



Surface Finishing Tools & Accessories



**GRINDING
SANDING
POLISHING
BEVELING**

High-performance Tools for
Finishing Stainless Steel, Steel,
Nonferrous Metals and Wood

 **UNITEC**

ELECTRIC • PNEUMATIC

... the power of innovation!®

CS UNITEC Surface Finishing Tools & Accessories

CS Unitec offers professional 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 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!)



5/8"-11 SPEED NUT changeover

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!)

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



Important advancements in flap disc technology

- PLANTEX[®] high-tech hemp fiber compound (Patented!)
- TRIMTEX[®] for grinding inside corners; shown at left (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.

Better for the environment!

The fiber in the high-tech PLANTEX[®]/TRIMTEX[®] 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 6).



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



View product demonstrations at www.csunitec.com.

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PTX ECO SMART

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PLANTEX®

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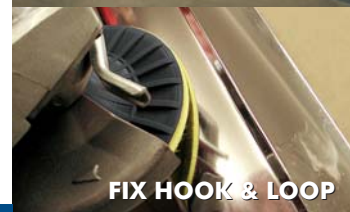
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POLY-MAGIC-WHEEL



FIX HOOK & LOOP

Pipe Sanders

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BOA PIPE SANDER

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DEBURRING/BEVELING

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.

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.

PTX ECO SMART

The professional surface finisher 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.



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



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

**SUBSTANTIAL
COST SAVINGS
ON ABRASIVES**



Grind closed pipe constructions using patented fleece belt with the buttonhole system.

Ergonomic design with anti-vibration handle for comfortable, fatigue-free operation

Service cover for fast carbon brush replacement



Variable-speed dial adjustment during operation



**PATENT
PENDING!**



Satin finishing using interleaf fleece wheel.

Ergonomically positioned lockable ON/OFF switch



* Note: Shaft supplied with keyway and finned shaft adapter.

Finned shaft*



QUICK-LOCK cord for fast, easy attachment and replacement – for example, if the power cord is damaged (see accessories in our price list)



Perfect finishes on large surfaces, with no shadows or streaks



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. It grinds from coarse to very fine finishes and burnishes to a high-gloss finish. It enhances stainless steel, steel and nonferrous metals including aluminum, brass, bronze and copper, as well as wood and rigid plastic.

Balanced straight-line handling, high torque and electronic speed control enable the PTX to easily produce matte, satin and other decorative surfaces up to a mirror finish. Besides fine finishing, the PTX is ideal for coarse grinding to remove welds, deep scratches, oxidation, rust and paint.

PTX Eco Smart features a newly developed abrasive mounting system. This unique system allows grinding and polishing wheels to be changed in seconds, without tools or hardware. Simply slide the wheels and accessories onto the finned, rigid rubber shaft. They secure themselves automatically when the machine turns.

The finned shaft design ensures absolutely no vibrations during operation and 100% concentricity. The main savings compared to other linear grinders comes from the cost of abrasives. The elimination of an internal core means the abrasives wheels can be produced less expensively, while delivering the same high-quality results.

CS Unitec can provide you with an extensive range of abrasive tools (patent pending) and accessories to cover almost every conceivable surface finishing application.



Slide-on grinding belt roller (Part Number 47006) is ideal for open and closed pipe constructions.

PTX Eco Smart Case Set (below, Part Number 47003a) and PTX Eco Smart Professional Kit (inset right, Part Number 47004a) are available.



PTX Eco Smart Specifications

Power	12.27 Amp (1350 Watts) 110 Volt / 60 Hz (Also available: 230 Volt / 50 Hz)
Variable speed	Variable speed control from 950 to 3700 RPM with tachogenerator for constant speed, even under load
Speed control dial	With fine adjustment for using abrasives at optimum efficiency
Wheel width	up to 4" (or 6" wide abrasives)
Wheel diameter	up to 4-1/2"
Weight	7.25 lbs. (3.3 Kg)

NOTE: We do continue to carry abrasives with core insert adapters for older LP 1503 VR model grinders and other machines. See our Price List for details.



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.

Pneumatic Surface Finisher

Save time sanding and polishing. 4" wide face is ideal for finishing stainless steel, metals, wood and synthetics.

The powerful LP 1503 AIR grinding and polishing machine produces a uniform finish fast and easy without leaving visible transitions and shadows. It is compact, lightweight and heavy duty. Ideal for graining, polishing, brushing, blending, deburring, cleaning welds, roughing and more. Easily achieve a #3, #4 or #8 finish. A wide speed range, high torque and a comprehensive line of accessories make this an essential tool for continuous-duty surface finishing.



1 HP air motor at 90 PSI

Pneumatic LP 1503 AIR Specifications

Load speed	2500 RPM
Motor	1 HP (1/2" Air Connection)
Air consumption	20 CFM @ 90 PSI
Weight	8 lbs.

Standard Equipment*

4" Interleaf wheel - P/N 47312*
Finned shaft - P/N 42004*

* Standard equipment for both PTX Eco Smart and LP 1503 AIR surface finishers.

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).

Part Number: 42004



PTX Professional Case (empty)

Strong, impact-resistant design with rigid foam internal compartments.

Lockable Case
Part Number: 80002



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 Number: 47701
4" dia. x 1" wide - Part Number: 47702



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 Number: 47711
4" dia. x 1" wide - Part Number: 47712



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 Number: 47721
4" dia. x 1" wide - Part Number: 47722

Stranded wire wheel for creating a rustic effect on wood



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 Number: 47731

PTX Grinding Wheels for Coarse and Fine Finishing

PTX abrasives from CS Unitec are made according to high quality standards. A unique production process guarantees high concentricity and thus vibration-free grinding – a prerequisite 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
Elastic 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" or 6"
Grit: 60, 80, 180, 280, 400, 600, 900



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" 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"
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. A new production process guarantees 100% concentricity.
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

PTX FLEECE (Nonwoven) Wheels

Part No.	Grit	Size
47411	60 grit	4" dia. x 4" wide
47412	80 grit	4" dia. x 4" wide
47413	180 grit	4" dia. x 4" wide
47414	280 grit	4" dia. x 4" wide
47415	400 grit	4" dia. x 4" wide
47416	600 grit	4" dia. x 4" wide
47417	900 grit	4" dia. x 4" wide
<hr/>		
47401	60 grit	4" dia. x 2" wide
47402	80 grit	4" dia. x 2" wide
47403	180 grit	4" dia. x 2" wide
47404	280 grit	4" dia. x 2" wide
47405	400 grit	4" dia. x 2" wide
47406	600 grit	4" dia. x 2" wide
<hr/>		
47422	80 grit	4" dia. x 6" extra wide
47423	180 grit	4" dia. x 6" extra wide

PTX Interleaf (Combi) Wheels

Part No.	Grit	Size
47311	60 grit	4" dia. x 4" wide
47312	80 grit	4" dia. x 4" wide
47313	180 grit	4" dia. x 4" wide
<hr/>		
47301	60 grit	4" dia. x 2" wide
47302	80 grit	4" dia. x 2" wide
47303	180 grit	4" dia. x 2" wide
<hr/>		
47322	80 grit	4" dia. x 6" extra wide
47323	180 grit	4" dia. x 6" extra wide

PTX Flap Wheels

Part No.	Grit	Size
47211	40 grit	4" dia. x 4" wide
47212	60 grit	4" dia. x 4" wide
47213	80 grit	4" dia. x 4" wide
47214	120 grit	4" dia. x 4" wide
47215	180 grit	4" dia. x 4" wide
47216	240 grit	4" dia. x 4" wide
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47201	24 grit	4" dia. x 2" wide
47202	40 grit	4" dia. x 2" wide
47203	50 grit	4" dia. x 2" wide
47204	60 grit	4" dia. x 2" wide
47205	80 grit	4" dia. x 2" wide
47206	120 grit	4" dia. x 2" wide
47207	180 grit	4" dia. x 2" wide
47208	240 grit	4" dia. x 2" wide

PTX CLEAN Wheels

Part No.	Grit	Size
47511	Medium (black)	4" dia. x 4" wide
47501	Medium (black)	4" dia. x 2" wide

PTX GUM Wheels

Part No.	Grit	Size
47611	60 grit	4" dia. x 4" wide
47612	180 grit	4" dia. x 4" wide
<hr/>		
47601	60 grit	4" dia. x 2" wide
47602	180 grit	4" dia. x 2" wide

HOLLOW-CORE ABRASIVES HAVE MANY ADVANTAGES:

- Easy to mount – simply slide on and off
- 100% concentricity – no vibration
- Lower cost!

We continue to carry abrasives with core inserts.

See our Price List.



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



PTX "TZ" Pyramid Sleeve

New abrasive cloth with pyramid-shaped grit structure. Allows high material removal while producing a very fine finish, reducing the amount of work required when compared to grinding belt sleeves and fleece sleeves. Pyramid sleeves are ideal for pre-polishing for fine mirror finishes and for removing scratches and spot welds. Even roller scale can be removed easily.

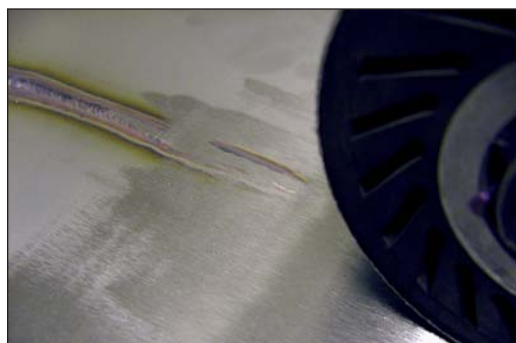
3-1/2" dia. x 4" wide
Grit: A65/320, A45/400, A30/600, A16/1200, A06/2000



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



The expansion roller is helpful when grinding large areas and removing large welds.

PTX Zirconium Grinding Belt Sleeves

Part No.	Grit	Size (dia. x width)	Quantity
42040	40 grit	3-1/2" x 4"	10 per pack
42060	60 grit	3-1/2" x 4"	10 per pack
42080	80 grit	3-1/2" x 4"	10 per pack
42120	120 grit	3-1/2" x 4"	10 per pack
42150	150 grit	3-1/2" x 4"	10 per pack
42180	180 grit	3-1/2" x 4"	10 per pack

PTX "TZ" Pyramid Sleeves

Part No.	Grit	Size (dia. x width)	Quantity
42265	A65/320 grit	3-1/2" x 4"	10 per pack
42245	A45/400 grit	3-1/2" x 4"	10 per pack
42230	A30/600 grit	3-1/2" x 4"	10 per pack
42216	A16/1200 grit	3-1/2" x 4"	10 per pack
42206	A06/2000 grit	3-1/2" x 4"	10 per pack

"TZ" PYRAMID GRIT COMPARISON TABLE

	A65	A45	A30	A16	A06
Corresponds to grit size	320	400	600	1200	2000

PTX Fleece "Nonwoven" Sleeves

Part No.	Grit	Size (dia. x width)	Quantity
42010	coarse (brown)	3-1/2" x 4"	5 per pack
42011	medium (red)	3-1/2" x 4"	5 per pack
42012	fine (blue)	3-1/2" x 4"	5 per pack
42009	superfine (grey)	3-1/2" x 4"	5 per pack

FLEECE COMPARISON TABLE

	Coarse (brown)	Medium (red)	Fine (blue)	Superfine (grey)
Corresponds to grit size	80	180	280	400

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.

