



Surtech

Essential Equipment for Welders

Grinding

•

Deburring

•

Polishing

•

Bevelling

•

Jigging

•

Cutting

•

Cleaning

•

Protecting



Essential Equipment for Welders

CONTENTS

Welding & Jigging Tables	3 - 4
Chamfering, Beveling & Radiusing machines	5
Beveling machines	6
Tube Notchers	7 - 8
Belt Grinders	9
Portable Tools	10 - 17
Floor Grinders	18
Corner Radius Grinding machines	18 - 19
Tube Grinders	20 - 21
Long Belt Grinding and Finishing machines	22 - 23
Weld Cleaner	24
Cleaning, Protecting and Lubricating Chemicals	25
Dust Extractors	26
Abrasive Test Centre	27
Surtech Machine Range	28

Modular 3-dimensional precision Welding Tables with ingenious clamping system



THE WELDING TABLES

Two basic modular versions - two professional modular versions offer many possibilities:



*The one sided **BASIC** table. Without skirt. Available with 16mm dia. holes and 50mm grid. Also available with 28mm dia holes and 100mm grid.*



*The five sided **PROFESSIONAL** table with 200mm deep skirt, Available with 16mm dia. holes and 50mm grid. Also available with 28mm dia. holes and 100mm grid. Can be enlarged by attaching one or several more tables.*

Basic tables have the same design as professional tables but without the skirt. The S4-System tables are offered in two basic versions: with 16mm holes and a 50mm grid, and with 28mm holes and a 100mm grid.

The wide-ranging accessory programme enables the S4 system tables to adapt to most demands. The modular concept makes it possible to combine several tables. This means, that the working area can grow in line with the order book. Alternatively, several workplaces can be joined together for an unusually large workpiece. The S4 system is ready for all eventualities.

Precision and long life

The S4 system is manufactured with a tolerance of 0.03mm for hole spacings, which makes it particularly suitable for fixture construction. The use of high quality steels guarantees long life and a high degree of dimensional precision

Several surfaces to choose from

S4 tables are available in various materials: steel, cast iron or stainless steel. Siegmund is the only manufacturer to offer a table made of HARDOX. HARDOX is well known for its sensational properties of extraordinary flatness, uniform surface quality and the great resistance to wear. In addition HARDOX surfaces are very resistant to weld spatter.

The latest addition to welding table surfaces are plasma-nitrided coatings which harden the surface to approx. 550 Vickers and offer optimal resistant to weld spatter, scratching and corrosion.

INTRODUCTION

Siegmund produce welding tables with modular clamping and fixture systems for metal construction. The tables can also be used as jigg tables.

SYSTEM 16

For light to medium heavy fabrications up to ???
Ideal for balustraders, architectural metalworkers, tube and pipe fabricators

SYSTEM 28

For heavy to extra heavy fabrications up to 5000 kg.

- Up to 40% time saving
- To a tolerance of 0.03mm
- In steel, stainless, Hardox or plasma nitrided
- Any size, any weight (up to 50 t)
- More than 100 clamps to suit plate, tube, pipe, fabrications, etc.



SOME APPLICATIONS FOR OUR WELDING TABLES



Tubular Fabrications.



Tooled up for welding pipe.



Balustrades.

Siegmund welding tables can handle all jigging jobs. All sizes. All weights. All shapes. The modular system grows with you.



Stops set up for mitred tube.



Several tables set up for extra heavy and large fabrications.



Ask for a copy of our 384 page catalogue.

THE TABLE TOOLS

Shorter working time thanks to an ingenious rapid clamping system

The heart of the S4 systems is the universal ball bolt. Its carefully thought out mechanical design means that it can be reliably fixed in place with one hand in a second or so. This means that setting up or changeover time is greatly reduced.

Comparative tests with conventional work tables and screw clamps showed a potential saving in working time of up to 40 %.



The Universal ball bolt.



The Clamps. For hollow sections and for tubes. Adjustable angles and interchangeable prisms.



The Stops.



Clamping squares extend over the table.



Close up shows position of holes and grid.



The optional tool stand with some of the most popular clamps, stops, clamping bolts, etc.

For more details click on www.siegmund.eu

Then click on **UK**, then click on **welding tables** in left column. Then click on **Service/Downloads**

Then click on any of the following, either **System 28** or **System 16**: **Tables** • **Table legs** • **Stops** • **Squares** • **Bolts** • **Clamps and accessories** • **Prisms** • **Supports** • **Fast clamping equipment** • **Magnetic clamping technology** • **Accessories** • **Sets** • **Connecting elements** • **Anti spatter**.

For most first time buyers Tables, Table legs and Sets (=tool sets) are the most important sections.

For an explanation of "System 16" and "System 28" click on **Welding Tables** in second top line and then click on **System 28** or **System 16** in left column.

For a drawing of the System 16 or System 28 grid click on **System 28/ System16 Grid** in left column

For choice of welding table materials click on **S4 surfaces** in left column.

Chamfering, Beveling & RADIUSING Machines

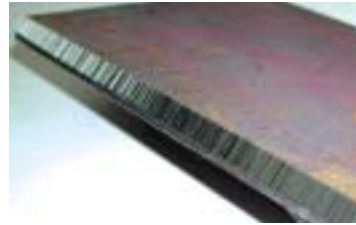
We can offer the largest range of chamfering and beveling machines in the UK. From light to extra heavy duty portable, bench or pedestal mounted. Special designs for heavy plate as used in ship and bridge building.

The machines shown here are a selection of our most popular models.

Bevel Finishes



RADIUSING on one or both edges. 2 - 6mm radii.



The slightly rippled bevel finish from machines with milling cutters.



The smoothest finish produced by abrasive belts or discs.

Portable Beveling machines with milling cutters



Model 2014

1.5 KW, 0 - 5mm chamfer



Model 2023

2.6 KW, 0 - 10mm chamfer



Model 760

1 KW, 0 - 15mm chamfer



Model KaKi 2014-42

1.4 KW, 0.5 - 6mm radii

Pedestal and Bench Chamfering machine with abrasive discs



Model 43

0 - 3mm chamfer



Model 61

0 - 6mm chamfer



Model 650

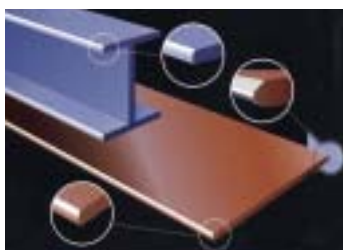
0 - 10mm chamfer



0 - 10mm chamfer (horizontal cutting head)

Edge preparation for shipbuilders, bridgebuilders and the construction industry

These are our largest machines. For plate, flat bar, girders, bulb flats, etc. All of these machines use abrasive belts for faster stock removal and improved finish.



- Edge grinding
- Corner radiusing
- Beveling
- Removing primer and rust
- Removing hardened surface
- Straightening edges



A typical installation with infeed and outfeed handling. With multihead abrasive belt power grinders inside acoustic booth. With central control cabinet.

