



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

CS Unitec's portable magnetic drills are ideal for drilling structural steel and virtually any metal. We offer the most compact and powerful series of portable magnetic drills for holes up to 5" diameter. All CS Unitec drills are heavy-duty for use in construction and industry. Our complete product line includes electric, pneumatic and hydraulic. They are available for prompt delivery.

CS United is the industry leader in:

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

We offer:

- Variable-speed, multiple-geared models
- Electric, pneumatic and hydraulic power
- Reversible motors for tapping and machining
- Swivel base stand for hard-to-reach areas

Special Features

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

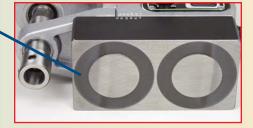




The SENSORTEC™ System measures whether the magnet has sufficient adhesive force on the material. An LED indicator on the switch panel warns you of insufficient magnetic force (Red Light) or if the correct force is present (Green Light).



High-density (HD) dual-coil magnets are wound in two circles to increase the surface area and density of the magnetic field. The higher density increases the magnetic force by over 100% as compared to a single rectangular coil commonly used in electromagnetic drills.



TEMPTEC™ 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 TEMPTEC feature ensures that the power of the magnets is reduced when the drill motor is not active. Therefore, it won't build up heat.





Keyless arbor allows easy, no-tools changeover of Annular Cutters. No more searching for allen keys or set screws – just twist and lock. Included on ECO-50, ECO-80 and ECO-100 series drills.



ARMOR-PLATED™ TIAIN Cutters are ideal for all drilling applications. A high surface hardness and greater lubricity allow drilling at high operating temperatures with more power and speed.





Special Features



Many drills are offered with forward and reverse capabilities, allowing drilling and tapping with one unit.

High-torque motors are double insulated to increase operator safety.

Optional Power Assist provides delayed torque transfer, decreasing the load on both the cutter and machine. This allows the machine to maintain maximum RPM under full load.
See page 23 for more information.



SZ-IO

RPM

Variable-speed dial on some models lets the operator adjust speed to match cutter diameter to correct RPM. This provides increased tool life and reduces cutter breakage.

Some Pneumatic tools are ATEX Approved for use in hazardous and potentially explosive atmospheres.

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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.





ECO™-30/3P



Ultra-compact and lightweight with power assist



Model ECO-30/3P



Standard
equipment
includes auto
lubrication,
carrying case,
chip guard,
safety chain,
carabin hook,
gloves, safety
glasses, ear
protection and
allen keys.



Cutter capacity up to 1 ½" dia., stroke: 2 ½/4"

See pages 18-26 for Annular Cutters and Accessories.

- Compact height of 12¹/₄"
- Lightweight at 22 lbs.
- Patented power-assist mechanism reduces feed pressure to help prevent motor burn-out and cutter breakage
- Strong 7.5 Amp double-insulated motor
- Powerful high-density dual-coil magnet has superior holding strength of 3300 lbs.
- Drills up to 1¹/₈" diameter holes with Annular Cutters

One-year warranty

Patented power-assist mechanism reduces load on motor and cutter.
Standard with ECO-30/3P.
See page 23.



Model ECO-30/3P has an integrated auto-lubrication system.

m meyrateu o-lubrication system.	
Model E	CO-30/3P

Model ECO-30/3P	
Motor Power	7.5 Amp / 110 Volt*
Weight	22 lbs.
Hole Capacity	1 ¹ / ₈ "
Speed	450 RPM
Magnet Base Size	6 ³ /8" L x 3 ¹ /4" W
Dimensions	12 ¹ / ₄ " H x 9 ³ / ₈ " L x 6 ³ / ₈ " W
Magnetic Force (1" Plate)	3300 lbs.
Arbor Bore	3/4"
Automatic Lubrication	Included

^{* 220} Volt / 50 Hz also available



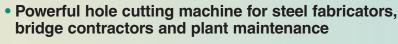
UNITEC



Heavy-duty compact hole drilling machine

Model MDM-40





- Compact height of 13" allows drilling in tight spaces
- Lightweight and portable at only 24 lbs. for use on the job site or in the shop
- Strong 9.25 Amp double-insulated motor
 - One-piece motor mount and arbor support for added strength and stability
 - High-density dual-coil magnet has holding strength of 2640 lbs.



- Drills up to 1¹/₂" diameter holes with Annular Cutters
- One-year warranty



All CS Unitec 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.





See pages 18-26 for Annular Cutters and Accessories.

Model MDM-40	
Motor Power	9.25 Amp / 110 Volt
Weight	24 lbs.
Hole Capacity	1 ¹ / ₂ " dia.
No Load Speed	440 RPM
Magnet Base Size	6 ¹ / ₂ " L x 3 ¹ / ₄ " W
Dimensions	13" H x 9 ¹ / ₂ " L x 7" W
Magnetic Force (1" plate)	2640 lbs.
Arbor Bore	3/4"
Automatic Lubrication	Included

^{* 220} Volt / 50 Hz also available



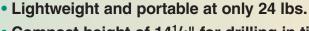


SUNTEC

ECO™-32 and ECO™-32AK



Best power-to-weight performance in the industry



- Compact height of 14¹/₄" for drilling in tight spaces
- Strong 8.2 Amp double-insulated motor
- High-density dual-coil magnet has holding strength of 3080 lbs.
- Drills up to 1¹/₄" diameter holes with Annular Cutters; up to 1/2" with twist drills
- Optional Power Assist to maintain maximum RPM under full load (Part No. 020.0330)

With a 1/2" chuck (Part No. IBK-17),

stroke for conventional twist drills.

these models easily convert to standard drill presses with a 7 1/2"

See page 23 for more information.

71/2"

stroke





See page 2



Model ECO-32AK has an automatic cooling/lubrication system built into the arbor.



Model ECO-32



Standard equipment includes carrying case, safety chain, carabin hook and allen keys.

Includes one-year warranty



Cutter capacity up to 1 1/4" dia., stroke: 5 3/4"

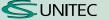
Twist drill capacity up to 1/2" dia., stroke: 7 1/2"

See pages 18-26 for Annular Cutters and Accessories.

Model ECO-32 and ECO-32AK

Motor Power	8.2 Amp / 110 Volt*
Weight	24 lbs.
Hole Capacity	1 ¹ / ₄ " dia.
Twist Drill Capacity	¹ /2" dia.
Speed	450 RPM
Magnet Base Size	6 ⁵ / ₁₆ " L x 3 ¹ / ₄ " W
Dimensions	14 ¹ / ₄ " H x 9 ¹ / ₂ " L x 4 ³ / ₈ " W
Magnetic Force (1" plate)	3080 lbs.
Arbor Bore	3/4"
Manual Lubrication	Order Model ECO-32
Automatic Lubrication	Order Model ECO-32AK

^{* 220} Volt / 50 Hz also available ** Power Assist Part No. 020.0330

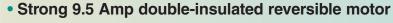


ECO™-32Tand ECO™-32TAK





Reversible motor for drilling and tapping applications



- Stepless variable-speed control, 100-450 RPM
- Compact height of 14¹/₄" allows drilling in tight spaces
- Lightweight and portable at only 24 lbs.
- Best power-to-weight ratio in the industry
- HD dual-coil magnet has holding strength of 3080 lbs.
- Drills up to 1¹/₄" diameter holes with Annular Cutters and taps up to ³/₄"
- Optional Power Assist to maintain maximum RPM under full load (Part No. 020.0330)
 See page 23 for more information.