Abrasives for Polishing to High-gloss and Mirror Finish



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
Part Number: 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 - **Part Number: 42013N**

Polishing and Maintenance Products



PTX Pre-grinding & Polishing Compound
 Essential for polishing all metals, including stainless steel, aluminum, etc.
PTX® WHITE pre-polishing compound (23 oz.)
Part Number: 40013
PTX® BLUE finishing compound (23 oz.)
Part Number: 40014
 Cardboard dispenser contains 23 oz. (approx.)



PTX Polishing Cream, Pink
 For finishing. Produces a perfect mirror finish on stainless steel and nonferrous metals when used with the SuperPolish Sleeve.
Can, 2.2 lbs. - Part Number: 40015
Miniature tube, 2 oz. (approx.) - Part Number: 40015T



PTX Lime (noncaustic)
 For removing cream and compound residues. Scatter on the surface, and wipe off with a microfiber cloth.
Can, 2.2 lbs. - Part Number: 40016
Aluminum scatter container - P/N: 4002A



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" - Part Number: 40030



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. It removes fingerprints, dust, compound residue, minor oil and grease marks and adhesive residue effortlessly. Evaporates quickly without leaving any residue on the surface.
Canister (including spray bottle), 1.3 gal. - P/N: 40051
Spray bottle, 17 oz. - Part Number: 40050



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. Also suitable for food-grade and outdoor use.
Canister (including spray bottle), 1.3 gal. - P/N: 40012
Spray bottle, 17 oz. - Part Number: 40011



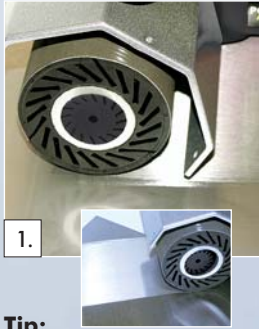
INOX-Protect (hard sealant)
 Protects finished and polished metal surfaces (stainless steel, steel, aluminum, brass, copper, etc.) with a clear, dry adhesive film. Removes fingerprints and other dirt.
Canister (including spray bottle), 1.3 gal. - P/N: 40041
Spray bottle, 17 oz. - Part Number: 40040



↓ TIPS & TRICKS

A perfect mirror finish on stainless steel and nonferrous metals.

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.



1.

Tip:

When grinding with "TZ" Pyramid abrasives, you must also move longitudinal and diagonally to the working direction to ensure that the material is removed evenly.

Step 1

Prepare with "TZ" Pyramid sleeve A 45 (Gr 400) or A 65 (Gr 320) to remove roller scale, scratches and minor unevenness. Then rework with "TZ" Pyramid A 30 (Gr 600) and finish with A 16 (Gr 1200). We recommend that you prepare lower-quality stainless steel (with minor imperfections, etc.) or very hard material with A 06 (Gr 2000).

Step 2

Use the yellow SuperPolish sleeve for the main polishing process in conjunction with preparation and finishing compound.

Important:

After each step, remove the compound residue from the workpiece with PTX Lime and a microfiber cloth.

Step 3

Finally, use the yellow SuperPolish sleeve together with the finish polishing cream. This time, only polish in a single direction.



3.

The result...

a brilliant mirror finish!



2.

Tip:

With the pre-polishing compound you should also work longitudinal and diagonally to the working direction. This is not necessary for working with the finish compound and polishing cream.

Maintain and protect finished or polished stainless steel surfaces.

Compound and cream residues can be removed using **PTX Lime**. Simply scatter on the lime 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.

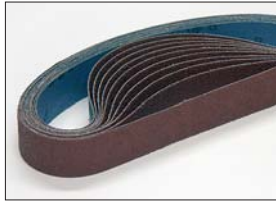


To protect finished or polished metal surfaces, spray **INOX-Protect** on the surface, rub off with a microfiber cloth, wipe the surface dry and then polish briefly. The surface will be protected by a dry, invisible film for several weeks. Polished finishes will not be darkened by this product.

Abrasives for Pipe Constructions – Open or Closed



PTX Grinding Belt Roller with stainless steel flanges
 For 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 Number: 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.



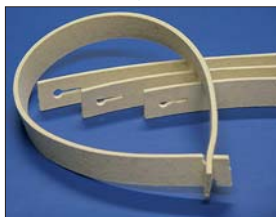
PTX "TZ" Pyramid Belt (closed)
 New abrasive fabric with pyramid-shaped grit structure for removing scratches, roller scale and spot welds. "TZ" Pyramid belts allow high material removal while producing a very fine finish. They are ideal for the initial grinding before polishing to a mirror finish. Because the grit fineness is increased slowly, it is possible to omit several operations. For

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 on 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, superfine
 See ordering information at right.

↑
 With buttonhole –
PATENTED!
 ↓



PTX Felt Belt (open)
 Made of merino felt with buttonhole fastening system for polishing work on open and closed pipe constructions and handrails. The polishing belt can be opened and closed as often as necessary. For use with grinding belt rollers and our polishing compounds and creams. Use a separate felt belt for each compound and cream grit. Do not use compounds with different grits on felt. International patent and design protected.

Dimensions: 1.2" x 26"; **Part Number: 49004**



PTX Special Adhesive Tape
 With glass fabric insert for joining grinding belts. Strong, heat-resistant adhesive force. For joining PTX grinding and "TZ" Pyramid belts for use on closed pipe constructions. Affix the adhesive tape over the entire length of the grinding belt, overlapping approximately 370°.
Dimensions: 1" x 165' **Part Number: 49000**



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 lots of work time. For use with grinding belt rollers.

Dimensions: 1.2" x 26" (not available with buttonhole fastening system)
Part Number: 49004N

PTX Grinding Belts (Aluminum Oxide)

Part No.	Grit	Size (width x length)	Quantity
49040	40 grit	1.2" x 24"	10 per pack
49060	60 grit	1.2" x 24"	10 per pack
49080	80 grit	1.2" x 24"	10 per pack
49120	120 grit	1.2" x 24"	10 per pack
49150	150 grit	1.2" x 24"	10 per pack
49180	180 grit	1.2" x 24"	10 per pack
49240	240 grit	1.2" x 24"	10 per pack

PTX "TZ" Pyramid Belts

Part No.	Grit	Size (width x length)	Quantity
49365	A65/320 grit	1.2" x 24"	10 per pack
49345	A45/400 grit	1.2" x 24"	10 per pack
49330	A30/600 grit	1.2" x 24"	10 per pack
49316	A16/1200 grit	1.2" x 24"	10 per pack
49306	A06/2000 grit	1.2" x 24"	10 per pack

PTX Fleece Nonwoven Belts (open)*

Part No.	Grit	Size (width x length)
49001	coarse (brown)	1.2" x 26"
49002	medium (red)	1.2" x 26"
49003	fine (blue)	1.2" x 26"
49007	superfine (grey)	1.2" x 26"

* Feature buttonhole fastening system

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°).

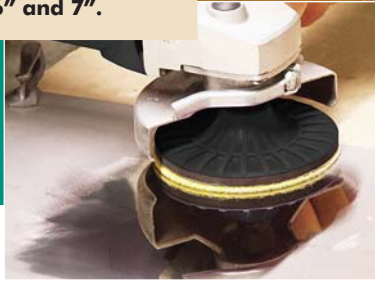


VARILEX® WSF 1600

Professional

The most powerful
speed-controlled angle
grinder in its class.

Variable speed from 2000 to 7300 RPM, 12.27 Amp
(1350 W) power, disc change in seconds without tools.
For disc diameters of 4", 4-1/2", 5", 6" and 7".



VARILEX® is the ideal angle grinder for flap, grinding and cutting discs and the Hook & Loop system.

The carbon brushes are under the service cover for easy inspection and quick changing



Long-life magnetic field

Dust-tight field coil with special coating to protect against metal dust



QUICK-LOCK cord for fast, easy attachment and replacement – for example, if the power cord is damaged (see accessories in our price list)



Easy speed control during operation



SPEED NUT Changeover

Hand tighten discs in seconds without tools using the 5/8"-11 EASY-LOCK SPEED NUT (Patented!)



Very powerful and infinitely adjustable

New ergonomic design for comfortable, fatigue-free working

Much lower electromagnetic interference for the user due to the separation of the armature/field package and handle in the design

5/8"-11 UNC spindle thread



Safety Notice: Always use the protective wheel guard and follow all applicable safety instructions and regulations.

The most powerful single-handed angle grinder in its class

The VARILEX® boasts a powerful motor up to 12.27 Amp, 1350 W that has been designed and developed for heavy industrial use. The speed is infinitely adjustable between 2000 and 7300 RPM. A tachogenerator keeps the speed constant, even when the grinder is operating at full load.

Sensitive variable-speed control makes the VARILEX® ideal for use with both flap discs and grinding and cutting wheels. This feature:

- Doubles the service life of a flap disc
- Prevents glazing of the disc and heat deformation on the workpiece
- Drastically reduces the noise level

The VARILEX® differs from a conventional angle grinder in its ability to change discs in seconds, without tools, using the patented EASY-LOCK clamping nut and spindle lock. It also offers:

- Optimal speed setting for a range of grinding and polishing tools, yielding perfect results every time
- A balanced handle that ensures fatigue-free grinding

VARILEX® WSF 1600 Professional Specifications Order Number: 6500A

Power	12.27 Amp (1350 Watts) 110 Volt / 60 Hz (Also available: 230 Volt / 50 Hz)
Variable speed	Infinitely adjustable from 2000 to 7300 RPM
Diameters	4" to 7"
Spindle thread	5/8"-11 UNC
Arbor size	7/8"
Weight	5.2 lbs.

Use with various discs and safety guards

Available with safety guards (5", 6" and 7") for use with various-size grinding discs from 4" to 7" diameter (typical disc diameters are 4", 4-1/2", 5", 6" and 7").

5/8"-11 EASY-LOCK SPEED NUT Clamping System



Using the **EASY-LOCK SPEED NUT**, you can change the abrasive disc on an angle grinder in a matter of seconds – without tools!

Easy hand tightening eliminates the need for wrenches and expensive 5/8"-11 hubs. See page 31 for details.

Kit sets for VARILEX® WSF 1600 Professional angle grinders



Basic Starter Kit in a case, includes: VARILEX® angle grinder, PLANTEX® discs and TRIMTEX® discs. **Part Number: 80053**



FIX Test Kit
FIX Hook & Loop backing disc with PUR foam, FIX fleece discs, FIX SuperPolish discs, FIX TZ Pyramid disc, mini polishing compounds and lime powder in a practical dispenser. **Part Number: 80051u**

The VARILEX® is not designed for continuous use at low speed for polishing paint in the automotive trade.

TIPS & TRICKS



Polish stainless steel to a mirror finish with the VARILEX® WSF 1600 Professional

- (1) Initial grinding** (remove scratches and roller scale, level welds) with TZ Pyramid disc A45 (grit 400) or A65 (grit 320). Finish with TZ Pyramid disc A30 (grit 600) and A16 (grit 1200) (→ page 25)
- (2) Main polish** with SuperPolish disc and white polishing compound, then with blue polishing compound. Important: Use a separate disc for each compound grit.
- (3) Mirror finish** with SuperPolish disc and pink polishing cream (→ page 9)

FLAP DISCS

Longer, faster
and better grinding



Unbeatable technology and performance

The first flap discs for high-speed angle grinders were developed at the end of the 1970s. More than 30 years of experience and unbeatable technology go into the manufacture of every CS Unitec flap disc. In terms of material removal capacity, service life and grinding quality, the flap discs that bear the brands TRIMTEX® and TIGER SHARK-PLANTEX® – plus the newest development, PLANTEX®, made of hemp fiber high-tech compound – are among the best in the world.