Bevelling Machines With Rotary Shear Cutters

- **Model CHP 7**
- **Model CHP 12**
- **Model CHP 12-G**
- **Model CHP 12-G REV**
- **Model CHP 21-G**
- **Model CHP 21-G REV**

All CHP beveling machines use rotary shears for cutting. Rotary shears cut faster than milling cutters used in many other bevelling machines, however the finish is not as smooth as produced by milling cutters but has a rippled surface.

Model CHP 12 is the most popular machine. It covers nearly 80% of all bevelling operations with portable and transportable machines. Model CHP 12 as well as Model CHP 21 can be mounted on wheeled carriages so that the machines self propel along the length of the plate.



CHP 7



CHP 12



CHP 12-G



CHP machines can also bevel tubes and small plates



CHP 21-G

MILLING CUTTERS	CHP 7	CHP 12	CHP 12-G CHP 12-G REV	CHP 21-G CHP 21-G INV
 1026 for carbon sheets	X	X	X	
 1026-1 for stainless steel	X	X	X	
 1026-F for aluminium	X	X	X	
 2003-A for carbon & stainless steel				X



Bevel
angles

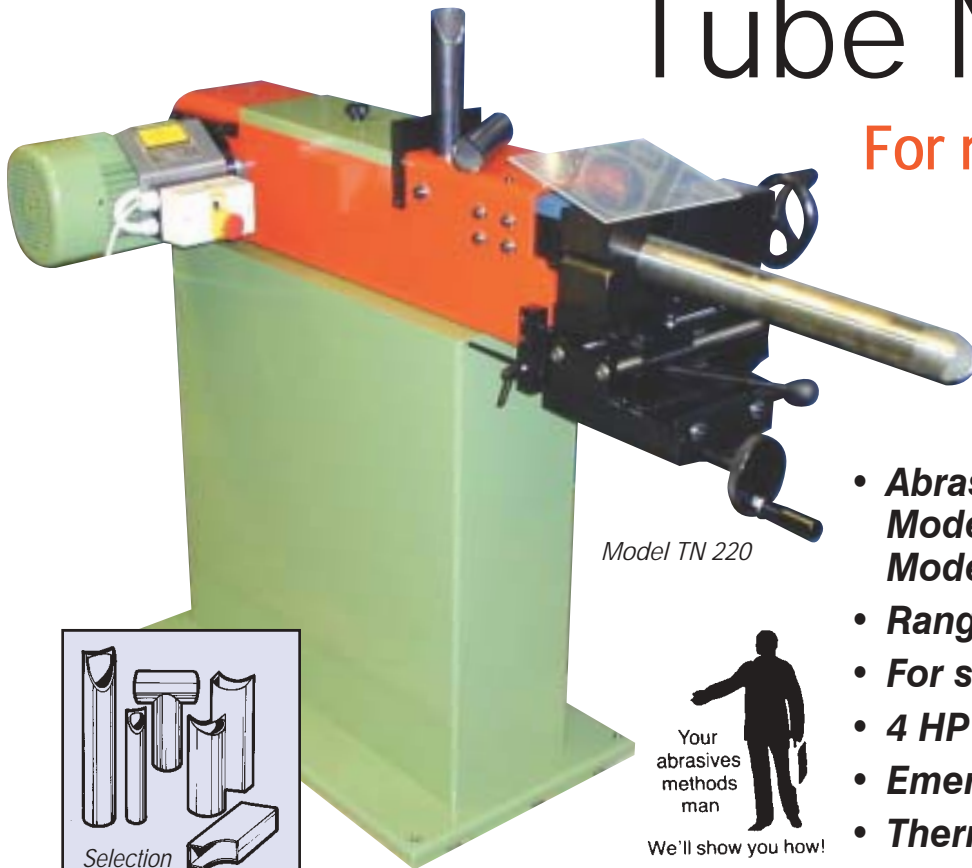
	CHP 7	CHP 12	CHP 12G CHP 12G REV	CHP 21G CHP 21G INV
Motor Power	0.75 HP	3 HP	3 HP	4 HP
Voltage	220/380 V	220/380 V	220/380 V	220/380 V
Approx Feed Speed per minute				
on mild steel	1.8m	2.6m	2.6m	1.7m
on stainless steel	0.9m	1.3m	1.3m	0.9m
Max bevel width				
on mild steel	6mm	12mm	12mm	20mm
on stainless steel	5mm	10mm	10mm	16mm
Bevel angle	30°	30°	20-45°	20-45°
Plate thickness	3-16mm	6-40mm	6-30mm	9-50mm
Approx weight	34 kg	65 kg	110 kg	370 kg

Model TN 201 & Model TN 202 Tube Notchers

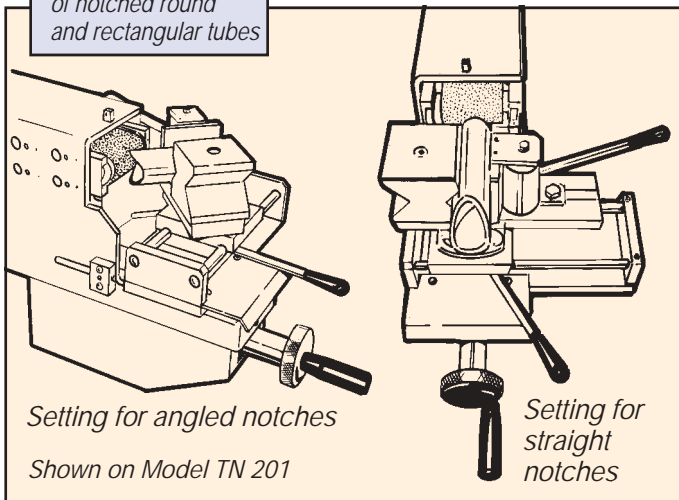
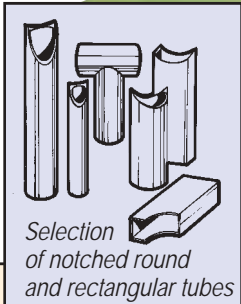
For round & square tube

Model TN 201
20 - 70mm dia.

Model TN 220
20 - 116mm dia.



Model TN 220

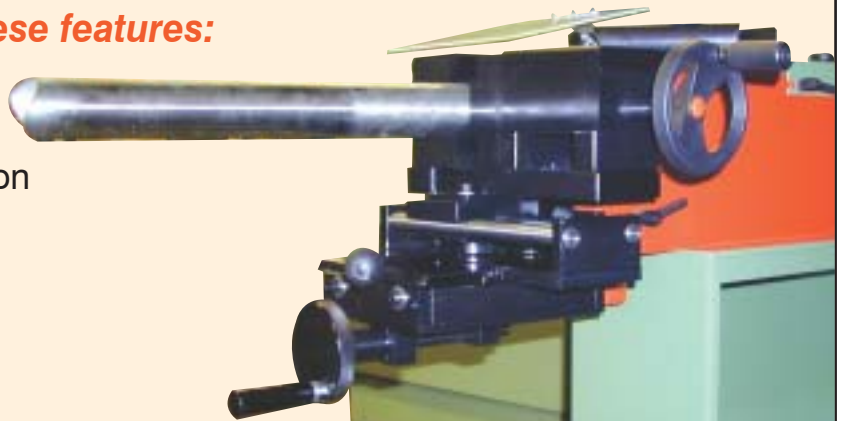


- **Abrasive belt sizes**
Model TN 201 - 75 x 2000mm
Model TN 220 - 120 x 2000mm
- **Range of quick change mandrels**
- **For straight and angled notches**
- **4 HP motor on both models**
- **Emergency stop button**
- **Thermal overload**
- **No volt control**
- **Optional built-in or stand alone dust extractor**

