNA	SLIO
	777
(Ex) ALEX 6	ertified

Model No.	Power	Throttle	ATEX EX Zone Certification (If Applicable)	Strokes per Min.	Blade Stroke	Hose	Wt. (lbs.)
Pneumatic - 3/4"	ID NPT A	ir Connec	tion (Air Consumption: 51 C	CFM @ 90 PSI)			
5 1212 0010	1.5 HP	Roll	N/A	100-350	23/8"	1/2"	16.5
5 1212 0050	1.5 HP	Lever	N/A	100-350	23/8"	1/2"	16.5
5 1212 0050A	1.5 HP	Lever	II2GExhIIBT5Gb 😥	100-350	23/8"	1/2"	16.5
<b>NEW</b> 5 1232 0050	1.5 HP	Lever	II2GExhIIBT5Gb 😥	100-350	23/8"	1/2"	16.5
<b>NEW</b> 5 1232 0010	1.5 HP	Roll	II2GExhIIBT5Gb €x	100-350	23/8"	1/2"	16.5
Electric - 11 Amp	s / 110 V	olt (Also ava	nilable as 220 Volt/50 Hz)				
5 1215 0070	1.5 HP	Trigger	110V/60 Hz	60-500	23/8"	Cable	16.5
Hydraulic - 1/2" F	F (HTMA	) Coupling	s				
<b>NEW</b> 5 1230 0050	3.8 HP	Lever	II2GExhIIBT5Gb 😥	100-500	23/8"	<sup>1</sup> / <sub>2</sub> " ID	24.2
<b>NEW</b> 5 1230 0010	3.8 HP	Roll	II2GExhIIBT5Gb 😥	100-500	23/8"	1/2" ID	24.2
5 1220 0050	3.8 HP	Lever	II2GExhIIBT5Gb 😥	100-500	23/8"	1/2" ID	24.2
5 1220 0010	3.8 HP	Roll	II2GExhIIBT5Gb (Ex)	100-500	23/8"	<sup>1</sup> / <sub>2</sub> " ID	24.2

#### **NEW Hacksaw Models Include:**

- Up to 75% reduction in cost of ownership
- Improved design for increased saw life
- Increased stability to reduce tool wear
- Improved sealing for increased corrosion resistance
- Increased water resistance for hydraulic saw underwater applications



Twist or lever throttle

Pneumatic, electric or hydraulic motor

Pneumatic: 3/4" NPT Connection Electric: 110 Volt (220V available) Hydraulic: 1/2" FF (HTMA) Couplings

Optional saw blade guide for added blade stability – ensures straight cutting! Two sizes available (not required for operation)

### Throttle Types for Pneumatic Saws:



Roll Throttle (air model 5 1212 0010) used only with automatic feed clamps

**Lever Throttle** (model 5 1212 0050) on/off for manual clamps

Metal carrying case available P/N 9 9910 0080



Scan for

**Full Hacksaw** 

### **Heavy Duty Hacksaw Blades**

### **CUT UP TO 60% FASTER THAN STANDARD BLADES**

- Cut ferrous & non-ferrous metal, extremely hard specialty alloy steels, and more!
- Designed to reduce blade wear and quickly remove chips to increase productivity
- Increased durability for extended blade life