Top of the class in material removal, service life and quality

The performance and service life of a flap disc are not only dependent on the abrasive fabric used, but above all on the correct combination of elastic backing material; grit mixtures on the flaps; the angle at which the flap is held against the material; hard pressing; gluing system; and more. These considerations are part of what sets CS Unitec apart from the rest – not all flap discs are the same!

Good for the environment and better for your health

Great care is taken to select raw materials that are environmentally sound and user friendly. Commonly used materials such as fiberglass, mineral fibers and epoxy resins are avoided in favor of sustainable raw materials such as hemp for the discs' backing plates. A patented, revolutionary elastic adhesive mounting system for the abrasive fabric flaps further contributes to the safety, performance, service life and user friendliness of CS Unitec flap discs. Our discs also considerably reduce vibration and noise while grinding.

Unique patented production process

Completely new production technologies have been developed to manufacture our high-quality flap discs. The adhesion of the flaps to the backing disc is achieved using a patented, revolutionary adhesive system. In contrast to many rival products, the flaps of CS Unitec's discs are pressed on to the backing disc over their full area – throughout the entire hardening process – to produce a solid, compact and vibration-stable abrasive. This also gives added support to the grits and holds them firmly in their mounting, considerably extending the service life of the grinding discs.

Standard and endurance tests ensure quality and play an essential role in progressive new developments.

Speed test

Grinding discs are tested on a centrifugal test machine to ensure that they can withstand the sort of speeds that are required for grinding work. The test system can test discs at speeds of up to 30,000 RPM.

Endurance grinding test

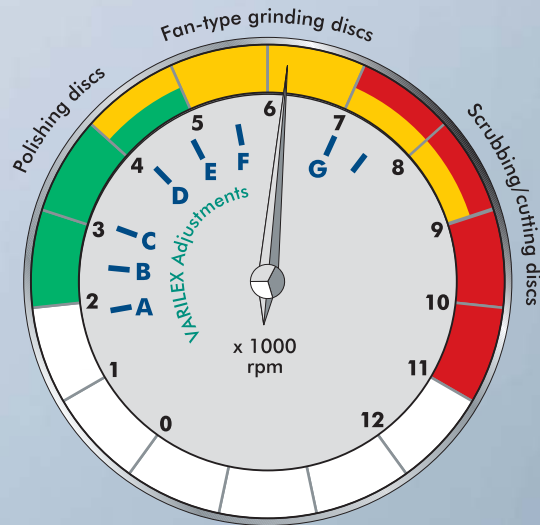
Endurance tests are conducted to measure the material removal and service life of flap discs. New fabrics are tested to ensure their suitability and their grinding properties on various materials.

Compliant with American and German standards set by ANSI B7.1 and DIN 13743.

TIPS & TRICKS

Check the speed

The right speed increases the service life of flap discs by up to 100% – a major factor in ensuring a low-cost workflow. Operating flap discs between 5000 and 8000 RPM sets the table for optimal grinding capacity and service life. Powerful, speed-controlled angle grinders such as the VARILEX® WSF 1600 Professional (see page 12) are ideal for working with flap discs.



Recommended speeds for maximum flap disc service life and economy:

- 4" diameter: 9000 - 11,000 RPM
- 4-1/2" diameter: 7000 - 9000 RPM
- 5" diameter: 6000 - 8000 RPM
- 6" diameter: 5000 - 7000 RPM
- 7" diameter: 4000 - 6000 RPM



CS Unitec Flap Disc

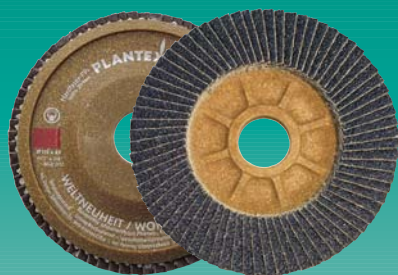


Standard Flap Disc

A clear difference

These pictures show the clear difference between a CS Unitec flap disc with hard-pressed flaps (top) and a standard flap disc with fiberglass backing and unpressed flaps (bottom). The poorly pressed disc tends to "chatter" during the grinding process, generating vibrations and resulting in the grit pulling away from the mounting prematurely. This results in irregular grinding, poor grinding capacity, short service life and potential flap tearing.

Grinding & Polishing Discs



PLANTEX®

Flap discs for grinding steel and stainless steel, with hemp/polypropylene backing.

See page 16



MAGNUM® FLEECE

For surface conditioning, fine finishing and polishing.

See page 22



MAGNUM® CLEAN

For pore-deep cleaning of metals.

See page 23



FIX HOOK & LOOP SYSTEM

Highly elastic backing disc for outstanding finish quality.

See page 24



EP DIAMOND DISCS

For fiberglass and plastics.

See page 26



REDUCED SPARKING

EB diamond wheels reduce sparking.

See page 27



PLANTEX® COOL TOP

Provides additional cooling to improve grinding performance and service life for stainless steel.

See page 18



TRIMTEX®

For weld seams and spots in corners, flanges and on flat surfaces.

See page 19



POLY-MAGIC-WHEEL

Ideal for dry polishing in corners.

See page 20



TIGER SHARK-PLANTEX®

Specially designed for grinding aluminum.

See page 21

PLANTEX®

High-tech Compound

A quantum leap in flap disc technology



Steel/Stainless Steel/Aluminum



PLANTEX® offers important advances in grinding performance, service life, protection for the environment and personal safety.

The development of the new PLANTEX® high-tech compound has resulted in the production of the first flap discs in the world with a backing plate made of natural hemp, with polypropylene used to bind it. In addition to excellent material abrasion and a long service life, the discs offer maximum operator safety, protection of natural resources and environmental friendliness.

This new composite material (hemp and polypropylene) minimizes pollution from production to waste disposal. Even the polypropylene binding material combusts to approximately 1% carbon when disposed of by thermal methods, producing almost zero residue. Polypropylene is physiologically safe and is used in automotive engineering (interior) and medical technology for common items such as syringes, cannulae and infusion bottles. As a result of its fiber structure, the hemp fiber offers excellent tearing strength values. The superior strength values of this high-tech compound are achieved through a patented new treatment ("impact method") for hemp fibers.

Hemp fiber high-tech compound is an almost ideal base material for flap disc backing plates – it is elastic, heat-absorbent (for low grinding temperatures), very easy to trim, safe to use and easy to dispose of. The cavities of the hemp fiber structure, in conjunction with polypropylene, have a highly insulating, damping and noise-reducing effect, thus enhancing the safety features of the discs.



Made in Germany

PATENTED!

PLANTEX®

Hightech-Compound



www.csunitec.com

Safer working conditions

- No fiberglass, no mineral fibers, no epoxy resin
- Easy to trim, safe to use, easy to dispose of

Earth friendly

- Minimizes pollution, from production to disposal
- Hemp plant counteracts greenhouse effect

Competitively priced

- Lower cost of production
- Superior service life; 100% utilization

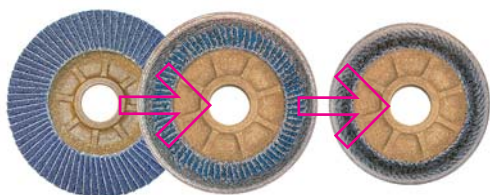
The high-tech compound material used for the PLANTEX® flap disc is perfectly safe. The backing plate is trimmed automatically during the grinding process or can be trimmed manually using cutting tools. The CO₂ and energy balance are also impressive. During its growth, 1 ton of hemp converts approximately 2 tons of carbon dioxide into oxygen by means of photosynthesis. Hemp therefore plays a beneficial role in counteracting the greenhouse effect.



Trimming with cutting tools produces soft, harmless chips that can be disposed of as domestic waste (smell is similar to wood chips).

Grinding down to the last fraction of an inch

The backing plate used on PLANTEX® flap discs reduces in diameter automatically during grinding. It can also be trimmed with cutting tools, a process that is simple and straightforward. The PLANTEX® flap disc can be used down to the last flap of the abrading fabric – and saves you money in the process!



100% Service Life!

Use down to the last abrasive flap by automatic trimming during grinding or trimming using cutting tools on a sharp steel edge.

PLANTEX® Specifications

Dimensions	Diameter: 4", 4-1/2", 5", 7"
Max. speed	13,300 RPM for 4-1/2" diameter
Ideal speed	5000 to 8000 RPM
Complies with	ANSI B7.1, 260 ft./sec. DIN EN 13743
Grits	40, 60, 80, 120
Arbor size	5/8" or 7/8"

Ordering information follows on page 18.

PLANTEX® – features to convince everybody!

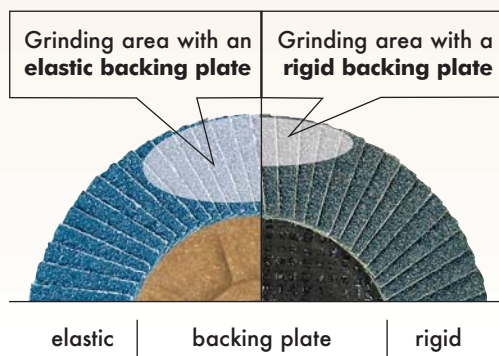


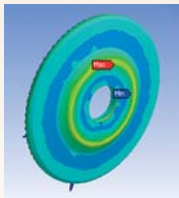
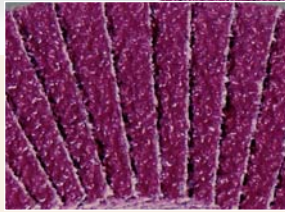
- Superior material abrasion and service life due to the discs' springy elasticity and 100% pure zirconium.
- Self-trimming and very easy to cut – the backing plate reduces in size automatically during the grinding process.
- Adjusts better to the surface of the workpiece during grinding.
- Absorbs vibration and noise due to its high fiber content.
- Heat-absorbent high-tech compound (with hollow fiber insulation) reduces the temperature during grinding.
- High strength, yet lightweight.
- High shape stability while maintaining elasticity.
- High-tech compound is resistant to most chemicals.
- Made of a sustainable raw material – protects valuable natural resources.
- The backing plate can be disposed of safely and easily (polypropylene binding combusts to approx. 1% carbon).
- Hemp provides good energy and CO₂ balance.
- Outstanding value: PLANTEX® costs no more than a medium-quality conventional flap disc.

The clever ones give way!



The fiber substrate of the PLANTEX® high-tech compound gives it absorbent, spring-like properties that enhance grinding performance. This elasticity provides a greater contact surface area with the workpiece (more grit is used) that results in more material being abraded. The material removal capacity is therefore higher. The larger contact surface area also dissipates more heat, making the grinding work cooler – the workpiece does not suffer smearing and the abrasive fabric does not burn.





Strength & safety with FEM

The backing plate for the PLANTEX® high-tech compound is calculated using the finite element method (FEM). That ensures that it provides the optimal strength and safety properties, while minimizing material

use. Like all flap discs from CS Unitec, PLANTEX® flap discs are approved for 260 ft./sec. to DIN EN 13743 and have been approved by the MPA (Material Testing Institute) in Hanover and by the BGIA (Professional Association Institute for Industrial Safety). PLANTEX® additionally complies with ANSI standard B7.1.

PLANTEX® COOL TOP®

Flap disc with cool performance for grinding stainless steel

The PLANTEX® high-tech compound is becoming the standard flap disc for many companies. It is fiberglass free and provides excellent performance and service life. PLANTEX® also protects the environment and precious resources.