Angle in degrees	Max. tube diameter in mm	
	TN 201	TN 220
30	37	60
45	52	84
60	60	105
90	70.3	116
	TN 201	TN 220
Max Notch Dia (mm)	68.8	114.5

Only this machine has ALL of these features:

- Solid steel vice with 'V'-jaws
- Infeed control for depth of cut
- Slide bar for belt wear compensation
- Lead screw covers
- Depth of cut stop
- Swivel slide for angled cuts
- Protractor scale



KOMBI Belt Grinder / Notcher

Perfect for the jobbing shop



Two models are available:

KOMBI 3075

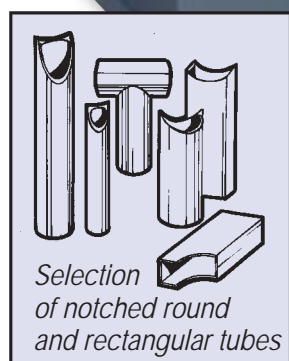
- Min/max. tube dia: 20mm / 70mm
- Motor size: 3kW, 4HP
- Abrasive belt size: 75 x 2000mm
- Top flatbed size: 100 x 390mm

KOMBI 3150

- Min/max. tube dia: 20mm / 145mm
- Motor size: 4kW, 5HP
- Abrasive belt size: 150 x 2000mm
- Top flatbed size: 150 x 390mm

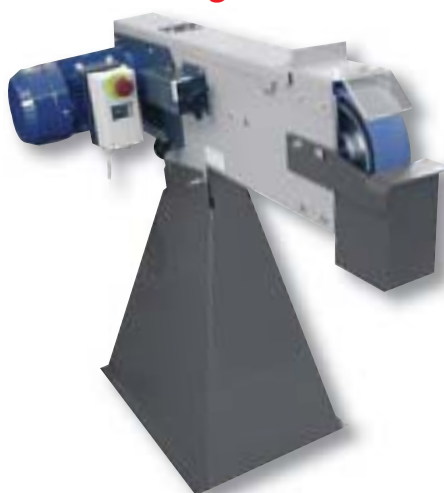
General Spec - both models

- Min/max angle settings: 30° - 90°
- Mandrels made to order
- Twin motor speeds: 1400 & 2800
- Motor insulation & class: B/IP44
- Tube fed into belt by lever.
- Method of using total belt width: Lead screw positioning.
- Working height: 1030mm
- Extraction spigots and size: 1 off 75mm OD.



Changes from belt grinder to notcher in minutes

Take a belt grinder... add a notcher head...



and you
have an
Abrasive
belt tube
notcher

Dual Purpose Abrasive Belt Grinders

Model Range SURTX - BS



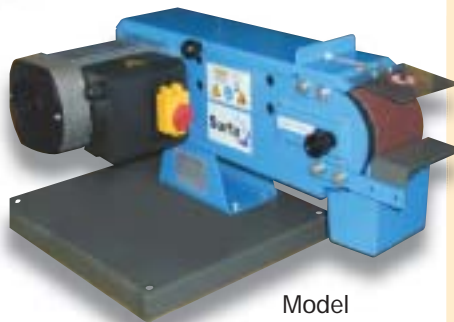
Model
BS 75



Model
BS 220



Model
BS 150



Model
BS 100



*View from right side
(all models)*



*Support table and dust
bucket can be removed on
all models*



Top platen with stop (all models)



*All models, apart from
BS 100, are height adjustable*



*Model BS
100 also
available
on stand*

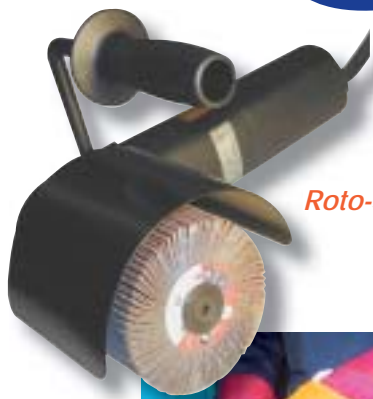


Internal view (all models)

Model	BS 75 Single speed	BS 75 Twin speed	BS 150 Single speed	BS 150 Twin speed	BS 220 Twin speed	BS 100 Single speed
Motor size	3 KW	3KW	3KW	4KW	4KW	1.5 KW
Voltage	230 only	400 only	230 only	400 only	400 only	230 only
Abrasive Belt size in mm	75 x 2000	75 x 2000	150 x 2000	150 x 2000	220 x 480	100 x 1220
Abrasive Belt speed m/sec	30	30 / 15	33	33 / 16	29 / 15	19
Contact Wheel dia. in mm	200	200	200	200	200	125
Top Platen size	75 x 460	75 x 460	150 x 460	150 x 460	220 x 480	100 x 280
Weight	72 kg	72kg	90 kg	90kg	105kg	44kg
Spigot diameter: Rear only, mm	100	100	-	-	-	75
Front and rear	-	-	100	100	100	-

Portable Tools for Finishing Stainless Steel

In-line Grinders • Angle Grinders Fillet Weld Grinders



Roto-Sat-FN

*Roto-Sat
in action*



*Roto-
Sat-FX*



*Roto-Vario-Angle FX
Fast speed*



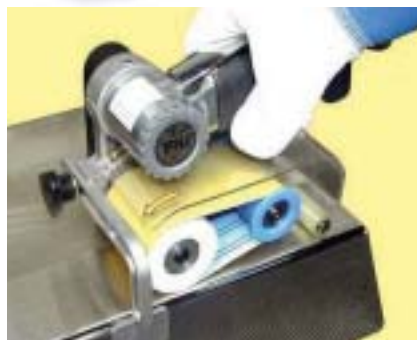
*Roto-Vario-Angle-FN
Slow speed*



*Roto-Vario-Fillet-CM
in action*



*Roto-Vario-
Angle-FX Set*



Roto-Liner



*Roto-Vario-
Fillet-FX*



*Roto-Vario-
Fillet-FX Set*

Model	Motor KW (HP)	Voltage	RPM	Belt, Wheel or Disc mm	Weight Kg (approx)
Roto-Sat-FN	1.2 (1.6)	110	900 - 2700	Wheel, max 100mm OD	2.7
Roto-Sat-FX	1.2 (1.6)	230 or 110	1200 - 3700	Wheel, max 100mm OD	2.5
Roto-Angle-FN	1.2 (1.6)	110	900 - 2700	Disc, max 125mm OD	2.3
Roto-Angle-FX	1.4 (1.8)	230 or 110	2100 - 7500	Disc, max 125mm OD	2.4
Roto-Fillet-CM	1.2 (1.6)	230 or 110	1200 - 3700	Wheel, max 150mm OD	2.9
Roto-Fillet-FX	1.2 (1.6)	230 or 110	1500 - 4700	Wheel, max 150mm OD	3.4
Roto-Liner	Air	n/a	Variable	Belt, 260mm x 60mm	1.2

ROTO-SAT ACCESSORIES



ROTOCUSHION 120
Pneumatic contact wheel.
Wheel size:
120mm OD x 80mm wide.
How to mount:
Screws straight on to M14 spindle.
Belt size: 90mm x 395mm.