Scan for Full Line

### **NEW! FAST CUT Hacksaw Blades**

#### **UP TO 60% FASTER THAN STANDARD BLADES!**

UP 10 60% FASTE	R IHAN	SIANDAI	RD BLAL	DES!	
Order No.	Length	Teeth/Inch	Thickness	Material	Max. Dia. of Cut
Z23-6 HSS	12"	14	5/64"	Steel	6-5/8"
Z23-6 HSS-SL*	12"	14	5/64"	Cast Iron, Aluminum, Plastic	6-5/8"
Z23-33 HSS	18"	6-8	5/64"	Cast Iron, Aluminum, Plastic	12 <sup>3</sup> / <sub>4</sub> "
Z23-33 HSS-SL*	18"	6-8	5/64"	Cast Iron, Aluminum, Plastic	12 <sup>3</sup> / <sub>4</sub> "
Z23-29 HSS	18"	8	5/64"	Cast Iron, Aluminum, Plastic	12 <sup>3</sup> / <sub>4</sub> "
Z23-29 HSS-SL*	18"	8	5/64"	Cast Iron, Aluminum, Plastic	12 <sup>3</sup> / <sub>4</sub> "
Z23-7 HSS	18"	14	5/64"	Steel	12 <sup>3</sup> / <sub>4</sub> "
Z23-7 HSS-SL*	18"	14	5/64"	Stainless Steel	12 <sup>3</sup> / <sub>4</sub> "
Z23-72 HSS	22"	6-8	5/64"	Cast Iron, Aluminum, Plastic	16 <sup>3</sup> / <sub>4</sub> "
Z23-72 HSS-SL*	22"	6-8	5/64"	Cast Iron, Aluminum, Plastic	16 <sup>3</sup> / <sub>4</sub> "
Z23-30 HSS	22"	8	5/64"	Cast Iron, Aluminum, Plastic	16 <sup>3</sup> / <sub>4</sub> "
Z23-30 HSS-SL*	22"	8	5/64"	Cast Iron, Aluminum, Plastic	16 <sup>3</sup> / <sub>4</sub> "
Z23-73 HSS	22"	14	5/64"	Steel	16 <sup>3</sup> / <sub>4</sub> "
Z23-73 HSS-SL*	22"	14	5/64"	Stainless Steel	16 <sup>3</sup> / <sub>4</sub> "
Z23-45 HSS	26"	6-8	5/64"	Cast Iron, Aluminum, Plastic	203/4"
Z23-45 HSS-SL*	26"	6-8	5/64"	Cast Iron, Aluminum, Plastic	203/4"
Z23-74 HSS	26"	8	5/64"	Cast Iron, Aluminum, Plastic	203/4"
Z23-74 HSS-SL*	26"	8	5/64"	Cast Iron, Aluminum, Plastic	203/4"
Z23-79 HSS	26"	14	5/64"	Steel	203/4"
Z23-79 HSS-SL*	26"	14	5/64"	Stainless Steel	203/4"
Z23-76 HSS	30"	6-8	5/64"	Cast Iron, Aluminum, Plastic	243/4"
Z23-76 HSS-SL*	30"	6-8	5/64"	Cast Iron, Aluminum, Plastic	243/4"
Z23-78 HSS	30"	8	5/64"	Cast Iron, Aluminum, Plastic	243/4"
Z23-78 HSS-SL*	30"	8	5/64"	Cast Iron, Aluminum, Plastic	243/4"
Z23-75 HSS	30"	14	5/64"	Steel	243/4"
Z23-75 HSS-SL*	30"	14	5/64"	Stainless Steel	243/4"
Z23-37 HSS	37"	14	5/64"	Steel	31 <sup>3</sup> / <sub>4</sub> "
Z23-37 HSS-SL*	37"	14	5/64"	Stainless Steel	313/4"

### **Heavy Duty Hacksaw Blades (cont.)**

### Extra-Thick Hacksaw Blades

### **HEAVY-DUTY CUTTING OF PIPE AND STRUCTURAL STEEL**

- Cut steel, stainless steel, aluminum, cast iron, wood, plastic, masonry & more!
- Extra thick blades for 90° cutting
- 3 grades of blades for wide variety of applications