The result:

The PLANTEX® COOL TOP® high-tech compound has been specifically developed for grinding stainless steel.

A new abrasive fabric with additional top-size coating improves grinding performance and service life and also provides additional cooling.

PLANTEX® COOL TOP® Specifications

Dimensions	Diameter: 4", 4-1/2", 5", 7"
Max. speed	13,300 RPM for 4-1/2" diameter
Ideal speed	5000 to 8000 RPM
Complies with	ANSI B7.1, 260 ft./sec. DIN EN 13743
Grits	40, 60 (for finer grits, use PLANTEX 80 and 120)
Arbor size	5/8" or 7/8"

Easy Disc Changeover - No Wrenches or Hubs Required!

Grinding discs can be changed in seconds, without tools, using the 5/8"-11 EASY-LOCK SPEED NUT. It is easily tightened by hand and eliminates the need for wrenches or expensive hubs. See page 31 for details.



PLANTEX® Disc Ordering Information

PLANTEX® Ordering Information

Part No.	Size (dia. x width x arbor)	Grit	Max. Speed	Quantity
93514	4" x 0.63" x 5/8"	40	15,000 RPM	10 pack
93516	4" x 0.63" x 5/8"	60	15,000 RPM	10 pack
93518	4" x 0.63" x 5/8"	80	15,000 RPM	10 pack
93519	4" x 0.63" x 5/8"	120	15,000 RPM	10 pack
93524	4-1/2" x 0.87" x 7/8"	40	13,300 RPM	10 pack
93526	4-1/2" x 0.87" x 7/8"	60	13,300 RPM	10 pack
93528	4-1/2" x 0.87" x 7/8"	80	13,300 RPM	10 pack
93529	4-1/2" x 0.87" x 7/8"	120	13,300 RPM	10 pack
93534	5" x 0.87" x 7/8"	40	12,200 RPM	10 pack
93536	5" x 0.87" x 7/8"	60	12,200 RPM	10 pack
93538	5" x 0.87" x 7/8"	80	12,200 RPM	10 pack
93539	5" x 0.87" x 7/8"	120	12,200 RPM	10 pack
93544	7" x 0.87" x 7/8"	40	8600 RPM	10 pack
93546	7" x 0.87" x 7/8"	60	8600 RPM	10 pack
93548	7" x 0.87" x 7/8"	80	8600 RPM	10 pack
93549	7" x 0.87" x 7/8"	120	8600 RPM	10 pack

PLANTEX® COOL TOP® Ordering Information

Part No.	Size (dia. x width x arbor)	Grit	Max. Speed	Quantity
93614	4" x 0.63" x 5/8"	40	15,000 RPM	10 pack
93616	4" x 0.63" x 5/8"	60	15,000 RPM	10 pack
93624	4-1/2" x 0.87" x 7/8"	40	13,300 RPM	10 pack
93626	4-1/2" x 0.87" x 7/8"	60	13,300 RPM	10 pack
93634	5" x 0.87" x 7/8"	40	12,200 RPM	10 pack
93636	5" x 0.87" x 7/8"	60	12,200 RPM	10 pack
93644	7" x 0.87" x 7/8"	40	8600 RPM	10 pack
93646	7" x 0.87" x 7/8"	60	8600 RPM	10 pack



Hightech-Compound

The solution for grinding weld seams and spot welds in corners. A self-trimming hemp backing plate saves time and money.

Ideal for grinding in corners and on flanges, as well as on flat surfaces. A large number of perpendicular grinding flaps (approximately twice as many as on conventional flap discs) with small gaps between them make it possible to combine different operations, drastically cutting working time and tool costs.

Benefits:

- Extremely high number of flaps provide very long service life.
- Ideal for smoothing welds in corners and on flanges (produces clean, “soft” transitions for a perfect look).
- Multifunction discs – by increasing the contact pressure, the flaps compress to form an aggressive package for heavy-duty grinding and high material removal. By decreasing pressure, the flaps fan out, making it perfect for finish grinding and deburring.
- Hemp backing plate is trimmed automatically while grinding.
- Open construction creates a high cooling effect that drastically reduces the grinding temperature on both the workpiece and the grinding disc.
- The new active agent composition in the abrasive fabric further reduces the surface temperature of the workpiece.
- 100% pure zirconium ensures perfect results on steel and stainless steel.
- The flat design of the backing plate allows the user to reach into awkward places.
- The spring-effect arrangement of the flaps actively prevents grinding damage on the workpiece.
- Automatically adjusts to corner shapes.

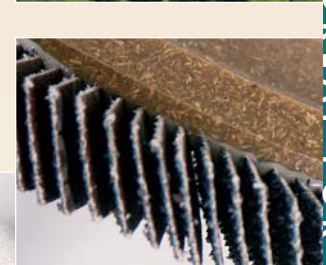
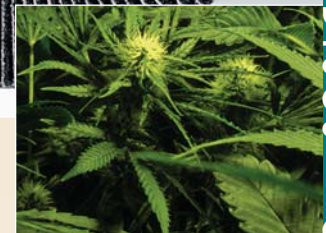
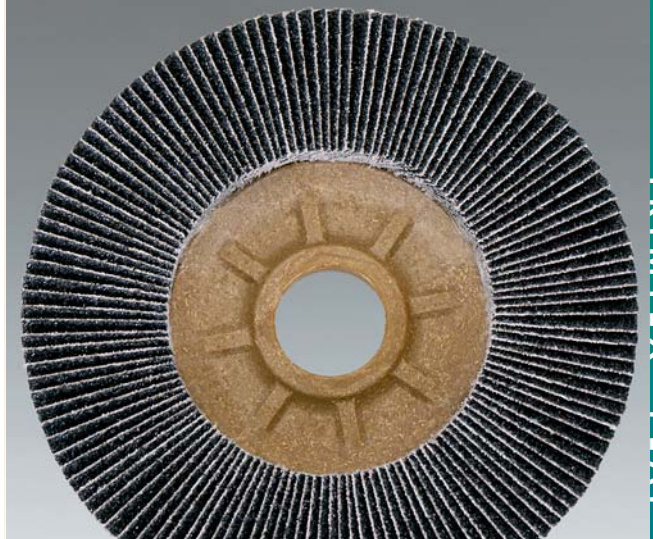
Ideal for use on speed-controlled angle grinders.

TRIMTEX® Specifications

Dimensions	Diameter: 4-1/2", 5"
Max. speed	12,000 RPM for 4-1/2" dia.
Ideal speed	6000 to 8000 RPM
Complies with	ANSI B7.1, 207 ft./sec.
Grits	40, 60, 80
Arbor size	7/8"

TRIMTEX® Ordering Information

Part No.	Size (dia. x arbor)	Grit	Max. Speed	Quantity
93704	4-1/2" x 7/8"	40	12,000 RPM	5 pack
93706	4-1/2" x 7/8"	60	12,000 RPM	5 pack
93708	4-1/2" x 7/8"	80	12,000 RPM	5 pack
93714	5" x 7/8"	40	11,000 RPM	5 pack
93716	5" x 7/8"	60	11,000 RPM	5 pack
93718	5" x 7/8"	80	11,000 RPM	5 pack



Ideal for corners and grooves (e.g. at shipyards)

Grind **STEEL** and **STAINLESS STEEL!**



TRIMTEX® FLAP DISCS - GREAT FOR GRINDING IN CORNERS

POLY-MAGIC-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 made of highly compressed fleece material and are made in a sophisticated production process using compressed single flaps that are strengthened by being impregnated with foam. 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-MAGIC-WHEEL Specifications

Dimensions	6-1/2" dia. x 1/2" material thickness x 7/8" arbor
Max. speed	5000 RPM
Ideal speed	3000 to 4000 RPM
Grits	A/80, B/900

Ideal for speed-controlled angle grinders

POLY-MAGIC-WHEEL Ordering Information

Part No.	Grit	Usage	Qty.
96720	Grit A (80 grit)	Initial grinding & leveling welds (red)	5 pk.
96721	Grit B (900 grit)	Polishing to a perfect mirror finish (gray)	5 pk.



Ideal for
polishing
in corners

TIPS & TRICKS

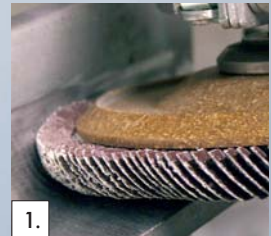
Polishing corner welds with the POLY-MAGIC-WHEEL

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. The POLY-MAGIC-WHEEL disc can reduce the time required for this work to a minimum, and the result can only be described as a minor miracle.

Carry out the initial grinding and leveling of welds with the red disc, grit A (80 grit). If the weld is very coarse it is a good idea to use the TRIMTEX® disc first.

Then polish to a mirror finish using the POLY-MAGIC gray disc, grit B (900 grit). These discs are very aggressive; they save a lot of working time and the result is sensational. No polishing compounds or creams are required for polishing with the POLY-MAGIC-WHEEL (dry polish).

Mirror finish in 3 steps:



1.

TRIMTEX® for coarse welds



2.

POLY-MAGIC-WHEEL A (80 grit)



3.

POLY-MAGIC-WHEEL B (900 grit)

TIGER SHARK-PLANTEX® & KANGAROO ALU-FIX OIL

The new dimension for grinding aluminum

TIGER SHARK-PLANTEX® elastic discs are unbeatable for the difficult grinding of aluminum. High material removal, reduced grinding temperature and no glazing with aluminum particles make the TIGER SHARK® the first choice for these applications. This flap disc, with its ceramic/corundum cotton abrasive fabric, also offers high grinding capacity and low tool costs for steel and nonferrous metals. The backing plate is elastic PLANTEX® earth-friendly compound and adjusts well to the shape of the workpiece. TIGER SHARK® is ideal for grinding curved surfaces and shapes, and it is often used in car body shops, car workshops and for tool making.

The excellent features of the TIGER SHARK® can be enhanced even further with the newly developed Kangaroo ALU-FIX® OIL. A quick spray on the workpiece will solve many of the problems you may have encountered while grinding aluminum in the past. Glazing is no longer necessary, the material removal rate is up to 300% higher, the finish is visibly better – and the flap disc will last around three times longer.

TIGER SHARK-PLANTEX® Specifications

Dimensions	Diameter: 4", 4-1/2", 5", 7"
Max. speed	13,300 RPM for 4-1/2" diameter
Ideal speed	5000 to 8000 RPM
Compliant with	ANSI B7.1, 240 ft./sec. DIN EN 13743
Grits	40, 60, 80, 120

TIGER SHARK-PLANTEX® Ordering Information

Order No.	Size (dia. x arbor)	Grit	Max. Speed	Quantity
93814	4" x 5/8"	40	15,000 RPM	10 pack
93816	4" x 5/8"	60	15,000 RPM	10 pack
93818	4" x 5/8"	80	15,000 RPM	10 pack
93819	4" x 5/8"	120	15,000 RPM	10 pack
93824	4-1/2" x 7/8"	40	13,300 RPM	10 pack
93826	4-1/2" x 7/8"	60	13,300 RPM	10 pack
93828	4-1/2" x 7/8"	80	13,300 RPM	10 pack
93829	4-1/2" x 7/8"	120	13,300 RPM	10 pack
93834	5" x 7/8"	40	12,200 RPM	10 pack
93836	5" x 7/8"	60	12,200 RPM	10 pack
93838	5" x 7/8"	80	12,200 RPM	10 pack
93839	5" x 7/8"	120	12,200 RPM	10 pack
93844	7" x 7/8"	40	8600 RPM	10 pack
93846	7" x 7/8"	60	8600 RPM	10 pack
93848	7" x 7/8"	80	8600 RPM	10 pack
93849	7" x 7/8"	120	8600 RPM	10 pack

Kangaroo ALU-FIX® OIL

Spray on aluminum workpiece to improve the removal rate and increase abrasive life. Available in a 1 pint spray bottle or a 1.3 gal. canister with a spray bottle.