With a $^{1/2}$ " chuck (Part No. IBK-17), these models easily convert to standard drill presses with a $7^{1/2}$ " stroke for conventional twist drills.



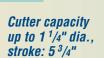


Model ECO-32T

Standard equipment includes carrying case, tap collet set, safety chain, carabin hook and allen keys.

includes

warranty



Twist drill capacity up to 1/2" dia., stroke: 7 1/2"

Tapping capacity up to 3/4" dia.

See pages 18-26 for Annular Cutters and Accessories.



Model ECO-32TAK has an automatic cooling/ lubrication system built into the arbor.



Model ECO-32T and ECO-32TAK

Motor Power	9.5 Amp / 110 Volt*
Weight	24 lbs.
Hole Capacity	1 ¹ / ₄ " dia.
Twist Drill Capacity	¹ /2" dia.
Tapping Capacity	³ / ₁₆ "- ³ / ₄ " dia.
Speeds	100-450 RPM
Magnet Base Size	6 ⁵ / ₁₆ " L x 3 ¹ / ₄ " W
Dimensions	14 ¹ / ₄ " H x 9 ¹ / ₂ " L x 4 ³ / ₈ " W
Magnetic Force (1" plate)	3080 lbs.
Arbor Bore	3/4"
Manual Lubrication	Order Model ECO-32T
Automatic Lubrication	Order Model ECO-32TAK

* 220 Volt / 50 Hz also available ** Power Assist Part No. 020.0330

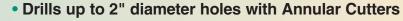




ECO™-50 and ECO™-50AK



Lightweight, two-speed high-performance drill



- Lightweight and portable at 29 lbs.
- Strong 10.5 Amp motor and two-speed gearbox
- HD dual-coil magnet has holding strength of 3750 lbs.
- Easy "twist and lock" keyless arbor for cutters
- Compact height of 16¹/₂" allows drilling in small spaces
- With a ³/₄" chuck (Part No. IBK-22), these models easily convert to standard drill presses with a 5" stroke for up to ⁷/₈" dia. twist drills
- Optional Power Assist to maintain maximum RPM under full load (Part No. 020.0330)

See page 23 for more information.



TEMPTEC™ Magnet



See page 2

Model ECO-50AK
has an automatic
cooling/lubrication
system built into
the arbor.



Model ECO-50 with keyless chuck cutter holder



Standard equipment includes Auto Chuck cutter holder, carrying case, safety chain, carabin hook and allen keys.

Includes one-year warranty



Cutter capacity up to 2" dia., stroke: 6"

Twist drill capacity up to 7/8" dia., stroke: 5"

See pages 18-26 for Annular Cutters and Accessories.



With a 3/4" chuck (Part No. IBK-22) or MT2, these models easily convert to standard drill presses with a 5" stroke for conventional twist drills.

Model ECO-50 and ECO-50AK

Motor Power	10.5 Amp / 110 Volt*
Weight	29 lbs.
Hole Capacity	2" dia.
Twist Drill Capacity	⁷ /8" dia.
Speeds	Gear 1: 250, Gear 2: 450 RPM
Magnet Base Size	6 ¹ /2" L x 3 ¹ /2" W
Dimensions	16 ¹ / ₂ " H x 9" L x 6 ³ / ₈ " W
Magnetic Force (1" plate)	3750 lbs.
Arbor Bore	3/4"
Manual Lubrication	Order Model ECO-50
Automatic Lubrication	Order Model ECO-50AK

^{* 220} Volt / 50 Hz also available ** Power Assist Part No. 020.0330

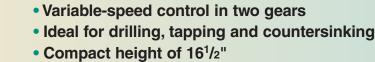


ECO™-50T and ECO™-50TAK





Reversible motor for drilling and tapping applications



- Lightweight and portable at 29 lbs.
- Strong 10.5 Amp reversible motor
- HD dual-coil magnet has holding strength of 3750 lbs.
- Easy "twist and lock" keyless arbor
- Drills up to 2" dia. holes with Annular Cutters
- Optional Power Assist to maintain maximum RPM under full load (Part No. 020.0330)

See page 23 for more information.



Model ECO-50TAK has an automatic cooling/lubrication system built into the arbor.





See page 2

Model ECO-50T with keyless chuck

With a 3/4" chuck (Part No. IBK-22) or MT2, these models easily convert to standard drill presses with a 5" stroke for conventional twist drills.



Optional quick-change tapping chuck with MT2 connection (Model GSW.222) has flexible collet to fit taps 5/16" to 5/8".





Standard equipment includes carrying case, tap collet set, safety chain, carabin hook, Auto Chuck cutter holder and allen keys.

Includes one-year warranty

Tap collet set included



Cutter capacity up to 2" dia.

Twist drill capacity up to 7/8" dia.

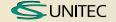
Tapping capacity up to 15/16" dia.

See pages 18-26 for Annular Cutters and Accessories.

Model ECO-50T and ECO-50TAK

Motor Power	10.5 Amp / 110 Volt*
Weight	29 lbs.
Hole Capacity	2" dia.
Twist Drill Capacity	⁷ /8" dia.
Tapping Capacity	³ /16"- ¹⁵ /16" dia.
Speeds	100-250 and 180-580 RPM
Magnet Base Size	7" L x 3 ¹ / ₂ " W
Dimensions	16 ¹ / ₂ " H x 9" L x 6 ³ / ₈ " W
Magnetic Force (1" plate)	3750 lbs.
Arbor Bore	3/4"
Manual Lubrication	Order Model ECO-50T
Automatic Lubrication	Order Model ECO-50TAK

^{* 220} Volt / 50 Hz also available ** Power Assist Part No. 020.0330

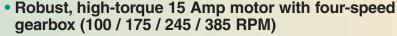




ECO™-80AK



Powerful high-torque motor with multiple speeds



 Multiple speeds match cutter diameter to correct RPM to provide increased tool life and reduced cutter breakage

> High-density dual-coil magnet has holding strength of 7040 lbs.

- Drills up to 3³/₁₆" diameter holes with annular cutters and 11/4" with twist drills
- Keyless arbor for annular cutters
- Mechanical slip clutch disconnects the transmission in case of overload
- Automatic lubrication system
- MT3 output spindle has 11¹/₄" max. stroke
- Optional Power Assist to maintain maximum RPM under full load (Part No. 020.0336) See page 23 for more information.



Model ECO-80AK with keyless chuck cutter holder

Standard equipment includes Auto Chuck cutter holder, carrying and carabin hook.

Includes one-year warranty

case, safety chain







See page 2



With a 3/4" chuck (Part No. IBK-21) or MT3, this model easily converts to a standard drill press with a stroke of 61/2".



Cutter capacity up to 3 3/16" dia., stroke: 10"

Twist drill capacity up to 1 1/4" dia., stroke: 6 1/2" w/chuck

See pages 18-26 for Annular Cutters and Accessories.