Scan for Full Line

Order No.	Length	Teeth/Inch	Thickness	Material	Max. Dia. of Cut
Z22-10 HSS-SL*	8"	16	1/16"	Stainless Steel	31/8"
Z22-9 HSS	8"	8	1/16"	Steel/Aluminum	31/8"
Z22-10 HSS	8"	16	1/16"	Steel	31/8"
Z22-11 HSS	8"	24	1/16"	Sheet Metal	31/8"
Z22-6 CARBIDE	12"	Coated	3/16"	Masonry	6 <sup>5</sup> /8"
Z22-71 HSS	12"	4	1/16"	Plastics/Wood	6 <sup>5</sup> /8"
Z22-6 HSS	12"	16	1/16"	Steel	6 <sup>5</sup> /8"
Z22-6 HSS-SL*	12"	16	1/16"	Stainless Steel	6 <sup>5</sup> /8"
Z22-31 HSS	12"	12	1/16"	Steel	6 <sup>5</sup> /8"
Z22-7 HSS-SL*	16"	16	1/16"	Stainless Steel	10 <sup>5</sup> /8"
Z22-7 CARBIDE	16"	16	1/16"	Masonry	10 <sup>5</sup> /8"
Z22-32 HSS	16"	4	1/16"	Plastics/Wood	10 <sup>5</sup> /8"
Z22-40 HSS	21"	4	1/16"	Plastics/Wood	10 <sup>5</sup> /8"
Z22-7 HSS	16"	16	1/16"	Steel	10 <sup>5</sup> /8"
Z22-29 HSS	16"	8	1/16"	Steel/Aluminum	10 <sup>5</sup> /8"
Z22-33 HSS	16"	6	1/16"	Cast Iron	10 <sup>5</sup> /8"
Z22-72 CARBIDE	20"	Coated	3/16"	Masonry	14 <sup>5</sup> /8"
Z22-72 HSS	20"	14	5/64"	Steel	14 <sup>5</sup> /8"
Z22-30 HSS	21"	12	1/16"	Steel	15 <sup>5</sup> /8"
Z22-30 HSS-SL*	21"	12	1/16"	Stainless Steel	15 <sup>5</sup> /8"
Z22-73 HSS-SL*	24"	14	5/64"	Stainless Steel	18 <sup>1</sup> / <sub>2</sub> "
Z22-73 CARBIDE	24"	Coated	3/16"	Masonry	181/2"
Z22-73 HSS	24"	14	5/64"	Steel	181/2"
Z22-74 HSS	24"	8	5/64"	Steel/Aluminum	18 <sup>1</sup> / <sub>2</sub> "
Z22-75 HSS	30"	12	5/64"	Steel	247/8"
Z22-75 HSS-SL*	30"	12	5/64"	Stainless Steel	247/8"
Z22-76 HSS	30"	6	5/64"	Cast Iron	24 <sup>7</sup> / <sub>8</sub> "
Z22-37 HSS	37"	12	5/64"	Steel	31 <sup>7</sup> /8"

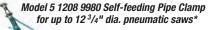
<sup>\*</sup> Use HSS-SL Blades for best cutting performance on stainless steel and hard metal. Blades for plastic, wood and masonry also available.

### **Hacksaw Clamps and Blade Guides**

Model No.	Cutting Diameter	Description
5 1207 9910	2" to 6"	Pipe Clamp
5 1202 9960	4" to 123/4"*	Pipe Clamp
5 1207 9970	Up to 13" OD	Blade Guide
5 1207 8910	Up to 21" OD	Blade Guide
5 1202 8970	21 <sup>5</sup> /8" x 11 <sup>3</sup> /8"	Profile Clamp
5 1208 9980	Up to 12 <sup>3</sup> / <sub>4</sub> "*	Automatic - Self-feeding Clamp (for pneumatic saws)
5 1208 9990	Up to 12 <sup>3</sup> / <sub>4</sub> "*	Automatic - Self-feeding (for electric and hydraulic saws)



Model 5 1202 9960 Pipe Clamp for 4" to 12 <sup>3</sup>/<sub>4</sub>" dia.\*





Model 5 1208 9990 Self-feeding Pipe Clamp for up to 12 3/4" dia. electric and hydraulic saws\*



1-800-700-5919

<sup>\*</sup> Cut up to 30" OD with two extension chains (order 2x P/N 5 1201 9030)

### Pipe Cutting Machines Air • Hydraulic



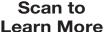


### Cut pipe up to 63" dia. with wall thickness up to 2"

Ideal for use in municipal water and gas utilities, petrochemical, power generation, plant maintenance, pipe line construction, marine and demolition applications.

- Heavy-duty, versatile air and hydraulic pipe cutting machines
- Cut pipe guickly from 6" to 63" dia. with wall thicknesses from 1/4" to 2"
- Use on steel, ductile iron, nonferrous metal, HDPE, plastic. concrete pipe and more
- Cut pipe underground with minimal excavation
- 7" blade with adjustable cutting depth and fully enclosed blade guard
- Machine is manually guided with hand lever feed to make a 360° cut in pipe at 90 degrees
- Guide chain is adjustable by adding and removing chain links
- ATEX certified for use in Ex Zones (ATEX II 2G Ex h IIB T6 Gb )

















Pneumatic Model No. 5 8010 0050

#### Features include:

- Fast cutting of pipe
- Adjustable cutting depth
- Fully enclosed blade quard
- Cooling water connection
- Carbide-tipped or diamond-coated blades



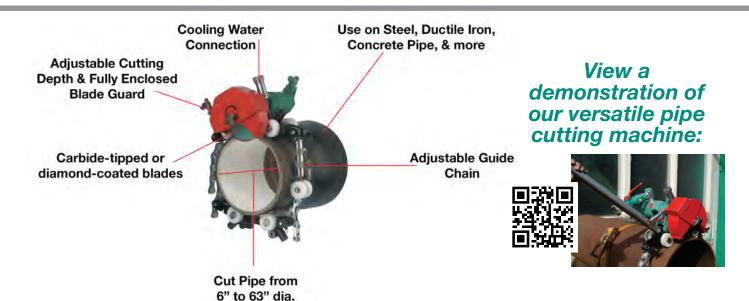


### When ordering, specify pipe diameter and application for assistance with determining required blade, feed handle, quide carriage & chain and tensioning chain & tensioner.