Part Numbers: 1-pint spray bottle - 40010
1.3 gal. canister and spray bottle - 40010k



Aluminum



Unique flap discs with a PLANTEX® elastic backing disc.



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 below). 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.

MAGNUM® TOPMIX Specifications

Dimensions	5" dia. x 5/8" fleece thickness x 7/8" arbor
Ideal speed	2000 to 4500 RPM
Max. speed	6000 RPM
Grit	80

Ideal for speed-controlled angle grinders



MAGNUM® TOPMIX Ordering Information

Part No.	Size (dia. x thick x arbor)	Grit	Max. Speed	Qty.
96705	5" x 5/8" x 7/8"	80	6000 RPM	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 eight times the service life of traditional fleece and SC discs. Its range of uses is impressive. The FLEECE TOP is an ideal disc for metalworking that requires fine grinding and pre-polishing to a uniform clean finish, and 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.

MAGNUM® FLEECE TOP Specifications

Dimensions	4-1/2" dia. x 5/8" fleece thickness x 7/8" arbor
Ideal speed	2000 to 4500 RPM
Max. speed	8000 RPM
Grits	80, 180, 280, 400, 600, 900

Ideal for speed-controlled angle grinders



MAGNUM® FLEECE TOP Ordering Information

Part No.	Size (dia. x thick x arbor)	Grit	Max. Speed	Qty.
96710	4-1/2" x 5/8" x 7/8"	80	8000 RPM	5 pk.
96711	4-1/2" x 5/8" x 7/8"	180	8000 RPM	5 pk.
96712	4-1/2" x 5/8" x 7/8"	280	8000 RPM	5 pk.
96713	4-1/2" x 5/8" x 7/8"	400	8000 RPM	5 pk.
96714	4-1/2" x 5/8" x 7/8"	600	8000 RPM	5 pk.
96715	4-1/2" x 5/8" x 7/8"	900	8000 RPM	5 pk.

MAGNUM® CLEAN & MAGNUM® CLEAN PLUS

For pore-deep cleaning of metals
(sand-blasting effect)

MAGNUM CLEAN® is an elastic cleaning disc for the pore-deep cleaning of metals. This elastic 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 underseal, 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).

MAGNUM® CLEAN Specifications

Dimensions	5" dia. x 5/8" material thickness x 7/8" arbor
Ideal speed	2000 to 4500 RPM
Max. speed	5000 RPM
Grits	Medium/standard (black), extra hard (red)

Ideal for speed-controlled angle grinders



MAGNUM® CLEAN (BLACK)

Elastic cleaning disc for removing color, rust, oil stains and more

For pore-deep removal of paint, rust, scale and dirt on metals (similar effect to sandblasting), without removing the basic material. Perfect for cleaning welds on stainless steel and wood, or for removing paint and old material.



MAGNUM® CLEAN PLUS (RED)

Elastic cleaning disc for the hardest dirt

For pore-deep removal of paint, rust, scale and dirt on metals (similar effect to sandblasting), without removing the basic material. These discs are complete without any metal, so there is no danger of corrosion. Perfect for cleaning welds on stainless steel.

MAGNUM® CLEAN Ordering Information

Part No.	Size (dia. x thick x arbor)	Grit	Max. Speed	Qty.
96700	5" x 5/8" x 7/8"	standard (black)	5000 RPM	10 pk.
96701	5" x 5/8" x 7/8"	extra hard (red)	5000 RPM	10 pk.

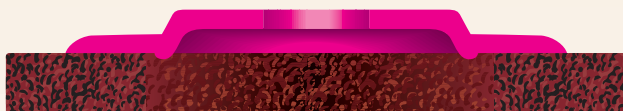


MAGNUM® CLEAN



Hardness: Standard (black)

MAGNUM® CLEAN PLUS



Hardness: Extra-hard (red)



Standard hardness for rust and paint.



Extra-hard for stubborn dirt.

PATENTED!

FIX HOOK & LOOP SYSTEM

Highly elastic backing disc for previously impossible finish quality; 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 important. 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 WSF 1600 Professional. A wide range of abrasives are available for all steps leading 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 Hook & Loop system is an essential surface finishing and polishing system for all sheet metal applications.



FIX Test Kit

FIX Hook & Loop backing disc with PUR foam, FIX fleece discs, FIX SuperPolish discs, FIX TZ Pyramid disc, mini polishing compounds and lime powder in a practical dispenser. **Part Number: 80051u**



FIX starter kit in a case, includes: VARILEX® angle grinder, FIX backing disc, FIX fleece discs, FIX SuperPolish discs, FIX zirconium pad, mini polishing compounds and lime in a practical dispenser. **Part Number: 80050u**



The FIX family of abrasives must be used with the FIX original backing disc.

Special FIX Backing Disc with PUR Foam Absorption Coating

For use with the FIX Zirconium disc, FIX TZ Pyramid disc and FIX SuperPolish disc. The backing disc is made of elastic PUR with a special 1/4" absorption coating. **Diameter: 4-1/2" with 5/8"-11 thread - Part Number: 80115u**



FIX Zirconium Disc

Abrasive disc with Hook & Loop fastening and an outstanding grinding capacity. Ideal for body shops and car workshops.

Diameter: 4-1/2"; Grits: 40, 60, 80, 120

FIX Zirconium Disc Ordering Information

Part No.	Diameter	Grit	Quantity
80904	4-1/2"	40	50 pack
80906	4-1/2"	60	50 pack
80908	4-1/2"	80	50 pack
80909	4-1/2"	120	50 pack

More Abrasives for the FIX Hook & Loop System



FIX TZ Pyramid Disc
New abrasive fabric with pyramid-shaped grit structure. Allows high material removal while producing a very fine finish. FIX TZ Pyramid discs reduce the amount of work required compared to grinding belt sleeves and fleece sleeves and are ideal for pre-polishing for later mirror finishes and for removing scratches and spot

welds. An additional absorption coating drastically reduces the grinding temperature and protects the Hook & Loop components and the workpiece.

Diameter: 4-1/2"; Grits: A65, A45, A30, A16, A06 (see grit equivalents below)

FIX TZ Pyramid Disc Ordering Information

Part No.	Diameter	Grit	Quantity
80932	4-1/2"	A65/320	10 pack
80940	4-1/2"	A45/400	10 pack
80960	4-1/2"	A30/600	10 pack
80970	4-1/2"	A16/1200	10 pack
80980	4-1/2"	A06/2000	10 pack



FIX Fleece (Nonwoven) Disc
Versatile disc for fine surface conditioning and pre-polishing.
Diameter: 4-1/2"
Grits: coarse, medium, fine, superfine

FIX Fleece (Nonwoven) Disc Ordering Information

Part No.	Diameter	Grit	Quantity
80615	4-1/2"	coarse (brown)	10 pack
80616	4-1/2"	medium (red)	10 pack
80617	4-1/2"	fine (blue)	10 pack
80618	4-1/2"	superfine (gray)	10 pack



FIX SuperPolish Disc
SuperPolish is a new, special needle fleece that produces a perfect, brilliant mirror finish on stainless steel and nonferrous metals. Used with our polishing compounds (white and blue) and pink cream to avoid smears and shadows. SuperPolish is absorbent,

does not smear and saves lots of work time. A separate SuperPolish disc must be used for each compound or cream so as not to mix different compound grits.

Diameter: 4-1/2"; Thickness: 1/4"

Part Number: 80715n (10 pack)

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 non-ferrous 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 compound and cream – the different compound grits must not be mixed. Remove compound and cream residues after each stage using POLY-PTX® lime and a microfiber cloth.



ABRASIVE DISCS FOR FIBERGLASS

EP diamond discs are very aggressive and perform well when sanding/grinding fiberglass and hard plastics

Electro-plated (EP) diamond discs from CS Unitec are for grinding and sanding fiberglass and hard plastics. Fast working and long service life.

EP DIAMOND DISC Specifications

Dimensions	Diameter: 4-1/2"
Max. speed	10,000 RPM
Ideal speed	2000 to 4000 RPM
Grits	30, 60, 100
Arbor size	5/8"-11 (7/8" optional)

EP DIAMOND DISC Ordering Information

Order No.	Size (dia. x arbor)	Grit	Max. Speed	Qty.
DKGF5811530	4-1/2" x 5/8"-11	30	10,000 RPM	1 disc
DKGF5811580	4-1/2" x 5/8"-11	60	10,000 RPM	1 disc
DKGF58115100	4-1/2" x 5/8"-11	100	10,000 RPM	1 disc

Note: Also available with 7/8" arbor.

EP diamond disc shown in L1506 VV angle grinder with dust extraction (see page 32).



Safety Notice: Follow all appropriate OSHA and international safety regulations for grinding fiberglass and hard plastics.

Grinders / Angle Grinders / Sanders with Dust Extraction

CS Unitec offers a variety of electric and pneumatic grinders and sanders that may be used in conjunction with our dust extraction vacuums. See page 32 for specifications on our L 1506 VV and VV AIR angle grinders / sanders and our CS 1500 and CS 1225 vacuums. Contact us or visit our Web site for more information on the concrete grinders shown below.



LD 1509 FR
5" Angle Grinder
(10,000 RPM)
Perfect for spot jobs and edging on concrete surfaces.



EBS 125 Concrete Grinder
(10,000 RPM)
Perfect for concrete surface preparation and smoothing.



CS 1500
Dust Extraction Vacuum



L 1506 VV
Electric
(2200 to 6800 RPM)



L 1506 VV AIR
Pneumatic
(6000 RPM)

REDUCED SPARKING GRINDING DISCS

Designed for grinding steel, stainless steel and other materials in nuclear plants, oil and gas industries and applications where spark reduction is an important feature

Eco Brazing (EB) diamond grinding discs from CS Unitec reduce sparking to 1% of that produced by resinoid wheels, making EB diamond a better choice than resinoid for use in some hazardous environments.