Model ECO-80AK

Motor Power	15 Amp / 110 Volt*
Weight	57 lbs.
Hole Capacity	3 ³ /16" dia.
Twist Drill Capacity	1 ¹ / ₄ " dia.
Speeds	100 / 175 / 245 / 385 RPM (4 gears)
Magnet Base Size	9" L x 4 ³ / ₈ " W
Dimensions	19 ¹ / ₂ " H x 13 ³ / ₈ " L x 7 ¹ / ₂ " W
Magnetic Force (1" pla	te) 7040 lbs.
Arbor Bore	3/4" **
Automatic Lubrication	Included

^{* 220} Volt / 50 Hz also available ** 1 1/4" also available



^{***} Power Assist Part No. 020.0336

ECO"-100/3AK and ECO"-100/3DAK





Powerful reversible motor for drilling and tapping



 Variable-speed, high-torque 16 Amp motor with 2 gears (40-140 and 120-480 RPM)

- Multiple speeds match cutter dia. to correct RPM to increase life
- Robust machine with 10" stroke is ideal for drilling structural steel
- High-density dual-coil magnet has holding strength of 6600 lbs.
- Drills up to 4" diameter holes with Annular Cutters
- Mechanical slip clutch disconnects the transmission in case of overload
- Variable torque control regulates power output
- Automatic lubrication system
- Optional arbor available for cutters with 1¹/₄" Weldon shanks
- MT3 output spindle; 11¹/₄" max. stroke
- Optional Power Assist to maintain maximum RPM under full load (Part No. 020.0336)

See page 23 for more information.



Twist Drilling



Tapping



Reaming





Model ECO-100/3AK

with keyless chuck

Optional Swivel Base (Model ECO-100/3DAK) provides movement through 30° and 3/4".





See page 2

Standard equipment includes Auto Chuck cutter holder, carrying case, safety chain, carabin hook and allen keys.

Includes one-year warranty



Cutter capacity up to 4" dia. stroke: 10"

Twist drill capacity up to 1 ¹/₄" dia. stroke: 6 ¹/₂" w/chuck

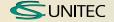
Tapping capacity up to 11/8" dia.

See pages 18-26 for Annular Cutters and Accessories.

Model ECO-100/3AK and ECO-100/3DAK

Motor Power	16 Amp / 110 Volt*
Weight	57 lbs.
Hole Capacity	4" dia.
Twist Drill Capacity	1 ¹ / ₄ " dia.
Tapping Capacity	³ /16"-1 ¹ /8" dia.
Speeds	40-140 and 120-480 RPM
Magnet Base Size	9" L x 4" W
Dimensions	19 ¹ / ₂ " H x 13 ³ / ₈ " L x 7 ¹ / ₂ " W
Magnetic Force (1" plate)	6600 lbs.
Arbor Bore	3/4" **
Automatic Lubrication	Included
Swivel Base	Order Model ECO-100/3DAK

^{* 220} Volt / 50 Hz also available ** 1 1/4" also available



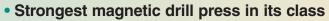
^{***} Power Assist Part No. 020,0336



ECO™-130AK



Triple arbor bearing guidance for drilling up to 5" dia.



Variable-speed and two gears (40-140 and 120-480 RPM)

Multiple speeds match cutter diameter to correct RPM

• 31/3" stroke with special triple arbor bearing guide

Powerful, high-torque 16 Amp motor with reverse

Variable torque control regulates power output

HD dual-coil magnet has holding strength of 10,560 lbs.

Drills up to 5" diameter holes with TCT Annular Cutters

 Mechanical slip clutch disconnects the transmission in case of overload

Automatic lubrication system

 Optional Power Assist to maintain maximum RPM under full load (Part No. 020.0336)

See page 23 for more information.



Automatic cooling/ lubrication system



Model ECO-130AK

Standard equipment

includes carrying

carabin hook and

Includes one-year warranty

allen keys.

case, safety chain,



Triple arbor bearing guide ensures stability for large-diameter hole drilling.

TEMPTEC™ S Magnet



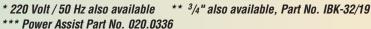
See page 2

Ideal for use with large-diameter Tungsten Carbidetipped (TCT) cutters (see page 22).



Model ECO-130AK

Motor Power	16 Amp / 110 Volt*
Weight	79 lbs.
Hole Capacity	5" dia.
Speeds	40-140 and 120-480 RPM
Magnet Base Size	9 ¹ / ₂ " L x 4 ³ / ₄ " W
Dimensions	26 ¹ / ₄ " H x 13 ³ / ₈ " L x 7 ¹ / ₂ " W
Magnetic Force (1" plate)	10,560 lbs.
Arbor Bore	11/4"**
Automatic Lubrication	Included







Optional 3/4" arbor adapter, P/N IBK-32/19 Cutter capacity up to 5" dia.

See pages 18-26 for Annular Cutters and Accessories.



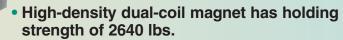
ECO™-40 Auto with Power Feed





Heavy-duty compact drill with automatic feed

- Power Feed automatically controls drill pressure to maintain optimal RPM and feed rate
- Ideal hole cutting machine for steel fabricators, contractors and plant maintenance professionals
 - Compact height of 16¹/₈" allows drilling in tight spaces
 - Lightweight and portable at only 37¹/₂ lbs. for use on the job site or in the shop
 - Strong 10.5 Amp double-insulated motor
 - One-piece motor mount and arbor support for added strength and stability
 - Automatic feed mechanism with automatic stop and manual retraction



- Drills up to 11/2" dia. holes with Annular Cutters
- One-year warranty



All CS Unitec 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.

Model ECO-40 Auto

Standard equipment includes auto lubrication, carrying case, safety strap, carabin hook, gloves, safety glasses, ear protection and allen keys.

Includes one-year warranty



Cutter capacity up to 1 ½" dia. stroke: 3"

See pages 18-26 for Annular Cutters and Accessories.

Model ECO-40 Auto

Motor Power	10.5 Amp / 110 Volt
Weight	37 ¹ / ₂ lbs.
Hole Capacity	1 ¹ / ₂ " dia.
Speed	360 RPM
Magnet Base Size	7 ¹ / ₁₆ " L x 3 ¹ / ₂ " W
Dimensions	16 ¹ / ₈ " H x 12" L x 7 ³ / ₄ " W
Magnetic Force (1" plate)	2640 lbs.
Arbor Bore	3/4"
Automatic Lubrication	Included





AIRBOR™ AB-4300-2 and AB-4300-2R

Pneumatic power for hazardous environments



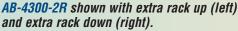
AIRBOR™ is inherently safer than electromagnetic drills in hazardous atmospheres and wet environments where electricity requires "hot work permits." *ATEX approved.*

- 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
- Magnet has a holding strength of 1600 lbs.
- Powerful 1.6 HP drill motor
- Lightweight and portable
- Long drill stroke up to 10¹/₄"
- Drills up to 2¹/₁₆" dia. holes with Annular Cutters
- Pressurized coolant system lubricates cutter and reduces risk of sparking

With a geared chuck adapter

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







Model Comparison

woder Companison					
AB-43	00-2R	AB-4	300-2		
	Drill S	Stroke			
<i>w/cutters</i> 10 ¹ /4"	w/chuck 7 ¹ /2"	w/cutters 4 ⁷ / ₈ "	w/chuck 1 ³ /4"		
	He	ight			
closed open 13 1/2" 22"		closed 13 ¹ /2"	<i>open</i> 17 ¹ /2"		
Weight					
lbs. 43	kg 20	lbs. 38	kg 18		



Cutter capacity up to 2 ¹/₁₆" dia. Twist drill capacity up to ¹/₂" dia.

See pages 18-26 for Annular Cutters and Accessories.