Model Number	Power	Blade Arbor	Motor Specifications	Speed (RPM)	Blade Dia.	Hose Connection	Weight (lbs.)
Pneumatic M	lotor						
5 8002 7000	2.4 HP	7/8"	77 CFM @ 90 PSI	350/1800	7"	1/2" NPT	28
5 8010 0050	4 HP	7/8"	106 CFM @ 90 PSI	1800	7"	3/4" NPT	28
Hydraulic Mo	tor						
5 8006 7000	2.7 HP	7/8"	6-13 Gallons @ 2000 PSI	350/1800	7"	1/2" FF (HTMA)	28

### Pipe Cutting Machines Air • Hydraulic





Pipe Cutting Machine Kits							
For Pipe Diameters	Hydraulic Kit Part No. (2.7 HP)						
6" to 16" (150-400mm)	5 8010 16PK	5 8002 16PK	5 8006 16HK				
6" to 32" (150-800mm)	5 8010 32PK	5 8002 32PK	5 8006 32HK				
6" to 63" (150-1600mm)	5 8010 63PK	5 8002 63PK	5 8006 63HK				

### Hydraulic Kits (2-Speed)

Select Appropriate Kit Based on Pipe Diameter

For cutting pipe with diameter greater than 63", please contact CS United for help identifying necessary components.

6" to 16" (150-400mm)	6" to 32" (150-800mm)	6" to 63" (150-1600mm)
Kit 5 8006 16HK	Kit 5 8006 32HK	Kit 5 8006 63HK
(1) Drive Unit P/N 5 8006 7000	(1) Drive Unit P/N 5 8006 7000	(1) Drive Unit P/N 5 8006 7000
(1) Guide Carriage, small P/N 5 8010 8090	(1) Guide Carriage, small P/N 5 8010 8090	(1) Guide Carriage, small P/N 5 8010 8090
(1) Chain Tensioner, small PN 5 8003 8300	(1) Guide Carriage, large P/N 5 8010 8100	(1) Guide Carriage, large P/N 5 8010 8100
(1) Guide Chain, 16" OD (24 chain links) P/N 5 8002 8760	(1) Chain Tensioner, large P/N 5 8002 8400	(1) Chain Tensioner, large P/N 5 8002 8400
(1) 7" Dia. Carbide-tipped blade P/N 9 2503 0120	(1) Tensioning Chain P/N 5 8002 8710	(1) Tensioning Chain P/N 5 8002 8710
(1) 7" Dia. Diamond blade P/N 9 2503 0100	(1) Guide Chain, 32" OD (46 chain links) P/N 5 8002 8780	(1) Guide Chain, 63" OD (90 chain links) P/N 5 8002 8830
(1) Steel Transport Box P/N 5 8002 9300	(1) 7" Dia. Carbide-tipped blade P/N 9 2503 0120	(1) 7" Dia. Carbide-tipped blade P/N 9 2503 0120
	(1) Tool Kit P/N 5 8002 9200	(1) Tool Kit P/N 5 8002 9200
	(1) Steel Transport Box P/N 5 8002 9300	(1) Steel Transport Box P/N 5 8002 9300

### Pneumatic Kits (1 & 2-Speed)\*

Select Appropriate Kit Based on Pipe Diameter

For cutting pipe with diameter greater than 63", please contact CS United for help identifying necessary components.