- Diamond grit protrudes higher off the EB diamond disc than traditional diamond wheels, providing greater durability, longer service life and cutting freeness
- High-tensile steel backing disc reduces plate thickness for a lightweight wheel that allows for high-rotation grinding
- High yield strength makes the steel backing disc elastic, helping to ensure that operators do not grind the material by over-removal
- Reduced sparking increases the visibility of the workpiece
- The EB diamond wheel wears approximately 1% as much as a resinoid wheel, therefore significantly reducing the amount of abrasive dust emitted
- Ideal for grinding steel and stainless steel, as well as natural stone, granite, marble, fiberglass and other materials



Benefits of reduced sparking:

- Workpiece visibility is improved, allowing more accurate grinding
- Reduced fire hazard from sparks

EB DIAMOND DISC Specifications

Dimensions	Diameter: 4", 7"
Max. speed	13,000 RPM (4") or 8500 RPM (7")
Ideal speed	6000 RPM (4") or 3300 RPM (7")
Grits	30, 40, 50, 60, 80
Arbor size	7/8"

EB DIAMOND DISC Ordering Information

Order No.	Size (dia. x arbor)	Grit	Max. Speed	Quantity
EB4007830	4" x 7/8"	30	13,000 RPM	1 disc
EB4007840	4" x 7/8"	40	13,000 RPM	1 disc
EB4007850	4" x 7/8"	50	13,000 RPM	1 disc
EB4007860	4" x 7/8"	60	13,000 RPM	1 disc
EB4007880	4" x 7/8"	80	13,000 RPM	1 disc
EB7007830	7" x 7/8"	30	8500 RPM	1 disc
EB7007840	7" x 7/8"	40	8500 RPM	1 disc
EB7007850	7" x 7/8"	50	8500 RPM	1 disc
EB7007860	7" x 7/8"	60	8500 RPM	1 disc
EB7007880	7" x 7/8"	80	8500 RPM	1 disc

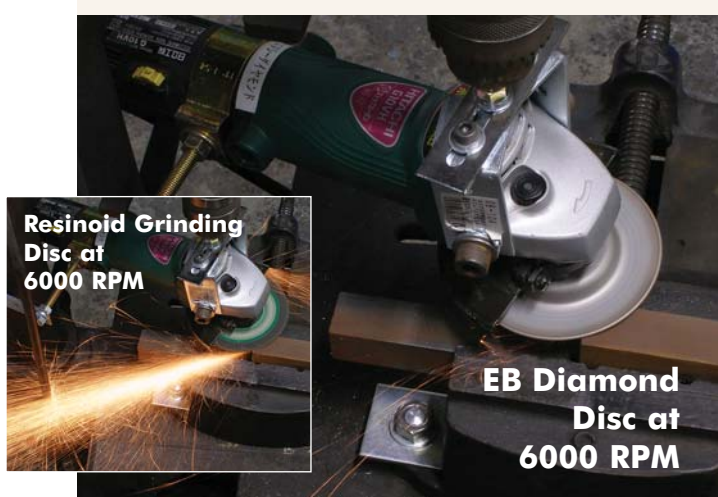
Though EB diamond discs have been shown to reduce sparking, we make no claim that sparking will be eliminated. Follow all appropriate safety regulations (ATEX, OSHA, ANSI) for all grinding applications, including those for working in hazardous environments.



Resinoid Grinding Disc at 10,000 RPM

EB Diamond Disc at 10,000 RPM

EB diamond grinding discs reduce sparking up to 1/100 of that produced by resinoid grinding wheels (inset left).



Resinoid Grinding Disc at 6000 RPM

EB Diamond Disc at 6000 RPM

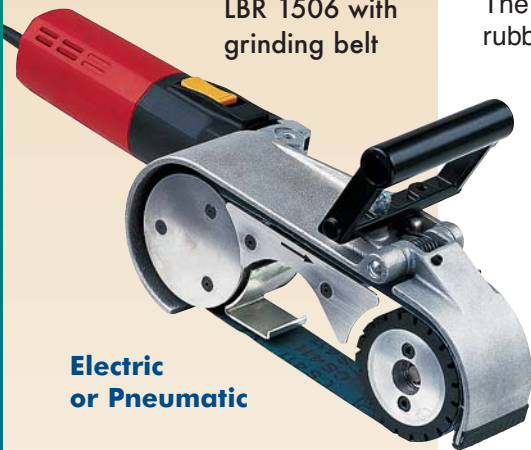
WELD SEAM GRINDER & PIPE SANDER

Electric or Air

Removes welds and polishes pipe



LBR 1506 with grinding belt



Electric or Pneumatic

LBR 1506 Accessories

Abrasive Grinding Belt (10/pack)

For grinding and surface structuring – Aluminum Zirconia

- 24" x 1-5/8", 36 grit [223.670](#)
- 24" x 1-5/8", 60 grit [223.689](#)
- 24" x 1-5/8", 120 grit [266.132](#)
- 24" x 1-5/8", 240 grit [250.610](#)

Abrasive Polishing Belt (3/pack)

For polishing and cleaning – Nonwoven abrasive

- 24" x 1-5/8", Coarse [250.586](#)
- 24" x 1-5/8", Medium [250.587](#)
- 24" x 1-5/8", Fine [250.588](#)

The LBR 1506 is a combination grinder and pipe belt sander. The front hard rubber contact roller drives the abrasive belt to grind flat surfaces. It removes weld seams in a straight line, without leaving edges or a wavy finish. For sanding pipes or handrails, it is a flexible tool. The sanding belt follows every contour to grind and polish up to a high-gloss finish. The belt wraps around the pipe and requires only a few steps to polish the entire circumference. It is ideal for stainless steel, aluminum and high-quality metals.

- For sanding pipes from 3/8" to 10" diameter
- Grinds weld seams on flat surfaces – leaves no edges
- Powerful 11 Amp motor and variable-speed control from 33 to 100 ft./sec.
- Quick and easy tool-free changing of sanding belts
- Ideal for stainless steel and aluminum

LBR 1506 Specifications

	Electric (LBR 1506 VR)	Pneumatic (LBR 1506 AIR)
Belt size (L x W)	24-1/3" x 1-5/8"*	
Belt speed	33 - 100 ft./sec.	
Power	11 Amp/1200 Watts	33 CFM @ 90 PSI
Pipe ø max.	10"	10"
Weight	11.25 lbs.	9 lbs.

* Note: Exact belt size is 618mm x 40mm

Standard Equipment

- 1 side handle - [Part No. 252.721](#)
- 1 spade-grip handle - [259.290](#)
- 1 sanding belt set, grits 60/120/240 - [1 set](#)
- 1 polishing fleece 1-5/8" x 24" (medium) - [250.587](#)
- 1 hex head wrench 5mm - [115.460](#)
- 1 hex head wrench 6mm - [104.167](#)

BOA PIPE SANDER

Electric or Pneumatic

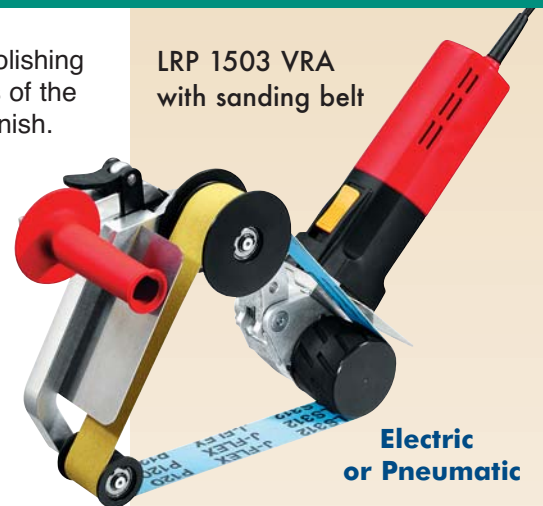
All-around polishing solution for handrails, pipe and tubing.



The LRP 1503 Boa Pipe Sander is the perfect solution for sanding and polishing pipe constructions. The sanding arm snakes up to 270° around the radius of the pipe. The operator simply rotates the BOA slightly to achieve a full 360° finish. Spring resistance between the deflection rollers ensures that the sanding arm and belt are always uniformly tensioned. The BOA saves time finishing stainless steel and other ferrous and nonferrous pipe.

- Variable-speed control; 12 to 40 ft./sec. belt speed
- Maximum pipe Ø : 5" diameter
- Quick, tool-free replacement of sanding belt
- High-quality 270° sanding arm is made of light alloy with two deflection rollers for quick progress, perfect finish and simple operation
- Additional side handle can be rotated 180° in narrow spaces

LRP 1503 VRA
with sanding belt



**Electric
or Pneumatic**

Accessories

Sanding belt, continuous (10/pkg.)	
For polishing pipes and tubes	
• 30" x 1-1/2", grit 80	P/N 326.739
• 30" x 1-1/2", grit 120	326.755
• 30" x 1-1/2", grit 220	326.771
• 30" x 3/4", grit 120	326.801
• 30" x 3/4", grit 220	326.836
Sanding fleece, continuous (3/pkg.)	
For polishing pipes and tubes	
• 30" x 1-1/2", fine	326.852
• 30" x 1-1/2", medium	326.879
• 30" x 1-1/2", coarse	326.895
Sanding-polishing belt, continuous	
For high-gloss polishing, without polishing agents, in two steps	
• 30" x 1-1/2", grit 600	326.917
• 30" x 1-1/2", grit 1500	326.933

Electric LRP 1503 VRA

Power	11 Amp
Belt speed	12 - 40 ft./sec.
Belt dimensions	30" x 1-1/2" or 3/4"*
Weight	8.2 lbs.

Pneumatic LRP 1503 AIR

Power	1 HP
Belt speed	28 ft./sec.
Air consumption	20 CFM @ 90 PSI
Weight	8 lbs.

Standard Equipment

1 carrying case with padding
1 sanding belt, continuous, grit 80, 30" x 1-1/2"
1 sanding belt, continuous, grit 120, 30" x 3/4"
1 sanding belt, continuous, grit 220, 30" x 3/4"
1 sanding fleece, continuous, fine, 30" x 1-1/2"
1 sanding fleece, continuous, medium, 30" x 1-1/2"
1 sanding-polishing belt, continuous, grit 600, 30" x 1-1/2"
1 sanding-polishing belt, continuous, grit 1500, 30" x 1-1/2"

* Note: Exact belt size is 760mm x 40mm or 20mm

FINGER BELT SANDER *Variable-speed*

Ideal for angles and tight spaces, as well as pipes and curves. The swivel-mounted arm, with 140° flexibility, reaches into corners, grooves and folds.

The LBS 1105 VE finger belt sander saves time grinding in confined and difficult areas. It uses belt sizes 3/16" to 1-1/8" wide by 21" long. The sanding arm rotates up to 140° for reaching into corners, grooves and folds, including pipes and curves.

The finger sander is ideal for grinding, blending, polishing and deburring ferrous and nonferrous metal. It also works on wood, plastic, fiberglass and other material. Speed is adjustable from 13 to 39 ft./sec.



LBS 1105 VE with 3/8" sanding arm. Interchangeable 1-1/8" arm shown at right.



LBS 1105 VE Accessories

Sanding Belts (10/pack)

- 3/16", 60 grit 303.615
- 3/16", 120 grit 303.623

- 3/8", 40 grit 257.101
- 3/8", 60 grit 257.105
- 3/8", 120 grit 257.102
- 3/8", 220 grit 257.103

- 1-1/8", 40 grit 256.538
- 1-1/8", 60 grit 255.328
- 1-1/8", 120 grit 255.329
- 1-1/8", 220 grit 255.330

Sanding Fleece (3/pack)

- 3/8", 240 grit 318.663
- 3/8", 400 grit 318.671

- 1-1/8", 240 grit 318.647
- 1-1/8", 400 grit 318.655

Dry Sand/Polish Belts (1/pack)

- 1-1/8", 600 grit 318.132
- 1-1/8", 1500 grit 318.140

Optional Equipment

- (1) 3/8" sanding arm (curved) - Part No. 256.532

- (1) 1-1/8" sanding arm (small roller) - Part No. 255.282

- (1) 1-1/8" sanding arm (large roller) - Part No. 258.888



Narrow filing arm and 140° adjustability allow sanding and grinding in confined and difficult areas.



LBS 1105 VE Specifications

Belt speeds	13 to 39 ft./sec.
Motor	6.1 AMP
Weight	5.5 lbs.

Standard Equipment

- (1) 3/8" sanding arm (pointed) - Part No. 256.525

- (1) sanding belt kit, grits 40/120/220 - 1 set

- (1) side handle - 194.034

- (1) hexagon socket screw key - 115.460

Standard equipment includes a metal carrying case.