Model AB-4300-2 and AB-4300-2R

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

Hydraulic for marine and construction – works underwater





- Ideal for industrial, construction, marine and mining applications
- Hydraulic motor safe for underwater use
- Drill structural steel and other metals
- Stainless steel construction resists corrosion
- Manually operated permanent magnet with ratchet control has holding strength of 1300 lbs.
- Lightweight, rugged machine for cutting up to 2¹/₁₆" diameter holes with Annular Cutters
- Easily converts to a standard drill press with a chuck for conventional twist drills up to ¹/₂" dia.
- Includes automatic lubrication



Standard equipment includes safety straps, allen keys and operating instructions.

With a 3/4" chuck (Part No. 602045A), this model easily converts to a standard drill press with a 3" stroke.





Cutter capacity up to 2 1/16" dia. stroke: 3 3/4"

Twist drill capacity up to ¹/₂" dia. stroke: 3"

See pages 18-26 for Annular Cutters and Accessories.

Model HB-4400				
Motor Power (Hydraulic)	1.5 HP			
Weight	48 ¹ / ₂ lbs.			
Hole Capacity	2 ¹ / ₁₆ " dia.			
Twist Drill Capacity	¹ / ₂ " dia.			
No Load Speed, Variable	0-630 RPM			
Hydraulic Supply	Flow 6.5 GPM @ 2000 PSI			
Magnetic Force (1" plate)	1300 lbs.			
Automatic Lubrication	Included			



Multi-purpose Beveling Machine

Bevel, deburr & chamfer edges of steel plate faster and

cleaner than angle grinders



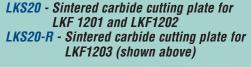
One Machine, Three Milling Options



LKF1201 milling head 30° LKF1202 milling head 45°



Accessories:

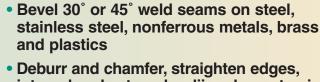


Standard equipment includes milling head and 2 inserts, SW22 key, carrying case

and user's manual.

Model No.	Beveling Angle	vvialii	Motor Power (Amps)	Voltage*	Cutting Speed (SFPM)	Dimensions (L x W x H)	Weight (lbs.)
LKF450-2A	30°	1/4"	10	110V	3000	12 ¹ / ₄ " x 5 ¹ / ₂ " x 11 ⁵ / ₈ "	10 ¹ / ₂
LKF450-2	45°	1/4"	10	110V	3000	12 ¹ /4" x 5 ¹ /2" x 11 ⁵ /8"	10 ¹ / ₂

^{**} All units available in 220 Volt / 50Hz † Max. bevel width may require several passes, depending on material hardness



- Deburr and chamfer, straighten edges, internal and external radii and countersink holes from ⁷/₈" dia.
- Fine adjustment feature for slight chamfers when deburring for the preparation of weld seams
- Three milling heads 30°, 45° and radius R2.5 – are available
- Ideal for the following applications:
 Moldmaking: straighten edges, internal and external radii and countersink holes from ⁷/₈" dia.

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

One-year warranty



Portable Beveling Machine

Bevel angles from 15° to 60° on plate and pipes



Bevel 15° to 60° angles on plate or pipe

High-quality performance allows better weld connections

 Continuously adjustable angle (15° to 60°) and land width up to 5/8"

- Ideal for steel, stainless steel, aluminum and nonferrous metals
- Robust design, single operator control and easy handling
- Includes two milling heads and 12 total indexable inserts for fast metal removal and extended tool life
- Welding angles and weld preparation on pipes/tubes with a minimum OD of 6¹/₄" (160mm) with included pipe roller guide
- Ideal for beveling pipe 6¹/₄" OD and larger
- Designed for continuous operation
- Smooth roller guides
- One-year warranty





Standard equipment includes two milling heads, each with 6 sintered carbide reversible cutting inserts, tools for assembly, LKF 225 pipe roller guide (shown at left), steel carrying case and user's manual.

Accessories:

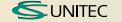
LKS10 - Sintered carbide cutting plates (10 per pack)



Ideal for beveling pipe 61/4" OD and larger.

Model No.	Adjustable Beveling Angle	Bevel Width (Max.)	Motor Power (Amps)	Voltage*	Rotation Speed (SFPM)	Dimensions (L xH)	Weight (lbs.)
LKF200	15° - 60°	5/8"†	14	110V	1800	16 ¹ / ₂ " x 13"	42

^{**} Available in 220 Volt / 50Hz † Max. bevel width may require several passes, depending on material hardness



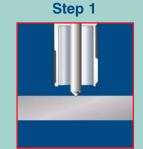
Faster and more accurate than twist drilling



Unibroach®
cutters are
made of
hardened,
high-speed
tool steel
and precision
ground with
up to 16 teeth
for fast drilling

CS Unitec's Unibroach® Annular Cutters drill a burr-free finished hole by cutting only the material around the periphery of the hole. This forms a solid slug which automatically pops out.

- Less time and energy are consumed per hole
- Faster feed rates are achieved with more cutting teeth and less tool wear
- Lighter, less powerful drilling equipment can be used
- Able to drill holes which are difficult or impossible to do accurately with conventional twist drill tooling – with no predrilling or stepdrilling required



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



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

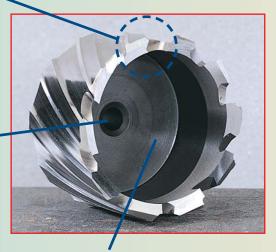


When hole is complete, the slug is automatically ejected from the cutter.

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

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

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



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

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





Less Friction = Less Heat = More Holes!Increase tool life and achieve faster feed rates **ARMOR-PLATED Unibroach™ Cutters — TiAIN**

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.



- 3 to 4 times longer tool life with TiAIN coating
- 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)



ARMOR-PLATED Unibroach™ cutters are available in the following sizes:

- 1" drill depth ø ⁷/16" to ø 5"
- 2" drill depth ø 7/16" to ø 5"
- 3" drill depth \emptyset 3/4" to \emptyset 5"
- 3/4" shank is standard for cutters up to 3" dia.
- See page 20 for part numbers
- Metric cutters available on request

Unibroach® High-Speed Steel (HSS) Cutters



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

1" drill depth $- \emptyset$ 7/16" to \emptyset 5" 2" drill depth $- \emptyset$ 7/16" to \emptyset 5" 3" drill depth $- \emptyset$ 3/4" to \emptyset 5"

- See page 21 for part numbers
- Metric cutters available on request



* HSS Cutters must be used with lubricant. See page 23 for CS United lubricants and cutting oil.

the length of the cutter for efficient chip clearance.
This increases drilling productivity and decreases

cutter breakage.

- CNC precision ground for fast penetration, accuracy and long life
- 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

Unibroach® Stack Cutters are available in diameters from ⁷/₁₆" to 1 ¹/₈" 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.



^{*} After the TiAIN coating is worn, lubricate with cutting oil

ARMOR-PLATED Unibroach™ Cutters - TiAIN (8-Series)



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 pin & carrying case.

Order No	. Des	cription
8-1-001	T 1" de	epth Cutter Kit
8-1-002	T 2" de	epth Cutter Kit

Pilot Pins for 8-Series

Order No.	Description	
	For 3/4" Shanks	
7-3-102	1" depth	
7-3-202	2" depth	
8-3-302	3" depth	

**We also offer 4" depth ARMOR-PLATED cutters as well as Metric ARMOR-PLATED cutters. Please call us for pricing and delivery.