ROTOCUSHION 90
Pneumatic contact wheel.
Wheel size:
90mm OD x 100mm wide.
How to mount:
Fits on to extension spindle.
Belt size: 100mm x 280mm.



ROTO-X-WHEELS
Expanding contact wheels.
Expanding contact wheels are available in one hardness only. Used with abrasive belts, they are the most aggressive tools for Roto-Sat machines.
Wheel size:
90mm OD x 100mm wide *or:*
100mm OD x 100mm wide
How to mount:
Fits on to extension spindle.
Belt size:
100mm x 280mm
(for 90mm x 100mm wheel)
100mm x 316mm
(for 100mm x 100mm wheel)



ROTO DRIVE WHEEL
Fits on to the 100mm M14 extension spindle.



TAPERED SPINDLE
With M14 bore. Screws straight on to the M14 spindle of the electric angle grinder.



EXTENSION SPINDLES
With M14 bore. 19mm dia keywayed 50mm and 100mm long. Screw straight on to the M14 spindle of the electric angle grinder.



EXTENSION HANDLE
With guard. To replace standard handle and guard and for use with polishing mops.

ROTO-SAT CONSUMABLES FOR GRINDING & COURSE GRAINING

These abrasives cut aggressively and remove material.



ZIRCONIA BELTS
For stainless steel.
Grit:

CERAMIC BELTS
For stainless steel. Even better and longer lasting than zirconia belts.
Grits: 24 - 120
For ROTOCUSHIONS
For ROTO-X-WHEELS



ALUMINIUM OXIDE BELTS
For general purpose applications.
Grits: 24 - 600 All metals.
For ROTOCUSHIONS
For ROTO-X-WHEELS



ABRASIVE CLOTH FLAP WHEELS
Can be used instead of belts. Less aggressive.
100mm OD x 100mm wide
100mm OD x 50mm wide
Grits: 40 - 240.
Bore: 19mm keyway or 25mm round.

ROTO-SAT CONSUMABLES FOR BLENDING & FINE GRAINING

These abrasives remove very little material and leave a finely grained surface.



ROTO COMBI
Mixed abrasive non-woven and abrasive cloth.
100mm OD x 100mm wide
100mm OD x 50mm wide
Grits: 60, 80, 120, 180, 240.
Bore: 19mm keyway or 25mm round. Fits on to extension spindles.

ROTO-SAT CONSUMABLES FOR CLEANING

These abrasives remove coatings, rust, paint, etc without damaging the parent metal.



ROTO STRIP
Coarse abrasive non-woven Sic mineral.
100mm OD x 100mm wide
Grit: Coarse only.
Bore: 19mm keyway only. Fits on to extension spindles.

ROTO-SAT CONSUMABLES FOR BLENDING & SATIN FINISHING

These abrasives do not remove material but produce a fine satin finish or blend after abrasive cloth belts and abrasive cloth flap wheels.



ROTOFLAP - FLEECE A/O

Abrasive non-woven only.
Aluminium oxide.
100mm OD x 100mm wide
100mm OD x 50mm wide
Grits: Very fine, fine, medium, coarse.
Bore: 19mm keyway or 25mm round. Fits on to extension spindles.



ROTOFLAP - FLEECE SIC

Abrasive non-woven only. Silicon Carbide (leaves brighter finish than aluminium oxide).
100mm OD x 100mm wide
100mm OD x 50mm wide
Grits: Very fine, fine, medium.
Bore: 19mm keyway or 25mm round. Fits on to extension spindles.



ROTO - LASTIC

Abrasive impregnated elastomer. Elastomer wheels are made from rubber impregnated with silicon carbide mineral. Silicon carbide produces a pleasing, bright, finely grained finish on stainless steel.
100mm OD x 100mm wide
Grits: Coarse, medium, fine.
Bore: 19mm keyway.
Fits on to extension spindles.



FLEECE SLEEVES

For Roto-Cushions and Roto-X-Wheels. Can be used instead of Rotoflap fleece wheels.

Grits: Coarse (*beige*), Medium (*red*), Fine (*blue*).



BUTTON HOLE FLEECE BELTS

Use with Roto-Drive Wheel. Abrasive non-woven.

Grits: Coarse (*beige*), Medium (*red*), Fine (*blue*).
Size: 600mm x 30mm.



HOOK AND LOOP BELTS

Use with Roto-Drive Wheel. Abrasive Cloth

Grits: 60, 80, 120, 220, 320.
Abrasive non-woven.
Grits: Coarse (*beige*), Medium (*red*), Fine (*blue*).
Size: 600mm x 40mm.
Hook and loop strap turns abrasive strips into belts.

ROTO-SAT CONSUMABLES FOR POLISHING

These mops and felt sleeves are used with polishing compo to produce mirror polished surfaces. Use with No. 76 cut and colour bar compo or No. G300A mirror polish bar compo.



ROTOMOP COLOUR

Coloured cotton stitched mop with tapered bore.

Size: 100mm x 50mm or 100mm x 25mm. Fit tapered spindle.



ROTOMOP WHITE

White cotton stitched mop with tapered bore.

Size: 100mm x 50mm or 100mm x 25mm. Fit tapered spindle.



ROTOFELT

Felt sleeve for use on Roto-X-Wheel 100mm x 90mm

Size: 100mm x 280mm only.



**Gritty
says . . .**

Roto-Sat portable abrasive power tools, equipped with abrasive belts, nylon belts, abrasive flap wheels, nylon flap wheels, elastomer wheels are ideal for grinding, graining and deburring of small quantities of flat parts: sheet, plate, hollow sections, flat bar, etc.



**Smoothy
says . . .**

Roto-Sat portable abrasive power tools, equipped with structured abrasive belts, polishing belts or polishing buffs will mirror polish small quantities of flat parts: sheet, plate, hollow sections, flat bars, etc.

GRINDING & POLISHING CONSUMABLES FOR ANGLE GRINDERS

ROTO-VARIO ANGLE-FX SET

Kit contains:



Roto-Vario Variable speed angle grinder.

1.4 kW, 2100 - 7500 rpm, 2.4 kg. Dust guard with tool free quick adjustment.

With FixTec tool free clamp nut.

With soft start and tachogenerator for constant speed under load.

With SoftVib handle for reduced vibration.

With set of consumables as listed here. All packed in carrying case.



1 x Thin cutting discs for stainless steel.

125mm dia x 1mm thick x 22.2mm bore.

Run at 7000 rpm.



1 x SC-VL non woven nylon flap wheel.

Medium, 125mm dia x 22.2mm bore.

Run at 2500 - 4500 rpm.

For removing surface imperfections. Also available in coarse and fine.



1 x Each non woven nylon discs, hook and loop backed.

125mm dia, coarse, medium, very fine.

Run at 2500 - 4500 rpm.