EASY-LOCK SPEED NUT SAVES TIME, WEIGHT AND MONEY!

Never has changing a grinding disc been so quick and efficient

The secret behind it – the self-clamping **EASY-LOCK SPEED NUT**

P/N 65008-1 (5/8"-11 UNC)

The **EASY-LOCK SPEED NUT** allows abrasive discs to be changed in seconds without tools. The **SPEED NUT** works with any abrasive with a hemp or ABS backing plate and a 7/8" arbor. That means you can change abrasives on an angle grinder in a matter of seconds. It easily hand tightens and eliminates the need for wrenches or heavy, expensive 5/8"-11 hubs.

The clamping collar shape on the top of the **EASY-LOCK SPEED NUT** can secure flap discs and abrasives with a "thicker" backing disc as well as centering them. "Thin" abrasives such as cutting discs, etc. can simply be secured using the reverse of the **EASY-LOCK SPEED NUT** clamping nut.



1. Secure the disc loosely by hand using the SPEED NUT.
2. Press the spindle lock and tighten the disc by turning it clockwise by hand. That's all there is to it!
3. To release the disc, press the spindle lock and turn the disc counter-clockwise by hand.

Angle Grinders, Sanders & Polishers

Electric and pneumatic

CS Unitec offers a variety of angle grinders, sanders and polishers to satisfy your most demanding needs. High torque output, variable speed and powerful motors make them ideal for use in metal fabrication, construction, shipyards, refineries, power plants and other heavy industries. Integrated dust extraction guard and vacuum systems are available for some models.

Pneumatic Angle Grinder, 4-1/2" and 5"

1 HP mini grinder with 5/8" spindle

The L 1509 AIR is a powerful, lightweight pneumatic angle grinder for grinding, cleaning, deburring, blending and smoothing. This lightweight, versatile angle grinder is ideal for use in the most demanding grinding and sanding applications.



L 1509 AIR Specifications

Power	1 HP
Speed	6500 RPM
Max. diameter	5"
Air consumption	33 CFM @ 90 PSI
Air connection	1/4"
Weight	4.25 lbs.

- Heavy-duty pneumatic motor (1 HP / 6500 RPM) stands up to continuous use
- Accepts both 4-1/2" and 5" grinding discs
- Spindle size: 5/8"-11 UNC
- Arbor size: 7/8"
- Removable side handle can be mounted on either side of the tool
- Spindle lock

Angle Grinders / Sanders with Dust Extraction

L 1506 VV 4" and 4-1/2", Electric
Extremely powerful 11 Amp angle grinder and sander with variable-speed electronic motor. Vacuum port: 1-1/4". Ideal for use with our **CS 1225** or **CS 1500** Dust Extraction Vacuum (see below).

L 1506 VV AIR 4" and 4-1/2", Pneumatic
Extremely powerful 1 HP angle grinder and sander with 1 HP pneumatic motor. Vacuum port: 1-1/4". Ideal for use with our **CS 1225** or **CS 1500** Dust Extraction Vacuum (see below).

Vacuum Port: 1-1/4"

L 1506 VV Specifications

	L 1506 VV	L 1506 VV AIR
Max. diameter	4-1/2"	4-1/2"
Speed	2200 - 6800 RPM	6000 RPM
Power	11 Amp	1 HP
Spindle	5/8"-11	5/8"-11
Weight	4 lbs.	4 lbs.
Air consumption	-	33 CFM @ 90 PSI
Air connection	-	1/4"



L 1506 VV with dust extraction (2200 to 6800 RPM)

5/8" Spindle
7/8" Arbor



Stepped Adapter (optional) adapts vacuum port to a 1-1/4" dia. hose
Part Number: 5.453-016



L 1506 VV AIR (6000 RPM)
(Hose not included)

5/8" Spindle
7/8" Arbor



CS 1500

"Power Take-off" Outlet



CS 1225

Dust Extraction Vacuums for Tools

CS Unitec's dust extraction vacuums offer strong 130 CFM air flow and an automatic filter cleaning system to maximize vacuum power and dust collection. The "Power Take-off" outlet activates the ON/OFF mode from the tool switch, making these vacuums ideal for use with power tools. Manual ON/OFF is necessary for pneumatic tools.

- Ideal for use with power tools
- 99.93% filtration efficiency of particles 3.0 microns is standard. HEPA filters are optional.
- Can also be used as a regular wet/dry vacuum



Stepped adapter and 15' hose included as standard equipment with CS 1225 and CS 1500

Vacuum Specifications

	CS 1225	CS 1500
Power	11 Amp	11 Amp
Air flow	130 CFM	130 CFM
Tank capacity	6.6 gal.	13 gal.
Weight	24.3 lbs.	35.2 lbs.

We 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.

Electric Grinders, Sanders & Polishers

L 1506 VR 4-1/2" and 5"

Compact, high-torque, variable-speed grinder/sander

This powerful 11 Amp, full-wave electronic grinder/sander has infinitely adjustable variable speeds (2200 to 6800 RPM) and overload protection. It is a versatile tool that is ideal for grinding, roughing, cutting, deburring and rust removal. This is a popular choice among the metal, automotive and natural stone industries.

L 1509 FR is a single-speed (10,000 RPM), high-performance, 4-1/2" or 5" angle grinder.

L 3410 VR 4-1/2" and 5"

Compact, high-performance, variable-speed grinder/sander

The L 3410 VR is a small, agile grinder with a powerful 11 Amp, variable-speed motor (3000 to 11,000 RPM). A flat aluminum die-cast gear head allows the tool to reach into the tightest areas. No matter what the task and workspace, the slim, saddle-shaped motor housing and easily-accessible side switch allow this grinder to sit perfectly in your hand for comfortable operation.



L 1506 VR
(2200 to 6800 RPM)

L 1509 FR
(10,000 RPM)

Specifications

	L 1506 VR	L 1509 FR	L 3410 VR
Max. diameter	5"	5"	5"
Speed	2200 - 6800 RPM	10,000 RPM	3000 - 11,000 RPM
Power	11 Amp	11 Amp	11 Amp
Spindle thread	5/8"-11	5/8"-11	5/8"-11
Weight	4.2 lbs.	4.2 lbs.	4.1 lbs.



L 3410 VR
(3000 to 11,000 RPM)

Low-speed Polishers

For metal, stone, concrete, plastic, glass and more

CS Unitec offers several polishing tools for both dry and wet applications. These tools feature either double or triple gear reduction for maximum torque with minimum motor load and a longer service life.

ELP 1300 Dry Polisher

Triple gear reduction, 650 to 1150 RPM

CS Unitec's ELP 1300 polisher is the ideal tool for low-speed dry polishing, especially under heavy load. In combination with various accessories, the ELP 1300 can be used for automotive, wood and metalworking applications such as polishing, fine brushing, matte finishing and sanding. This polisher is particularly suited for materials such as acrylic lacquer, glass, plastics and corian.



Removable handle

ELP 1300 (650 to 1150 RPM)



Powerful 12 Amp motor is ideal for low-speed polishing in the automotive and furniture industries.

- Triple transmission reduction for maximum torque with minimum motor load and a long lifetime
- Compact, nonslip handle balances weight distribution and minimizes vibrations
- Cover sheet for ventilation on the motor housing provides added dust protection
- Spindle stop for fast retooling
- Slim design for use in narrow spaces
- Ergonomic on/off switch with locking button

ELP 1300 Specifications

Power input	12 Amp (1300 W) 110 V / 60 Hz (Also avail.: 230 V / 50 Hz)
Speed	650 - 1150 RPM
Max. diameter	9"
Spindle thread	5/8"-11
Weight	6.4 lbs.

EPO 1301 Dry Polisher

Double gear reduction, 1300 - 3050 RPM

The EPO 1301 is a powerful polisher for dry applications such as sanding and polishing metal, stone, concrete and other materials. When used with diamond sanding discs and velcro fastener, it is effective for sanding edges and stone polishing within the workshop or at the construction site.

- Double gear reduction for maximum performance with minimum motor load and a long service life
- Low wearing thanks to dust-protected gear bearings
- Flat gearbox
- Compact, nonslip handle (removable)
- Cover sheet for ventilation on the motor housing provides added dust protection
- Spindle stop for fast retooling
- Slim design for use in narrow spaces
- Ergonomic on/off switch with locking button



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EPO 1301 (1300 to 3050 RPM)

EPO 1301 Specifications

Power input	12 Amp (1300 W) 110 V / 60 Hz (Also avail.: 230 V / 50 Hz)
Speed	1300 - 3050 RPM
Max. diameter	5"
Spindle thread	5/8"-11
Weight	5 lbs.

EPN 1301 P Wet Polisher

Double gear reduction, 3 speeds

The EPN 1301 P wet polisher for natural stone and concrete applications is particularly suited for grinding and polishing edges and curvatures. It also excels at removing scratches from granite, marble and concrete. This polisher is ideal for stone cutters, natural stone processing companies and concrete fabricators.



Powerful 12 Amp motor is ideal for wet polishing and grinding of granite, marble and concrete.

- Double gear reduction for maximum performance with minimum motor load and a long service life; high torque output
- External water supply below the motor provides protection for the gearbox and easy gear head guiding; no water flows across the motor or gearbox
- GFCI protective switch for isolating transformer helps ensure electrical safety
- Ventilation slots on the motor housing are covered, protecting against water seepage
- Three-speed switch with splash guard; water-protected electronic components
- Spindle stop for fast tool change
- Motor with special sealing provides rust protection

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EPN 1301 P
(1300/2175/3075 RPM)

EPN 1301 P Specifications

Power input	12 Amp (1300 W) 110 V / 60 Hz (Also avail.: 230 V / 50 Hz)
3 speeds	1300 / 2175 / 3075 RPM
Max. diameter	5"
Spindle thread	5/8"-11
Weight	6.4 lbs.

DS 301 Planetary Sander/Polisher

Sands, grinds, hones and polishes

The DS 301 planetary polisher produces a flat, swirl-free finish on counter tops, floors, walls and steps. The unit will grind, hone, polish and clean concrete, terrazzo, marble, granite and corian surfaces using coated abrasives, diamond polishing systems and lightweight diamond wheels. The system operates wet by default, or dry with an optional dust cowl.



DS 301, wet operation

This is a true planetary-driven tool. The 12" platform turns at a lower rate than the higher rotational speed of the 5" platens. This combination of RPM provides the optimal speed for polishing, producing a perfect finish five times faster than a single-head polisher. A center coolant feed, precision bearings and sturdy construction make this the ultimate tool for perfect finishes and superior polish.



DS 301 with optional cowl for dry operation

DS 301 Specifications

Power	10 Amp 110 V / 60 Hz
12" platform speed	150 - 450 RPM
5" platen speed	750 - 2200 RPM
3 platens	5" (with 5/8"-11 thread)
Weight	47 lbs.

Deburring, Beveling and Faceting Machines

(pages 36-39)

CS Unitec offers a line of deburring equipment for grinding, deburring, chamfering and faceting. Fast and efficient, these machines are available in hand-held and table-top models. See pages 36-39 for features and specifications on our full line of Deburring and Beveling Machines.



Above: **LKF450 Multipurpose Beveling Machine.** Bevel 30° or 45° and R2.5 radius

Above Left: **LKF200 Portable Beveling Machine.** Fast, easy preparation of weld seams. Bevels 15° to 60° angles on plate or pipe.