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

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

2" D	epth
Order No.	 Diameter
8-1-214 T	7/16"
8-1-216 T	1/2"
8-1-218 T	9/16"
8-1-220 T	5/8"
8-1-222 T	11/16"
8-1-224 T	3/4"
8-1-226 T	13/16"
8-1-228 T	7/8"
8-1-230 T	15/16"
8-1-232 T	1"
8-1-234 T	1-1/16"
8-1-236 T	1-1/8"
8-1-238 T	1-3/16"
8-1-240 T	1-1/4"
8-1-242 T	1-5/16"
8-1-244 T	1-3/8"
8-1-246 T	1-7/16"
8-1-248 T	1-1/2"
8-1-250 T	1-9/16"
8-1-252 T	1-5/8"
8-1-254 T	1-11/16"
8-1-256 T	1-3/4"
8-1-258 T	1-13/16"
8-1-260 T	1-7/8"
8-1-262 T	1-15/16"
8-1-264 T	2"

3" D	epth
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 = Less Friction = Less Heat = More Holes! Increase tool life and achieve faster feed rates

2-1/16"

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.

- 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
- * After the TiAIN coating is worn, lubricate with cutting oil



Unibroach™ High-Speed Steel (HSS) Cutters (6-Series)

1" D	epth	2" D	epth		
Order No.	Diameter	Order No.	Diameter	3" D 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"	N/A	
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"	6-1-332	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"	6-1-262	1-15/16"	6-1-362	1-15/16"
6-1-164	2"	6-1-264	2"	<u>6-1-364</u>	2"
6-1-166	2-1/16"	6-1-266	2-1/16"	6-1-366	2-1/16"
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" 2-5/8"	6-1-382	2-9/16"
6-1-184	2-5/8" 2-11/16"	6-1-284	2-5/6	6-1-384	2-5/8" 2-11/16"
6-1-188	2-11/16	6-1-286 6-1-288	2-11/16	6-1-386 6-1-388	2-11/16
6-1-190	2-3/4	6-1-290	2-3/4	6-1-390	2-3/4
6-1-190	2-13/10	6-1-292	2-13/10	6-1-392	2-13/10
6-1-194	2-1/6	6-1-294	2-1/6	6-1-394	2-1/6"
6-1-196	3"	6-1-296	3"	6-1-396	3"
0 1-130		0 1-230		0-1-030	
6-1-198	3-1/16"	6-1-298	3-1/16"	6-1-398	3-1/16"
6-1-1100	3-1/8"	6-1-2100	3-1/8"	6-1-3100	3-1/8"
6-1-1102	3-3/16"	6-1-2102	3-3/16"	6-1-3102	3-3/16"
6-1-1104	3-1/4"	6-1-2104	3-1/4"	6-1-3104	3-1/4"
6-1-1106	3-5/16"	6-1-2106	3-5/16"	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	3-1/2"	6-1-3112	3-1/2"
6-1-1114	3-9/16"	6-1-2114	3-9/16"	6-1-3114	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"



Shank size:

3/4" for cutters up to 3" dia.

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

Cutter Kits

Each HSS steel cutter kit comes with the following: 9/16",11/16", 13/16", 15/16", 1-1/16", pilot pin & 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
6-3-101	7/16" dia., 1" depth
7-3-102	1/2" - 3" dia., 1" depth
6-3-201	7/16" dia., 2" depth
7-3-202	1/2" - 3" dia., 2" depth
7-3-302	3/4" - 3" dia., 3" depth
	For 1-1/4" Shanks
8-3-3002	3-1/16" - 5" dia., 1" depth
8-3-2002	3-1/16" - 5" dia., 2" depth
8-3-3022	3-1/16" - 5" dia., 3" depth

**We also offer 4" depth HSS cutters and Metric HSS cutters. Please call us for pricing and delivery.





High-speed drilling — on the job site or in the shop Unibroach® Tungsten Carbide-tipped (TCT) Cutters



- Metric cutters available on request
- · See our price list for part numbers

- Use high-speed RPM for best results and faster holemaking
- Ideal for drilling steel with rust or paint
- Will outlast High-speed Steel cutters
- Leaves a burr-free finished hole
- Available in all sizes (fractional and metric)
- 3/4" or 11/4" shank

Available in the following sizes:

1" drill depth - ø 5/8" to ø 2"

2" drill depth - ø 11/16" to ø 5"

3" drill depth - Ø 13/16" to Ø 2"

Unibroach® Cobalt Cutters



- Unibroach[®] Cobalt Cutters are made with 5% cobalt to increase resistance to wear
- Excellent results when drilling high-tensile steel and difficult-to-machine materials
- Available with TiAIN coating upon request
- Available for hole sizes up to 5" dia.

• 3/4" shank is standard for cutters up to 3" dia. • Metric cutters available on request • See our price list for part numbers



Unibroach® Large-diameter Hole Cutting

Drill perfect holes up to 5" diameter without runout

- Standard with ³/₄" or 1¹/₄" 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
- A solid slug has a higher value for scrap metal
- Available in HSS, Cobalt, TCT and ARMOR-PLATED Unibroach™



Unibroach® Cutter Kits

Kits include one each: 9/16", 11/16", 13/16", 15/16", 1 1/16" (for cutter depth of 1" or 2"), pilot pin and plastic case



Lubricants

Coolant extends the life of cutting tools!

ProLube[™] Ideal for cutting steel, stainless steel and hard metals

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



ProLube



Cutting Oil



[Part No. IBO.20Q (quart): IBO.20G (gallon)]

- High-alloy cutting oil for heavy removal of metal, including stainless steel
- Chlorine-free (MSDS on bottle)
- Not necessary to dilute with water

Upgrade your drill's cooling system: see page 25 for arbors with automatic cooling.



Power Assist

The Power Assist is a standard capstan. designed with delayed torque transfer. This decreases the load on both cutter and drilling machine, allowing the machine to maintain max. RPM under full load

- Reduces drilling time
- Prevents cutter breakage
- Extends lifespan of cutter/ drill bit



030E.0048 - Included with ECO-30

020.0330 - Power Assist for ECO-32 and **ECO-50** machines

020.0336 - Power Assist for ECO-80, ECO-100 and ECO-130 machines

020,0063 - Power Assist with wrench mechanism for ECO-32 and **ECO-50** machines

020.0064 - Power Assist with wrench mechanism for ECO-80. ECO-100 and ECO-130 machines





1-800-700-5919

Visit our Web site at www.csunitec.com

Accessories



Pilot Pins for Cutters

- Milled channel efficiently supplies internal lubrication to cutting teeth
- Available for cutter diameters ranging from ⁷/₁₆" to 5" and 1", 2", 3" and 4" depth of cut
- See price list for part numbers

Drill Chucks for Straight Shank Twist Drills

- Two capacities: 1/2" and 3/4"
- Four chucks and adapters to fit all magnetic drills:
- A) IBK-17 $\frac{1}{2}$ " chuck for ECO-32 and ECO-32T
- B) IBK-18 1/2" chuck with 3/4" shank for AIRBOR™ and HB-4400 (fits all drills with 3/4" arbor bore)
- C) IBK-21 3/4" chuck with MT3 shank for ECO-80AK and ECO-100/3AK
- D) IBK-22 3/4" chuck with MT2 shank for ECO-50 and ECO-50T



Tapping Tools, Tap Collets and Tapping Chucks



- Manufactured from high-quality HSS to ASA Standard (or DIN 376 for metric)
- Ideal for CS Unitec's portable drilling and tapping machines and other drills

Tap collets fit magnetic drills with 3/4" arbor bore. They are available for taps 1/4" through 3/4". They hold standard USA taps conforming to ASA.