For satin finishing.



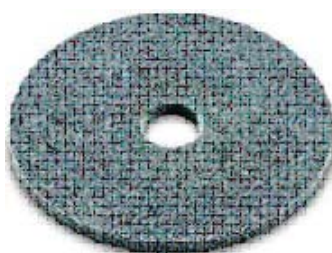
1 x Zirconia flap disc.

125mm dia x 22.2mm bore.

Grit 60.

Run at 4000 - 7000 rpm.

For general stock removal, welds, etc.



1 x Fillet disc.

125mm dia x 6mm thick x 22.2mm bore.

Run at 2500 - 5000 rpm.

For finishing fillet welds.



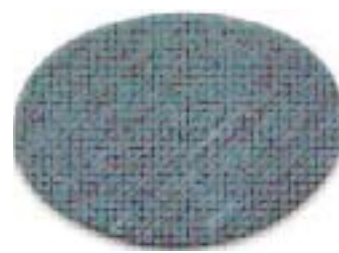
3 x Polishflex discs.

125mm dia.

Run at 2500 - 3000 rpm.

For mirror polishing with compound. 1 bar each compo supplied with set: blue, white and crème.

For cutting, colouring and mirror polishing.



1 x Each Pyraflex structured abrasive discs.

125mm dia.

Grit A 160 (P120), A65 (P240), A45 (P400), A30 (P600).

Run at 4000 - 5000 rpm.

For fine grinding.



1 x Hook and loop backing pad.

125mm dia x M14.

For use with Polishflex disc, Pyraflex discs, non woven nylon discs.

OTHER CONSUMABLES FOR THE ROTO-VARIO ANGLE-FX

Not included in the Roto-Vario Set. Available to order.



XF 870 Fibre discs with ceramic mineral.

The best fibre disc available at present.

125mm dia x 22mm bore.

Grit 24 - 120.



ZF 844 Fibre discs with zircona mineral.

Mineral. The standard grade for stainless steel.

125mm dia x 22mm bore.

Grit 24 - 80.



RUG Grinding wheel.

Available in many grades and for many metals.

For stainless steel:

SG-INOX 125mm x 22mm bore.

Max. speed: 12,000 rpm.



KEMP SATIFLEX-Z non woven nylon discs with vertical flaps.
115mm dia x 20mm thick x 22mm bore.

Available in A coarse (P60) or A very fine (P240).

Max 4,000 rpm.

For removing surface imperfections, cleaning and satin finishing.



ROS Non woven nylon discs with horizontal flaps.

Interleaved with abrasive cloth.

125mm dia x 22mm bore.

Coarse, medium, very fine.

Recommended speed 3,000 rpm.



ROS Coarse abrasive impregnated nylon discs.

Aggressive disc for removing rust, oxidation, paint, etc without damaging the parent metal.

125mm x 22mm bore.

Max. speed: 5,000 rpm.



KEMP FPT Felt wheel.

125mm dia x 25mm thick x M14.

Max 11,000 rpm.

For mirror polishing.

For use with polishing compound.



KEMP BOLD-KVR Abrasive cloth flap wheel.

For use in horizontal position.

125mm dia x 20mm thick x M14.

Grit 40 - 120. Max. 12,000 rpm.

CONSUMABLES FOR FILLET GRINDERS

ROTO-VARIO FILLET-FX SET



Kit contains:



Roto-Vario Fillet FX.

1.2 kW Motor.

Variable speed 1500 - 4700 rpm.

With FixTec quick clamp clamp M14 nut tool free quick clamping.

Weight 3.4 kg.

Soft start and constant speed control. With consumables as listed here. All packed in a sturdy carry case.



Unitised abrasive impregnated grinding and finishing discs.

152mm dia x 3mm thick x 25mm bore - 1 x Soft, 1 x Hard.

152mm dia x 6mm thick x 25mm bore - 1 x Soft, 1 x Hard.

Use hard discs for grinding and soft discs for polishing.



1 x Profiling stone.

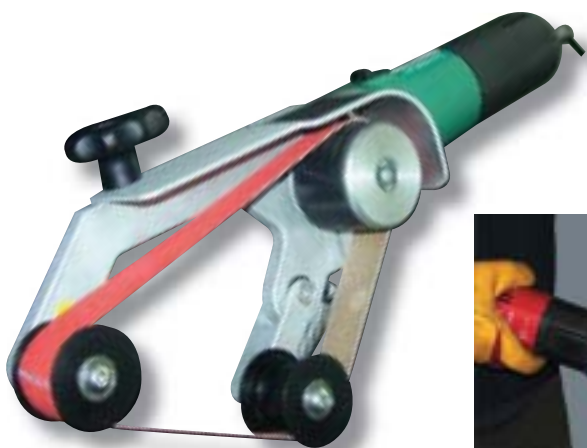
For profiling the unitised abrasive impregnated grinding and finishing discs.



Fillet grinder in action

Portable Tube Finishers

Five Portable Tube Finishers to suit all requirements. They all perform well, but which is the right one for you depends very much on your personal preferences.



Roto-Tube-CH with Surtx motor



Roto-Tube GRI with German FLEX motor

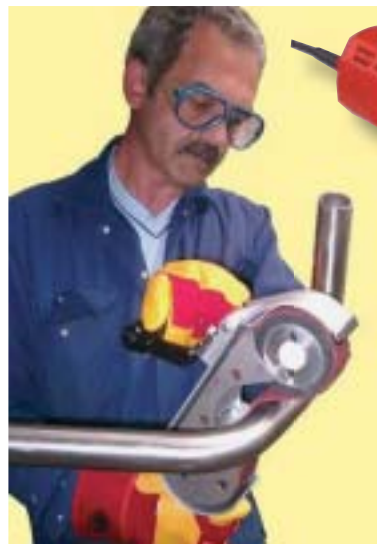


Roto-Tube-BOA

Available as a set only. With consumables in carrying case. With German FLEX motor.



Roto-Tube-POL with German FLEX motor. Used in horizontal position above and vertical position, right



Roto-Belter

The only dual purpose machine. Can be used on slack of belt for tube finishing or on front contact wheel for heavy duty grinding. With German FLEX motor.



All Roto-Tube machines can be used with abrasive belts, structured belts, nylon belts or polishing belts.

Model	Motor Power kw	Voltage	Speed m/sec	Abrasive Belt Size Size mm	Tube dia coverage in degrees	Weight Kg (approx)
Roto-Tube-GRI	1.2	230 or 110	Variable	650mm x 12, 15 or 30mm	160	4.3
Roto-Tube-CH	0.8	230 or 110	Variable	650mm x 12, 15 or 30mm	160	3.9
Roto-Tube-POL	1.2	230 or 110	Variable	820mm x 10, 20 or 40mm	180	4.4
Roto-Belter	1.2	230 or 110	Variable	620 x 20 or 40mm	n/a	4.2
Roto-Tube BOA	1.2	230 or 110	Variable	760 x 20 or 40mm	270	3.7

Portable Abrasive Belt Files

Belt files are designed to grind difficult to reach areas. Apart from the Roto-Belter they can all be used with quick change contact arms.