6" to 16" (150-400mm)	6" to 32" (150-800mm)	6" to 63" (150-1600mm)
Kit 5 8010 16PK	Kit 5 8010 32PK	Kit 5 8010 63PK
or 5 8002 16 PK	or 5 8002 32PK	or 5 8002 63PK
(1) Drive Unit	(1) Drive Unit	(1) Drive Unit
P/N 5 8010 0050	P/N 5 8010 0050	P/N 5 8010 0050
or 5 8002 7000	or 5 8002 7000	or 5 8002 7000
(1) Guide Carriage, small	(1) Guide Carriage, small	(2) Guide Carriage, small
P/N 5 8010 8090	P/N 5 8010 8090	P/N 5 8010 8090
(1) Chain Tensioner, small	(1) Chain Tensioner, small	(1) Chain Tensioner, small
PN 5 8003 8300	PN 5 8003 8300	PN 5 8003 8300
(1) Guide Chain, 16" OD (24 chain links) P/N 5 8002 8760	(1) Guide Carriage, large P/N 5 8010 8100	(2) Guide Carriage, large P/N 5 8010 8100
(1) 7" Dia. Carbide-tipped	(1) Chain Tensioner, large	(2) Chain Tensioner, large
blade P/N 9 2503 0120	P/N 5 8002 8400	P/N 5 8002 8400
(1) 7" Dia. Diamond blade	(1) Tensioning Chain	(2) Tensioning Chain
P/N 9 2503 0100	P/N 5 8002 8710	P/N 5 8002 8710
(1) Tool Kit P/N 5 8002 9200	(1) Guide Chain, 32" OD (46 chain links) P/N 5 8002 8780	(1) Guide Chain, 63" OD (90 chain links) P/N 5 8002 8830
(1) Steel Transport Box	(1) 7" Dia. Carbide-tipped	(1) 7" Dia. Carbide-tipped
P/N 5 8002 9300	blade P/N 9 2503 0120	blade P/N 9 2503 0120
	(1) 7" Dia. Diamond blade P/N 9 2503 0100	(1) 7" Dia. Diamond blade P/N 9 2503 0100
	(1) Tool Kit P/N 5 8002 9200	(1) Tool Kit P/N 5 8002 9200

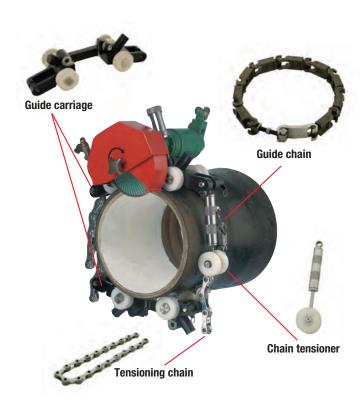
\*2-speed motor is included in kit for 2.4 HP **Pneumatic Pipe Cutting Machine** 



120

### Pipe Cutting Machines Air • Hydraulic





- Guide Carriages are for both saw mounting and movement for added leverage to reduce user effort
- Guide Chains provide a stationary track to ensure a straight, 90° cut
- Saw Blades allow for cutting steel. stainless steel, plastics, HDPE, PVC, Ductile Iron, cast iron, concrete, & clay up to a 7" diameter & 2" depth
- Tensioning Chain allows the pipe cutting machine to smoothly roll while holding the saw firm against the pipe's surface

For a list of contents included with Pipe Cutting

Machine Kits. visit our website at: www.csunitec.com/saws/ pipe-cutting-machines or Scan the OR Code!

#### **Guide Chain**

All guide chains include tightener



Part No.	Description
5 8002 8760	24 chain links
5 8002 8770	35 chain links
5 8002 8780	46 chain links
5 8002 8810	57 chain links
5 8002 8790	68 chain links
5 8002 8820	79 chain links
5 8002 8830	90 chain links



#### **Chain Link**

Part No. 5 8001 8750 (Length: 2-1/4") Chain Link Set (5 connected links) Part No. 5 8001 8860 (Length: 11-1/4") Chain Link Set (6 connected links) Part No. 5 8001 8960 (Length: 6 x 2-1/4") Magnet for Easy Setup!



**Tightener - Part No. 5 8002 6800** 

#### **Tensioning Chain**

Part No. 5 8003 8300



**Large Chain Tensioner** Part No. 5 8002 8400

**Tensioning Chain** Length: 37-3/8" (950mm) Part No. 5 8002 8710

### **Guide Carriages**



Small Guide Carriage - Part No. 5 8010 8090 Large Guide Carriage - Part No. 5 8010 8100



Feeding Pipe - Part No. 5 8002 9500

### 7" Saw Blades - for 2" max. cutting depth



Carbide-Tipped Blade Part No. 9 2503 0120 For steel, stainless steel (min. 1/4" wall thickness), plastics, HDPE and PVC 6-1/4" also available for 6" OD pipe cutting P/N 9 2503 0090



**Diamond Blade** Part No. 9 2503 0100 For cast iron, ductile iron, cement, concrete and clay 6" also available for 6" OD pipe cutting P/N 9 2503 0050

#### **Beveling Cutters**



45° Beveling Cutter – Part No. 9 2530 7040

90° Beveling Cutter -Part No. 9 2530 7090



60° Beveling Cutter -Part No. 9 2530 7060

### Cut Steel Up To 3/8" Thick

- Fast cutting without feed force, distortion, or sparks.
- Reduced fatigue and ergonomic fitment
- Easily rotate the direction of cut up to 360°
- Clear view of the work surface
- Heavy-duty punches for cutting steel and more!
- Cut over 90 degree bends with optional die accessory
- Two-speed models available for faster cutting!