Model No. **GSW.222** quick-change tapping chuck with MT2 connection, complete with flexible collet to tap $\frac{5}{16}$ " to $\frac{5}{8}$ ". For use with ECO-50T magnetic drill.



Model No. **GSW.830** tapping chuck utilizes 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.830** has an MT3 connection. For use with ECO-100 magnetic drill.

Variable clamp collets for use in tap chuck No. **GSW.830** Model No. **VSP.160** variable clamp collet fits shanks $^{3}/_{8}" - ^{5}/_{8}"$. Model No. **VSP.230** variable clamp collet fits shanks $^{5}/_{8}" - ^{7}/_{8}"$.





Accessories

Arbors for Annular Cutters







Extended Length



Manual Cooling

Automatic Cooling

- Can be used on any magnetic drill stand, drill press or shop equipment with a Morse Taper intake of No. 2, No. 3 or No. 4
- Available for Annular Cutter shank sizes of 3/4" or 11/4" Weldon
- Available for automatic internal cooling or manual cooling
- MC.2 Morse Taper No. 2 ³/₄" arbor bore manual cooling
- MC.3 Morse Taper No. 3 ³/₄" arbor bore manual cooling
- MC.4 Morse Taper No. 4 3/4" arbor bore manual cooling
- IMC.20 Morse Taper No. 2 ³/₄" arbor bore automatic cooling
- IMC.30 Morse Taper No. 3 3/4" arbor bore automatic cooling
- IMC.30/32 Morse Taper No. 3 11/4" arbor bore automatic cooling

Keyless Arbor with Automatic Cooling

Keyless cutter arbors allow fast, no-tools changeover for 3/4" dia. shank annular cutters.

IMC.2Q - Morse

Taper No. 2

IMC.3Q - Morse Taper No. 3

2-in-1 Drill/Taps

 Drill and tap with one tool

Sizes available:

CS500 - 1/2" UNC CS625 - 5/8" UNC CS750 - 3/4" UNC

CS875 - 7/8" UNC

CS1000 - 1" UNC

CSDT-UNCKIT - 1/2", 5/8", 3/4" and 1" UNC



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

Countersink hole sizes:

SCE 20 from 3/8" to 1 1/2" / 82°

SCE 30 from 5/8" to 2" / 82°

SCE 40 from 3/8" to 1 1/2" / 90°

SCE 50 from 5/8" to 21/8" / 90°



Cooling System

The cooling system on all our drills has been upgraded for easier use. The coolant reservoir is quickly and easily attached to the magnetic drill via a new magnet system. The coolant flow is measurable and easily monitored through a clear cylinder.

The hose connecting the reservoir to the spindle has also been upgraded. It is now equipped with a wear-resistant mechanical locking system that securely fastens the hose to the arbor.





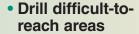
Extensions for Annular Cutters Extra-long holders extend stroke of drills

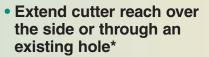


3/4" Weldon Shank (2 Flats)

6" length (p/n 7-9-906) 12" length (p/n 7-9-912)

- Extend cutter reach up to 12"
- Available for magnetic drills with ³/₄" arbor bore or MT3
- Also available with 3 flats for straight shank drill chucks and R8 shanks for drill presses







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



R8



3 Flats for Geared Chucks x 3/4" arbor



MT2 or MT3 x 3/4" arbor

Pipe Clamp Saddle System Ensures safe, secure drilling of pipes and tubular material



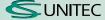


Ideal for a wide variety of pneumatic, hydraulic or electric drills

- Quick clamping feature for fast setup on pipes up to 20" dia. and larger
- For use on steel, stainless steel and other materials
- Chain tensioner secures saddle to pipe in any position, while four independent steel feet automatically adjust to pipe contour
- Larger sizes available with optional extension chain*

	Model PAK-100	Model PAK-200
	For models ECO-30/3P, ECO-32, ECO-32T and MDM-40	For models AB-4300-2, ECO-50, ECO-80, ECO-100/3, ECO-40 AUTO and HB-4400
Pipe OD	3 ¹ / ₄ " to 10" dia.	6" to 20" dia.
Maximum Magnet Dimensions	6 ⁵ /8" L x 3 ⁵ / ₁₆ " W	9" L x 4 ³ / ₈ " W
Weight	14 lbs.	23 lbs.

^{*} For larger pipe sizes, order 39" extension chain, Part No. PAK-CHAIN



Electric Drills and Drive Units

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









Heavy-duty Drills for Industrial and Construction Applications:

- 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 1¹/₄" capacities to protect operator and tool
- Drilling capacities up to 1¹/₄" in steel
- Special OEM motors available on request
- One-year warranty

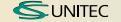






							Y .	
Model No.	Motor Power (Amps)	Voltage*	Load Speed (RPM)	Drilling Capacity in Steel	Torque Output (ft./lbs.)	Revers- ible	Chuck/Arbor	Weight (lbs.)
EHB 16/1.4 S	7.3	110V	0-500	5/8"	12	NO	5/8" Keyless	6.8
EHB 16/2.4 S	10	110V	0-430/0-760	5/8"	19	NO	5/8" Geared	7
EHB 16/2.4 R/L	10	110V	430/760	5/8"	19	YES	5/8" Geared	7
EHB 16/2.4 S/RL	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	⁵ /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 ¹ /4"	112	NO	МТЗ	15.2

^{*} All units available in 220 Volt / 50Hz Special Motors available upon request.



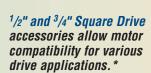
Slow-speed Electric Drills and Drive Units

Two-geared, variable-speed reversible motors









ı	Model		Motor Power (Amps)	Voltage**		Drilling Cap. in Steel	Tube Rolling (max.)	Revers- ible		Torque Control	Arbor	Weight (lbs.)
1	EHB 32/2.	2 R/RL	16.3	110V	60-140 / 200-470	1 ¹ /4"	2"	YES	92 max.	YES	МТЗ	14
1	ETE 32/2.3	3 R/RL	16.3	110V	30-75 / 90-230	N/A	3" ***	YES	174 max.	NO	МТЗ	15

Model EHB 32/2.2 R/RL Model ETE 32/2.3 R/RL



^{**} All units available in 220 Volt / 50Hz

^{***} With Expander (Up to 2 1/2" with Bead Roller)

^{* 1/2&}quot; Square Drive with MT3 - Part No. 830-1230-050 ³/₄" Square Drive with MT3 – Part No. 830-1230-075

Pneumatic Drills and Drive Units

High-torque reversible drilling and tapping machines

- High-torque reversible drilling, tapping and threading machines
- Ideal for drilling, reaming, tube rolling, tube expanding and tapping
- Use for special applications including 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
- One-year warranty