All belt files are suitable for abrasive cloth belts, structured belts, nylon belts and polishing belts, covering grinding, deburring, satinizing and mirror polishing.

Roto-File 24A and selection of contact arms



Roto-File 610A



Roto-File 610A in action

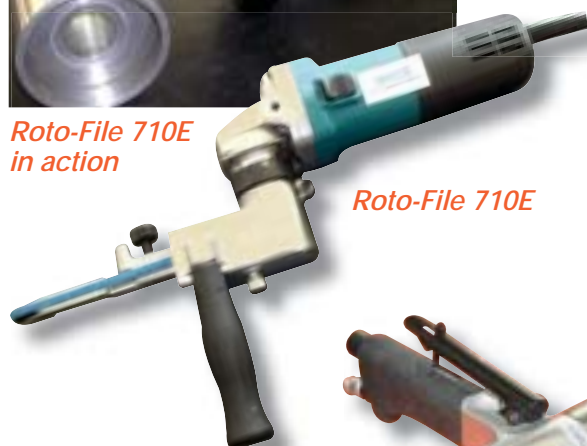
Roto-File 610A in a set



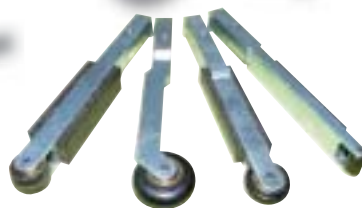
Roto-File 710E in action



Roto-File 710E



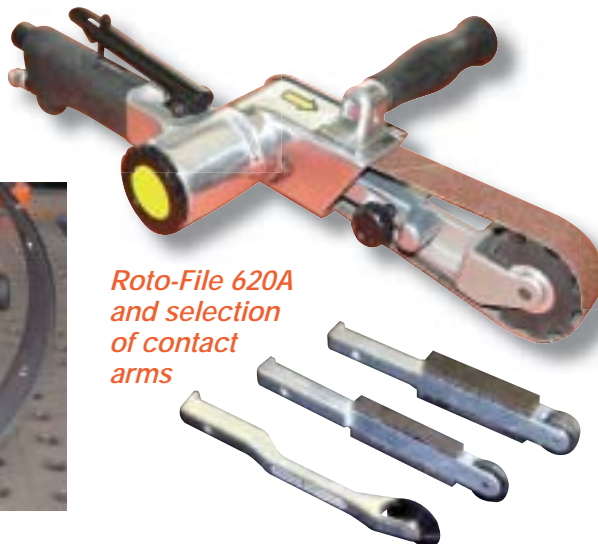
A selection of contact arms



Roto-Belter E



Roto-File 620A and selection of contact arms



Roto-File 620A in action



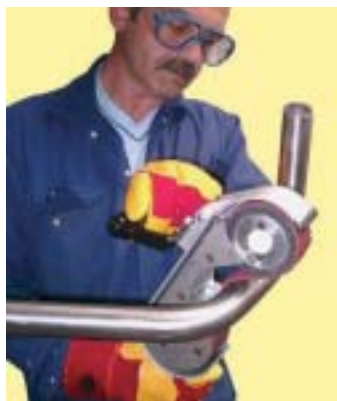
Roto-Belter E in action



Model	AIR Motor KW	ELECTRIC Motor KW	Belt Size mm	Contact Wheel dia mm	Weight Kg (approx)
Roto-File 24A	0.5 HP	-	610 x 3, 6 or 12mm	6 - 25mm	1.36
Roto-File 610A	0.37 HP	-	305 x 3, 6 or 12mm	6 - 25mm	1.0
Roto-File 620A	0.45 HP	-	457 or 610 x 3, 6, 13, 20 or 25mm	6 - 50mm	1.4
Roto-File 710E	-	0.7	457 or 610 x 3, 6 or 12mm	6 - 25mm	2.2
Roto-Belter E	-	1.2	620 x 40mm	80mm	4.2

CONSUMABLES FOR PORTABLE BELT GRINDERS

Model ROTO-BELTER



Model ROTO-TUBE-CH



Model ROTO-TUBE-GRI



Model ROTO-TUBE-BOA



Model ROTO-TUBE-POL



For belt sizes see page ??.



Abrasive Belts for Belt Grinders and Tube Grinders

VZ1

Zirconia mineral, open coated to prevent premature clogging.

Grit 24 - 240.

Polyester x-weight (stiff) backing grit 24 - 150.

Cotton backing grit 180 - 240.

Zirconia mineral belts are the recommended belts for stainless steel.

Zirconia mineral is tougher than aluminium oxide mineral and therefore better suited for stainless steel.

VZ2

Zirconia mineral with top size to keep cool. High zirconia content.

Grit 24 - 80.

Polyester X-weight (stiff) backing

Zirconia mineral belts are the recommended belts for stainless steel.

Zirconia mineral is tougher than aluminium oxide and therefore better suited for stainless steel.

VCER2

Ceramic mineral with top size to keep cool.

Grit 36 - 80.

Polyester X-weight (stiff) backing

Next to diamonds and boron nitride minerals ceramics are the toughest available today. They are more expensive but should perform better and last longer than zirconia.

VCA1

Granulated aluminium oxide compact grain.

Grit 80 - 1200.

Polyester J-weight (flexible) backing.

Also called compact grain. A multilayer grain structure with self sharpening action. Compact grain belts are more consistent, last longer and can reduce the steps in a finishing sequence. Because of their wide grit range they are particularly well suited for finishing stainless steel

VNYL1

Abrasive impregnated non woven nylon. Coarse, Medium, Fine, Very fine

Not suitable for stock removal but best for finishing and blending. Ideal for satin finishes.

For more detailed descriptions see our abrasive belt catalogue.

CONSUMABLES FOR PORTABLE ABRASIVE BELT FILES

Model

ROTO-FILE 24A

Portable abrasive air power tool



Model

ROTO-FILE 620A

Portable abrasive air power tool



Model

ROTO-FILE 610A

Portable abrasive air power tool



Model

ROTO-FILE 710E

Portable abrasive air power tool



For belt sizes see page ??.



Abrasive Belts for Belt Files

VA1

Aluminium Oxide. Very flexible.

Grit 60 - 800.

Polyester J-weight (flexible) backing. Aluminium belts are the basic grade for general grinding and blending.

VZ2

Zirconia mineral with top size to keep cool. High zirconia content..

Grit 24 - 80.

Polyester X-weight (stiff) backing

Zirconia mineral belts are the recommended belts for stainless steel. Zirconia is tougher than aluminium oxide and therefore better suited for stainless steel.

VCER1

Ceramic mineral with top size to keep cool.

Grit 24 - 120.

Polyester X-weight (stiff) backing.

Next to diamonds and boron nitride minerals ceramics are the toughest available today. They are more expensive but should perform better and last longer than zirconia.

VCER2

Ceramic mineral with top size to keep cool.

Grit 36 - 80.

Polyester X-weight (stiff) backing

Next to diamonds and boron nitride minerals ceramics are the toughest available today. They are more expensive but should perform better and last longer than zirconia.

VCA1

Granulated aluminium oxide compact grain.

Grit 80 - 1200.

Polyester J-weight (flexible) backing.