Above: **BE 5 Sheet Metal Deburring Machine.** Double-sided deburring of metal sheets from 0 to 0.2" thick.



Above: **EF 115 Deburring and Faceting Machine.** Ideal for awkward, heavy parts, frame constructions or large sheets of metal.



Left: **PEF 500 Faceting and Deburring Machine.** Adjustable 30° to 60° facet angle and 0 to 3/8" facet width.

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

Optional accessories:

- Spare flap wheels (40, 60, 80, and 120 grit)
- Machine stand, made from strong steel
- Port for industrial dust extractor
- 440 V / 3-phase – Order No. 30310
- 220 V / 3-phase – Order No. 30310A



Can also be used on its side with roller tables for large thin sheets.

ROLEI BE 5 Specifications

3-phase motor (optional voltage)	400 - 440 V 3-phase / 2 speeds
	220 - 240 V 3-phase / 2 speeds

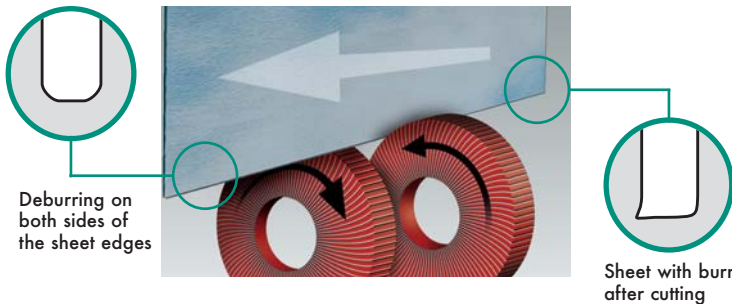
Dimensions	19.7" x 12.8" x 7.9"
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Weight	64 lbs.
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Options	Machine stand, dust extractor connection port, teflon tape
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ROLEI BE 5 Flap Wheels

Part No.	Grit	Qty.
37040	30	2 discs per pack
37060	60	2 discs per pack
37080	80	2 discs per pack
37120	120	2 discs per pack



Spare flap wheels for sheet metal deburring machine BE 5
Grit 40, 60, 80, 120, 150



Machine stand - P/N: 30320
Strong steel machine stand with black powder coating



Extension rail - standard, from 20" to 28" (included)



Teflon tape – self-adhesive
P/N: 30340 (20" length)
For extension rail to protect it from scratching the workpiece
Width 3/4"; length 20" + 28"

ROLEI® EF 115 Hand-held Deburring and Faceting Machine

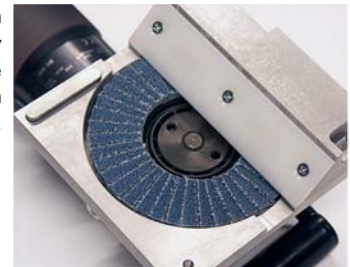
This handy deburring machine is designed for awkward, heavy parts, such as machine tables, frame constructions or large sheets of metal. Easy to handle, with good edge control. The EF 115 is also ideal for chamfering welds. Fixed beveling angle of 45°, infinitely adjustable facet width from 0" to 3/8".



Rolei EF 115

110 V / 60 Hz
Variable speed: 2,000 to 7,600 RPM
Part No. 30116

The handy ROLEI® EF 115 can deburr and facet large, heavy parts with ease. The precise edge control guarantees clean bevels at an angle of 45°.



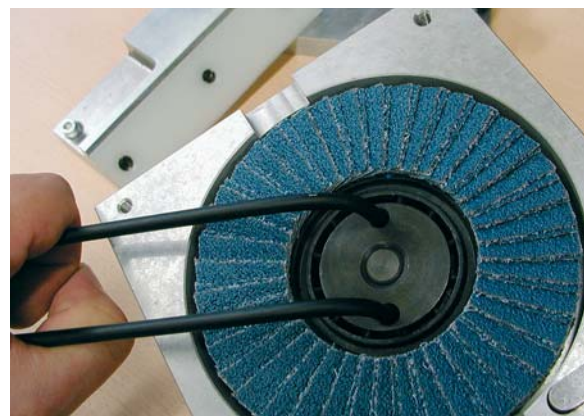
ROLEI® EF 115 Specifications

Universal motor	Part no. 30116 12.27 Amp (1350 W) 110 V / 60 Hz (230 V / 50 Hz, 1600 W also available)
Speed	Infinitely adjustable from 2,000 to 7,600 rpm
Weight	9 lbs.
Options	Sliding guide rail, plastic (P/N 30117, 2-piece set)



QUICK-LOCK cable for fast, easy replacement, e.g. if the cable is damaged
Available in 12 ft. and 33 ft. lengths (accessories)

Simple disc changing



ROLEI EF 115 Flap Discs

Part No.	Grit	Qty.
21050A	50	10 discs per pack
21060A	60	10 discs per pack
21080A	80	10 discs per pack
21120A	120	10 discs per pack

ROLEI® EF 165

Beveling and deburring machine with a fixed beveling angle of 45° and an infinitely adjustable beveling width from 0" to 3/8" for all metals from stainless steel to aluminum. Precise adjustment of the facet width using a hand wheel.

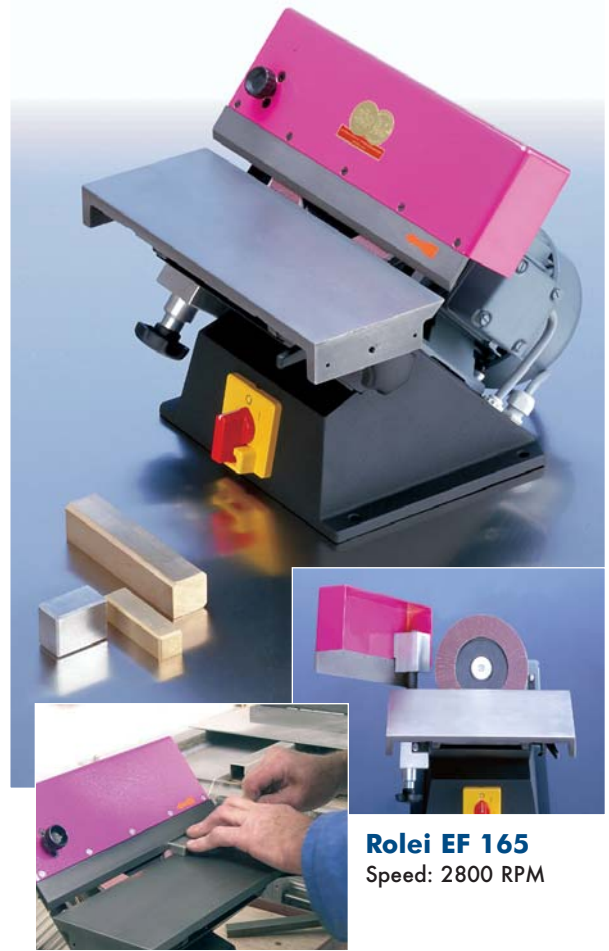
Optional accessories:

- Table extension (P/N 30110, 2 pieces, 5" x 13" each)
- Machine stand (P/N 30120)
- Extraction port for industrial dust extractor (P/N 30101)
- Spare flap discs (50, 60, 80, 120 grit)

ROLEI® EF 165 Specifications

Three-phase motor	Part no. 30100 220 - 240 V, 400 - 440 V, 3-phase
Support table	5" x 13"
Dimensions	14" x 13" x 12"
Weight	40 lbs.
Options	Table extension, machine stand, extraction port for dust extractor connection

Supplied as standard with 80 grit disc. Other grits can also be used to suit the facet width and materials.



Rolei EF 165
Speed: 2800 RPM

ROLEI® PEF 500

Precision beveling and faceting machine for all metals from stainless steel to aluminum. Infinitely adjustable beveling angle from 30° to 60° and infinitely adjustable facet width from 0" to 3/8" (precise adjustment using knob)

Optional accessories:

- Table extension (guide rail) from 20" to 28" (P/N 30240)
- Extraction port for dust (P/N 30230)
- Sliding feed plate, plastic (P/N 30240)
- Spare flap discs (grit 50, 60, 80, 120)

ROLEI® PEF 500 Specifications

Three-phase motor	Part no. 30200 220 - 240 V, 400 - 440 V, 3-phase
Dimensions	20" x 14" x 14"
Weight	88 lbs.
Options	Table extension, machine stand, extraction port for dust extractor connection

Supplied as standard with 80 grit disc. Other grits can also be used to suit the facet width and materials.



Rolei PEF 500
Speed: 2800 RPM

Parts are beveled with perfect cross-grinding - absolutely no opposite burr.

Multipurpose Beveling Machine

Bevel, deburr and chamfer edges of steel plate fast

The LKF450 is designed to bevel 30° or 45° weld seams on steel, stainless steel, nonferrous metals, brass and plastics. It can also be used to deburr and chamfer; straighten edges, internal and external radii; and countersink holes from 7/8" diameter.



LKF450



- 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)



LKF1201
milling head



LKF1202
milling head



LKF1203 milling head
R2.5 radius (only insert shown)

Portable Beveler Specifications

	LKF450-2A*	LKF450-2*	LKF200
Beveling angle*	30°	45°	15° - 60°
Bevel width (max.)**	1/4"	1/4"	5/8"
Motor power	10 Amp	10 Amp	14 Amp
Voltage	All machines: 110 V (220 V / 50 Hz also available)		
Cutting speed	3000 SFPM	3000 SFPM	1800 SFPM
Cutting inserts	2	2	12
Dimensions (L x W x H)	12-1/2" x 5-1/2" x 11-5/8"	16-1/2" x 13" (L x H)	
Weight	10.5 lbs.	10.5 lbs.	42 lbs.

* LKF450 milling heads are interchangeable.

** Max. bevel width may require several passes, depending on material hardness

LKF450 (above) standard equipment includes milling head and two inserts, SW22 key, carrying case and user's manual. Please see our Price List for available accessories.

LKF200 (below) standard equipment includes two milling heads, each with six sintered carbide reversible cutting inserts, tools for assembly, LKF pipe roller guide, steel carrying case and user's manual. Please see our Price List for available accessories.

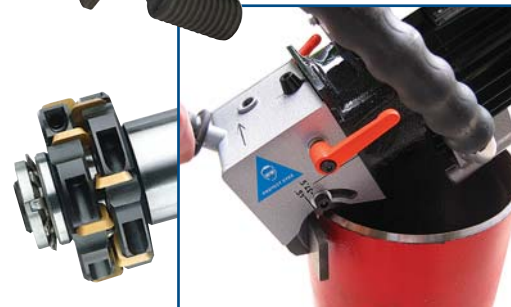
Portable Beveling Machine

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

CS Unitec's LKF200 Beveling Machine provides fast and easy preparation of weld seams and bevels 15° to 60° angles on plate or pipe. It is ideal for use on steel, stainless steel, aluminum and nonferrous metals and offers high-quality performance that allows for superior weld connections.



LKF200



- Continuously adjustable angle (15° to 60°) and land width up to 5/8"
- Robust design, single operator control and easy handling; designed for continuous operation with smooth roller guides
- Includes two milling heads and 12 total indexable inserts for fast metal removal and extended tool life
- Work on welding angles and weld preparation on pipes/tubes with a minimum OD of 6-1/4" (160mm) with included pipe roller guide; also ideal for beveling pipe 6-1/4" OD and larger

Also available from 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, non-sparking tools, portable mixers, dust extraction tools and vacuum systems.

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