D-handle Drills



Morse Taper Drills w/ Feed Spindle



Pneumatic Hammer Drills Pneumatic Pistol Drills



See page 29 for Rotary Hammer Drills





Model No.	Motor Power (HP)		Revers- ible	Chuck/ Arbor	Drilling Cap. in Steel	Tube Rolling Cap.	Torque Output (ft./lbs)	CFM at 90 PSI	Length	Feed Length	Weight (lbs.)
Pistol Drills											
2 1261 0010	0.7	90-850	NO	1/2" Chuck	1/2"	N/A	7 max.	21	9 ³ / ₄ "	N/A	4.6
Hammer Drills	(for cor	ncrete al	nd under	water applic	ations)						
2 1266 0010	0.75	950	NO	1/2" Chuck	1/2"	N/A	7 max.	21	12"	N/A	6.7
D-handle Drills											
2 1310 0010	0.8	650	NO	1/2" Chuck	1/2"	N/A	8 max.	24	12 ¹ / ₂ "	N/A	12
2 1311 0010	0.8	650	NO	MT1	⁵ /8"	N/A	8 max.	24	11"	N/A	12
Morse Taper Di	rills w/ F	eed Spi	indle								
2 2089*	1.7	250	YES	МТЗ	1 ¹ /4"	1"	36 max.	24	26 ¹ / ₂ "	1 ⁵ /8"	28
2 2506*	2.5	220	YES	МТЗ	1 ¹ /4"	2"	63 max.	70	26 ¹ / ₂ "	2 ¹ / ₂ "	32
2 2502*	2.5	80	YES	MT4	2"	2 ¹ / ₂ "	173 max.	70	26 ¹ / ₂ "	2 ¹ / ₂ "	37

^{*} 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.



Pneumatic and Hydraulic Corner Drills and Drives

High-torque drilling, reaming and driving units



ATEX

Corner Drills and Bridge Reamers

- Small side-to-side distance for working in tight spaces
- Self-closing roll throttle
- Built-in oiler for motor
- Ideal for bridge reaming and drilling applications
- One-year warranty
- Visit <u>www.csunitec.com</u> 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 $-\frac{7}{8}$ " Male Square Drive to $\frac{3}{4}$ " Male Square Drive 2 2089 7070 $-\frac{7}{8}$ " Male Square Drive to 1" Male Square Drive 6 1016 7940 $-\frac{7}{8}$ " Male Square Drive to 1" Male Square Drive

with retaining pin

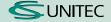
Pneumatic Corner Drill Model No.		Drilling (in steel)	Reaming (in steel)	Tube Rolling Cap.	Torque Output (ft./lbs.)	Load Speed (RPM)	Motor Power (HP)	CFM at 90 PSI	Length	Weight (lbs.)
Nonreversible	9									
2 1602 0030	#1	5/8"	1/2"	N/A	7	500	0.7	21	12.5"	7
2 1701 0030	#2	7/8"	⁵ /8"	N/A	35	270	1.8	49	20.9"	19
2 1801 0030	#3	1 ¹ /4"	1"	N/A	53	260	2.6	63	22.5"	25
Reversible										
2 2104 0030	#4	2 ¹ /8"	2"	2"	86	180	3.0	71	23.8"	37

Model No. 2 1602 0030 has a $^{3}/_{8}$ " 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)		Torque Output (ft./lbs.)	Speed			Length	Weight (lbs.)
2 1806 0010	#3	1 ¹ /4"	1"	N/A	60	220	3.8	4 GPM @2000	21"	25

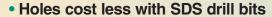
Pneumatic Drive Unit Model No.	Square Drive ID		Load Speed (RPM)	Revers- ible	Tube Rolling Cap.	Tapping Cap.	Motor Power (HP)	CFM at 90 PSI	Height x Length	Weight (lbs.)
2 2081*	¹³ / ₁₆ "	413	20	YES	3"	1 ¹ /2"	1.35	53	10.9" x 26.5"	29
2 2087*†	⁷ /8"	413	20	YES	3"	1 ¹ /2"	1.35	53	10.9" x 26.5"	29
2 2088*†	7/8"	138	60	YES	2"	3/4"	1.35	53	10.9" x 26.5"	29

^{*} 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.



Pneumatic and Hydraulic Rotary Hammer Drills

Powerful percussion drilling for concrete and masonry



- 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



SDS Max – Modes of Operation

2" bit capacity for drilling concrete and masonry





SDS Plus – Hammer and Drill
1" bit capacity for drilling concrete and masonry

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



SDS Drill Bits and Chisels

@aaaaaaaaaa

Chisel

for demolition

Small Masonry Bits SDS Plus up to 1" dia. Large Masonry Bits SDS Max up to 2" dia. Auger Drill Bit for wood

Air **Pneumatic** Blows/ Solid Bit Core Bit **Twist** Power Drill **Dimensions** Weight Tool Consum-Hammer Drill at 90 **Minute** Speed Capacity Capacity Drill (inches) System (lbs.) ption at Model No. (BPM) (RPM) (Concrete) (Concrete) (wood) **PSI** 90 PSI 1" dia. 3" dia. 2 2404 0010 0-3000 0-625 0.7 HP 21 CFM **SDS Plus** 16 x 81/2 x 4 11 3/4" dia. 2 2404 0030* 0-3000 0-625 1" dia. 3" dia. 0.7 HP **21 CFM SDS Plus** 11 3/4" dia. 16 x 81/2 x 4 0-2500 0-250 2" dia. 6" dia. 1¹/₄" dia. 1.6 HP 53 CFM SDS Max 19¹/₂x 9.8 x 4¹/₂ 26 2 2417 0010

* Underwater model – Optional underwater air tool line conditioner to displace moisture, Part No. MS 9105. See page 32.

SDS Max

Hydraulic Hammer Drill Model No.			Solid Bit Capacity (Concrete)	Capacity	Drill	Power at 2000 PSI	Flow Range at 1450 PSI (GPM)	Tool System	Dimensions (inches)	Weight (lbs.)
2 2406 0010	0-3400	0-625	1" dia.	3" dia.	³ /4" dia.	0.8 HP	5.8-13.2	SDS Plus	18 x 10 ¹ / ₄ x 4	15
2 2418 0010	0-2500	0-250	2" dia.	6" dia.	1 ¹ / ₄ " dia.	1.8 HP	2.6-13.2	SDS Max	19 ¹ / ₂ x 11 ¹ / ₈ x 7 ¹ / ₂	37

Hydraulic Hammer Drills operate at hydraulic pressures of 1,450 - 2,000 PSI



Woodboring Air Drills, Reversible

Heavy-duty power for underwater drilling and other wood boring applications



Model 2 1924 0010



- 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"

|--|

Model 2 1903 0010 with lever throttle Up to 1" for boring wood

Capacity in wood	1" Diameter	2" Diameter
	i Diametei	2 Diameter
Reversible	Yes	Yes
Power	2 HP	3 HP
Chuck Style	1/2" Woodboring	1/2" Woodboring
Spindle	Stub Taper	#2 Morse Taper
Free Speed	750 RPM	700 RPM
Recommended Hose Size	1/2"	1/2"
Overall Height	17 ¹ /2"	18 ¹ / ₂ "
Weight	14 ¹ / ₂ lbs.	24 ³ / ₄ lbs.
Air Inlet Thread	1/2" ID	¹ / ₂ " ID
Air Exhaust Thread	¹ /2" NPT	¹ / ₂ " NPT
Air Consumption at 90 PSI	39 CFM	50 CFM

Model 2 1903 0010

AirPac Extends life of pneumatic power tools



- 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.