Ideal for wide range of applications from cutting sheet metal, steel plate, weldments, I-beam, tanks, double sheets & more











Model Number	Power	RPM	Working Speed (ft/Min)	Start Hole Dia.	Min. Radius	Max Material Thickness Steel / Stainless / Aluminum	Weight (lbs.)
CS-350-E	12 Amp, 110 V	0-650	4	1.25"	0.28"	0.135" / 0.09" / 0.135"	7.5
CS-500-E	12 Amp, 110 V	0-600	4.5	1.25"	3.125"	0.197" / 0.135" / 0.276"	8.5
CS-700-E	15 Amp, 110 V	400	5	2.75"	5.5"	0.276" / 0.197" / 0.394"	26
CS-3400-E	15 Amp, 110 V	230/370	5.2	3"	16"	0.375" / 0.276" / 0.5"	32

To learn more and see available accessories & consumables, Scan Here:





### **Air Tool Accessories**

### **Dryers/Cleaner & Filters**



#### Model CSAP-2

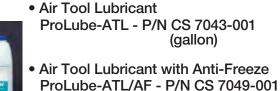
- Removes moisture and dirt from air lines; a float valve automatically ejects water and dirt
- Includes automatic oiler
- Connections for two tools, max. air flow 185 CFM

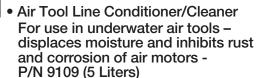


### Model 9 2406 0650

- Removes moisture and dirt from air lines
- Adjustable air pressure 0-140 PSI, maintains constant downstream pressure
- Maximum air volume 125 CFM

### **Lubricants & Conditioners**







### **Whip Hoses**

Model Number	Tool Fitting	Integral Swivel Fitting (MPT)	Hose Connection
14HW-HYD	CP/	0-650	
38HW-HYD	Chicago Style Fittings	0-600	1/2"ID x 6'
12HW-HYD	ritifigs	400	



### **Whip Checks**

P/N CS-WHIPCHECK1
 For 1/2" to 1-1/4" OD

(gallon)

P/N CS-WHIPCHECK2For 1-1/2" to 3" OD



For Air & Hydraulic

### Whip Hoses with Inline Oilers

Model Number	Tool Fitting	Lubricator Connection	Hose Connection
CS-1HW-HDS	1/4"	O-R w/ CP (Chicago Style Fitting)	1/2" ID x 6'
CS-2HW-HDS	3/8"		
CS-3HW-HDS	1/2"		
CS-4HW- 0.500-HDS*	1/2"		



# Hose Needs, Please Contact a CS Unitec Specialist

# Hydraulic Tool Accessories Hydraulic Power Units

- Ideal for use with our hydraulic power tools.
- Delivers 5 GPM or 8 GPM at 2000 PSI
- Easy to move with lift and latch handle
- Weighs 330 lbs.
- 18 HP gas engine



The Hydraulic Power Unit is available with gas, electric or diesel engines. Contact us for more information.

Model Number	GPM (LPM)	Output Pressure (PSI)
Gas: P95 Electric 3PH: P95E	5 - 8 (19 - 30)	2000
Gas: CSM300-23G-HPP	8-14 (30 - 53)	2500

#### Pressure reducers also available:

CS 70350 for reducing earth moving equipment 5000 psi to 2000 psi, 2 2406 9900 reduces 5075 psi to 1160 psi 2 2406 9700 reduces 2000 psi to 1160 psi



### Also Available from CS United

#### CS Unitec, Inc. specializes in industrial power tools and safety tools for construction and industry.

Innovation and high quality are synonymous with CS Unitec's power tools. In 1991, the company invented the first pneumatic portable band saw. CS Unitec has added to its list of industry firsts with the widest range of portable magnetic drills and hand-held concrete core drills. The line also includes surface preparation tools for metal, concrete and masonry, air, electric and hydraulic portable band saws, reciprocating saws, hacksaws, nut runners, rotary hammer drills, rolling motors, non-sparking safety tools, portable mixers and dust extraction vacuum systems.

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