Also called compact grain. A multilayer grain structure with self sharpening action. Compact grain belts are more consistent, last longer and can reduce the steps in a finishing sequence. Because of their wide grit range they are particularly well suited for finishing stainless steel

VNYL1

Abrasive impregnated non woven nylon. Coarse, Medium, Fine, Very fine. Not suitable for stock removal but best for finishing and blending. Ideal for satin finishes.

For more detailed descriptions see our abrasive belt catalogue.

FLOOR GRINDERS

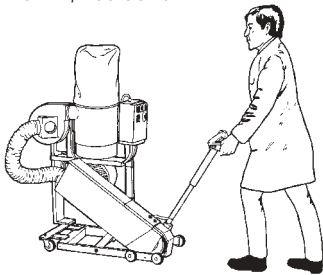
Model 125 ABRASIVE BELT FLOOR GRINDER

This machine is used for grinding plate laying flat on the ground. The floor grinder comprises an abrasive belt head, control handle, wheels and an optional built-in dust extractor. The head can be angled to produce V, X and Y shaped weld preparations.

Abrasive belt widths range from 50mm to 100mm and drive motors from 1KW to 5KW, so floor grinders can be used to remove scale or strip protective lacquer and varnish. These machines will remove the heaviest surface imperfections faster and with a better finish than any other method.

FEATURES

- 4HP single speed motor.
- With 24 V control voltage.
- With long stem adjustable handle bar.
- With 6 wheel carriage.
- Abrasive belt size: 75mm x 2000mm.
- Abrasive belt cutting speed 30 m/sec.
- Contact wheel size: 200mm dia x 75mm wide.
- Dimensions: 600mm x 1600mm x 1700mm high
- Weight: 100 kg.
- With built in dust extractor: 0.75 KW, 700 cbm/hr



MANUAL GRINDING, DEBURRING & POLISHING MACHINES

Grinding and blending of corner welds on enclosures

Model 132 AUTOMATIC RADIUS GRINDING MACHINE

Model 132 abrasive belt machine automatically grinds, blends and finishes corners on welded enclosures up to 600mm x 400mm.

The abrasive belt can be set to oscillate around the corners in a radius from 1 - 10mm.

Use an abrasive belt of the correct grade and grit for grinding.
Use an abrasive impregnated nylon belt for blending.
Choose a felt belt for polishing.



FEATURES

- Abrasive belt motor: 2.25 / 1.5 kW.
- Abrasive belt motor rpm: Two speed, 2800 / 1400.
- Conveyor belt motor: 0.55 kW.
- Conveyor feed speed: 7/35 m/min.
- Abrasive belt size: 150mm x 2000mm
- Abrasive belt cutting speed: 12 m/sec - 24 m/sec.
- Idler wheels: 50mm dia x 150mm wide.
- Machine dimensions: 700mm x 1400mm x 1500mm.
- Weight: 220 kg.



A typical welded enclosure suitable for automatic corner radius on Model 132

OPERATION

1. Choose abrasive belt grade and grit.
2. Place welded enclosure in the jig.
3. Set belt speed, conveyor feed speed and radius.
4. Start operation.

The abrasive belt head consists of a drive wheel and two idler rolls. Grinding takes place on the slack of belt between the two oscillating idler rolls.



Model 131 Corner Radiusing Machine

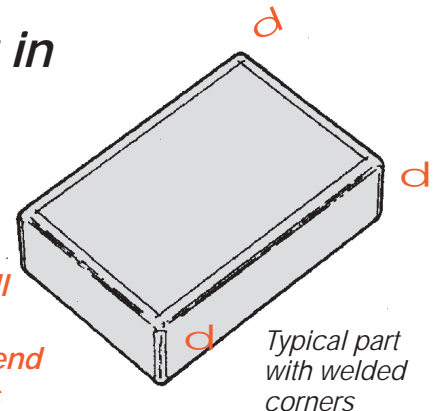


*Just place part
on table.
The machine
will do the rest.*

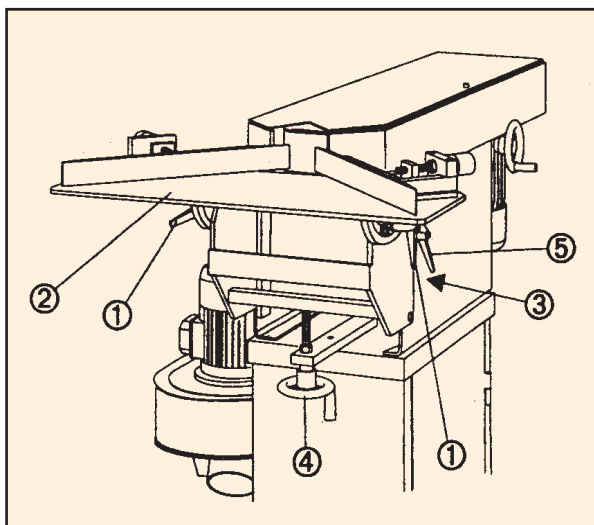
- *Automatic operation*
- *Perfect and consistent radiused corners in 2 - 5 sec.*
- *Various radii settings*
- *For max. 150mm long corners*
- *3.2 HP, 2 speed motor*
- *Abrasive belt 2000mm x 150mm*
- *Optional built in extractor*

Your
abrasives
methods
man
We'll show you how!

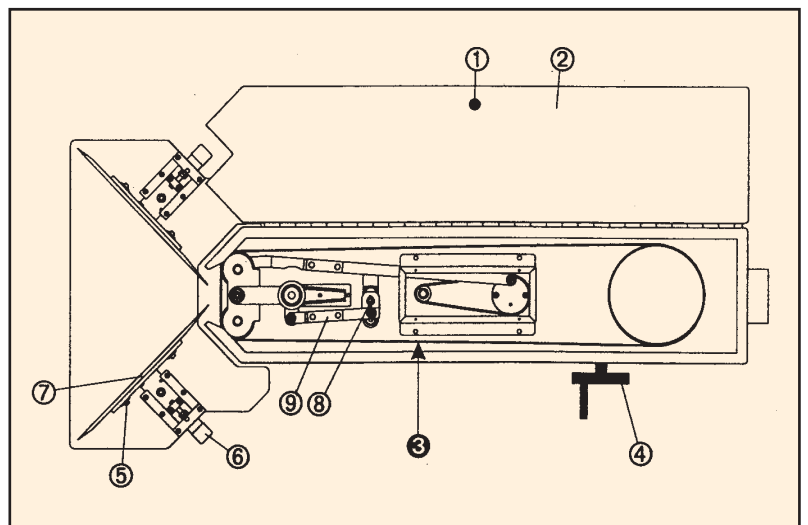
*Model 131 will
automatically
radius and blend
these corners*



*Typical part
with welded
corners*



1. Table angle setting
2. Table
3. Scale for table angle
4. Table height setting
5. Locking handle for table setting



1. Guard door fixing screw
2. Guard door
3. Belt tension check area
4. Belt tension handle
5. Guide adjustment
6. Guide adjustment
7. Guide adjustment
8. Settings for size of radius
9. Settings for size of radius

Lowest ever price for a multi-purpose machine

The Fabricator's Abrasive Belt Grinder

Changes from Belt Grinder to Tube Finisher in minutes!