MS 9105 - 1 quart/liter



Pneumatic and Hydraulic Nut Runners

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
- Both Pneumatic and Hydraulic models available
- One-year warranty



Model numbers pictured above (listed from top to bottom): 6 1015 0075 (with male drive), 6 1015 0010 (female), 6 1014 0075 (with male drive)

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





Male Sq. Drive Head 1/2" or 3/4"

Female Sq. Drive Head 3/4" or 7/8" (7/8" pneumatic only)

Square Drive Accessories



6 1015 7030

³/₄" Male Square Drive with retaining hole (included with model numbers 6 1014 0075, 6 1015 0075 and 6 1016 0075)

3 1017 7940

3/4" Male Square Drive with retaining pin

6 1015 7020

1/2" Male Square Drive with retaining hole (included with model numbers 6 1014 0099, 6 1015 0099 and 6 1016 0099)

6 1018 7940

1/2" Male Square Drive with retaining pin

Pneumatic Nut Runner Model No.	Square Drive 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 (inches)	Length (inches)		Air Conn- ection (inches)	Hose ID (inches)
6 1014 0010	³ /4" F	100	180	100	0.9	42	1	16	10	NPT 3/8	1/2
6 1014 0075	³ /4" M	100	180	100	0.9	42	1	16	11	NPT 3/8	1/2
6 1014 0099	¹ /2" M	100	180	100	0.9	42	1	16	11	NPT ³ / ₈	1/2
6 1015 0010	³ /4" F	423	44	22	0.9	45	1	21	10	NPT 3/8	1/2
6 1015 0075	³ /4" M	423	44	22	0.9	45	1	21	10	NPT 3/8	1/2
6 1015 0099	¹ /2" M	423	44	22	0.9	45	1	21	10	NPT ³ / ₈	1/2
6 1016 0010	³ /4" F	141	120	67	0.9	42	1	21	10	NPT 3/8	1/2
6 1016 0075	³ /4" M	141	120	67	0.9	42	1	21	11	NPT 3/8	1/2
6 1016 0099	¹ /2" M	141	120	67	0.9	42	1	21	11	NPT ³ / ₈	1/2
6 1017 0010	³ /4" F	60	260	125	0.9	46	1	21	11	NPT 3/8	1/2
6 1017 0075	3/4" M	60	260	125	0.9	46	1	21	11	NPT 3/8	1/2
6 1017 0099	¹ /2" M	60	260	125	0.9	46	1	21	11	NPT 3/8	1/2
6 1021 0010	⁷ /8" F	423	44	22	0.9	45	1	21	11	NPT ³ /8	1/2

Nut Runner	Drive	Torque at 90 PSI	Free Speed (RPM)	Load Speed (RPM)	Power (HP)	Oil Flow (GPM)	Oil Pressure (GPM)	Side to Center Distance (inches)	Length (inches)	Weight (lbs.)	Conn- ection Quick Couplers
3 6242 0010*	³ /4" F	554	44	22	1.6	4 - 13	1000	1	20	22	¹ / ₂ " FF
3 6243 0010*	³ /4" F	223	44	90	1.6	4 - 13	1000	1	20	22	¹ / ₂ " FF

^{*} Also available with 1/2" and 3/4" Male Square Drive



Pneumatic and Hydraulic Drive Units

High torque and slow speed for special driving and tapping applications



- Both Pneumatic and Hydraulic models available
- One-year warranty



	N. C.		
			7
		D	

Di	ydraulic rive Unit odel No.	Square Drive	Stall Torque at 90 PSI (ft-lbs.)	Free Speed (RPM)	Load Speed (RPM)	Power (HP)	Oil Flow (GPM)	Oil Pressure (PSI)	Side to Center Distance (inches)	Weight (lbs.)	Connection Quick Couplers
22	2090 0010	³ /4" F	376	40	20	1.5	4 - 13	1000	2.2	28	¹ /2" FF
22	2810 0010	1- ¹ /8" F	1550	24	12	3.5	4 - 13	1000	3.6	77	1/2" FF

Pneumatic Drive Unit Model No.	Square	Stall Torque at 90 PSI (ft-lbs.)	Free Speed (RPM)	Speea	Power (HP)	CFM at 90 PSI	Side to Center Distance (inches)	Weight (lbs.)	Air Connection (inches)	Hose ID (inches)
2 2804 0010	1- ¹ /8" F	1327	40	20	5	141	3.6	82	NPT 1"	1"

Drive Units and Special Motors Electric and Pneumatic for Custom Applications



- High-torque, variablespeed reversible motors
 - Driving applications include mills, spindles, bar boring, tube rolling and valve turning
 - Custom-designed motors for special driving applications





Pneumatic Chisel Scalers / Needle Scalers

Ideal for chipping and removing metal, stone, concrete and brick, as well as carving wood

- Use in oilfields, fabrication shops, petrochemical plants, construction sites and foundries
- Chisel scalers are general-purpose hammers for chipping stone, metal, concrete, brick and for carving wood
- Needle scalers are ideal for removing weld splatter, rust, paint and other debris from many surfaces and hardto-reach places



Copper Beryllium non-sparking needles available for CSU-182LNS and CSU-1BLNS.

Ex308-319B - 7" long needle, 19 per pack Ex308-3100B - 7" long needle, 100 per pack



Model CSU-182LCS
Scaling Hammer with Lever Throttle
Gooseneck handle and push throttle hammers also available.



Model CSU-182LNS
Needle Scaler with Lever Throttle
Push throttle hammers also available.
Non-sparking CuBe needles (Ex308-319B) available.



Model CSU-1BLCS
Chisel Scaler with Lever Throttle



Model CSU-1BLNS Needle Scaler with Lever Throttle Non-sparking CuBe needles (Ex308-319B) available.



Accessories available:

CSU-43: 7" Steel Needles EX308-319B: 7" CuBe Needles CSU-047: 3/4" Flat Chisel CSU-048: 1-3/8" Angle Chisel

Ask About Non-sparking CuBe Chisels.



Model No.	Bore	Stroke	Blows per Minute	Rec'd Hose Size	Length	Weight (lbs.)	Air Inlet Thread	CFM at 90 PSI		
Scaling Hammer - Lever Throttle (takes 1/2" ir notched shank chisels)										
CSU-182LCS	15/16"	1-1/16"	4000	1/4"	9"	4	1/4"	13		
Needle Scaler	- Lever T	Throttle (re	quires 19 needle	es; takes 1/2" ir	notched shar	nk chisels)				
CSU-182LNS	15/16"	1-1/16"	4000	1/4"	17"	5.75	1/4"	13		
Chisel Scaler -	Lever T	hrottle (tak	es 1/2" c notche	ed shank chisels	;)					
CSU-1BLCS	1"	1-1/8"	4600	1/4"	10-1/4"	3.625	1/4"	6		
Needle Scaler - Lever Throttle (requires 19 needles; takes 1/2" c notched shank chisels)										
CSU-1BLNS	1"	1-1/8"	4600	1/4"	17"	6.2	1/4"	12		

Also available from \$\lefts\text{UNITEC:}



CS Unitec, Inc. specializes in electric, pneumatic and hydraulic power 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 electric, pneumatic and hydraulic portable band saws, reciprocating saws, hack saws, nut runners, rotary hammer drills, rolling motors, metal finishing tools, non-sparking safety tools, portable mixers, dust extraction tools and vacuum systems.

... the power of innovation!®

For more information, please visit our Web site at www.csunitec.com.



View product demonstrations at <u>www.csunitec.com</u>.

Electric, Pneumatic and Hydraulic Tools





CS UNITEC, Inc.

22 Harbor Avenue, Norwalk, CT 06850 Phone 800-700-5919 • 203-853-9522 • Fax 203-853-9921 Email info@csunitec.com • www.csunitec.com