Abrasive Belt Grinder

Model BSM 75

With 2000mm x 75mm belt size. 3 kW motor, 400V, 3 phase.

Model BSM150

With 2000mm x 150mm belt size. 3 kW motor, 400V, 3 phase.

Both models with adjustable working height, rear dust extraction flange, front spark box, top flatbed platen.



Centreless Attachment

Model RSE 150

Belts on to Models BSM 75 and BSM 150 in minutes.

Turns belt grinders into tube finishers.
0.25 kW, 400V, 3 phase motor.
150mm OD x 40mm wide drive wheel.
Separate socket.



Tube Finisher

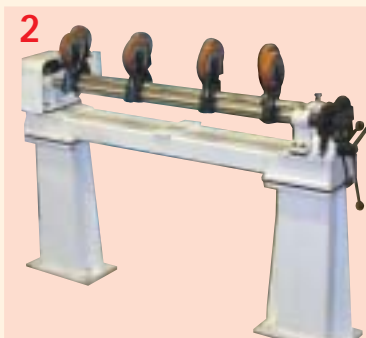
Model BSM-RSE

Based on either Model BSM 75 or BSM 150.

Will grind, finish and polish tubes from 10mm to 100mm diameter.
Variable feed speed.
Adjustable contact pressure.
Max tube weight approx 10 kg without conveyoy system. Over 10 kg with suitable conveyor system.

OPTIONAL EXTRAS

- 1 Infeed and outfeed tube supports
- 2 Roller Conveyor systems and dedicated conveyor systems
- 4 Bolt on dust extractor for small amounts of non-hazardous dust
- 5 Stand alone dust extractors for large amounts of dust



Model 128S Abrasive Belt Tube and Bar Grinding & Polishing Machine

- **With one, two or more abrasive belt heads**
- **For diameters from 5mm to 100mm**
- **Dry or wet operation**
- **Simple, fast and safe**



For long (approx. 1000mm+) and heavy tubes (approx 10 kg+) it may be necessary to fit a roller conveyor and driven pinch rollers. For shorter and lighter tubes a simple V-channel is usually sufficient.



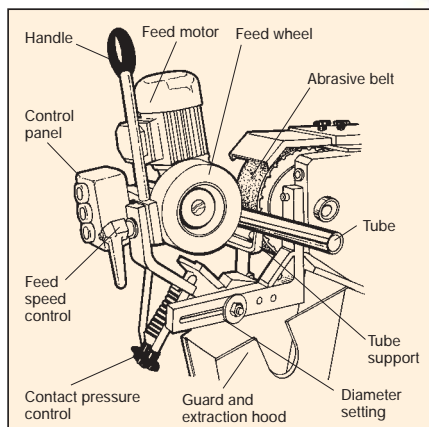
Model 128 DL with 2 heads

TECHNICAL SPECIFICATIONS

Belt motor:	2.6/3.3kw, two speed, 400V, 3 phase
Drive motor:	0.1kw, variable speed
Abrasive belt size:	2000mm x 75mm
Contact wheel:	200mm dia x 75mm wide
Machine dimensions:	Approx. 1450mm high x 1500mm deep x 600mm wide
Machine weight:	Approx. 140kg

Wet operation machines do not need a dust extractor.

For dry operation machines we can offer a number of dry or wet dust extractors.



This is not an exact drawing of the Model 128S head but it does show all the components making up the centreless unit.

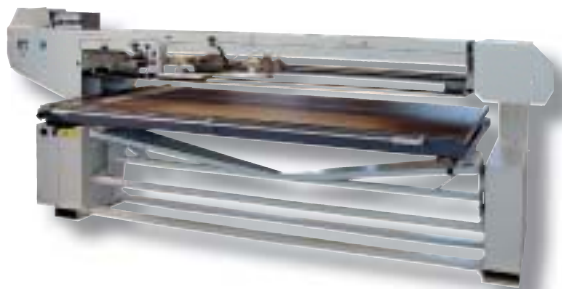


You can connect several machines. This one has six heads.

Model Range LZG

Overhead Belt Grinding, Deburring, Graining & Finishing Machines

The Machines



Single Abrasive Belt machine

With Contact Platen or Contact Wheel
Optional Parts Manipulator.

INTRODUCTION

There are several descriptions of this type of machine: overhead belt grinders, pad grinders, twin belt grinders, etc.

They all have the following design features in common:

- **A single or twin horizontal abrasive belt head**
- **A large table underneath the abrasive belt head which can be moved back and forth in a horizontal position or up and down in a vertical position.**



Twin Abrasive Belt machine

With Pneumatic Belt Tensioning,
Pneumatic Pressure Assist Contact
Unit and Second Table
Optional Parts Manipulator.



Single Abrasive Belt machine

With three Contact Units:
Platen or Contact wheel, Buffing Head
and Vertical Belt Head.
Optional Parts Manipulator.

All machines feature:

- Large 350mm dia Drive and Idler Wheels.
- Manual or Pneumatic Belt Tensioning.
- In sizes to suit all parts.
- Wide choice of table sizes:
2000mm x 800mm, 3000mm x 1000mm,
4000mm x 1000mm, 5000mm x 1000mm.



The Optional Jigs



*Tailor made jigs
to suit all parts.*

With a pneumatically controlled ball head and a turning and swivelling cylinder. All operated by a foot control.

The Optional Tables

Tables are either integrated or separate. The separate tables can be moved out of the way and parked. Optional scissor table.



Small Secondary Table



Large Secondary Table



Table with cut out for tall parts

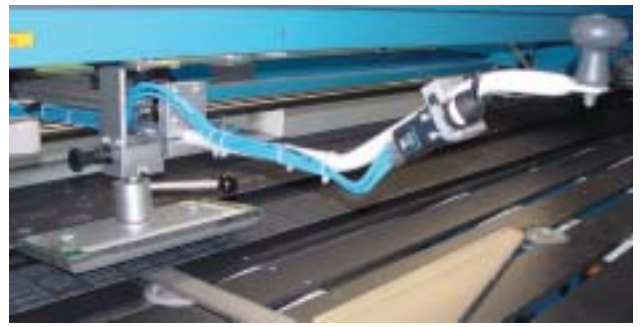
The Methods



Manual operation with hand sanding block



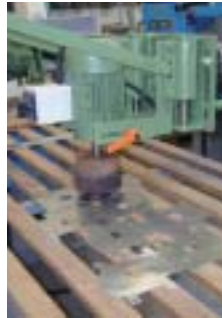
Manual operation with contact wheel. Optional pneumatic pressure assist



Manual operation with contact pad. Optional pneumatic pressure assist



Manual operation with polishing buff



Manual operation with deburring cup wheels



Multi-purpose design with contact pad, contact wheel, polishing head and vertical abrasive belt head



Combination belt and buff head

The Parts



Finishing large flat parts



Polishing frames



Graining boxes



Typical welded enclosures for blending welded corners and for graining all surfaces



Blending and graining enclosures



Deburring thermal cut blanks

And many more, like machine bases, containers, parts for food processing and the pharmaceutical industry. Hygienic and visual finishes.

The Consumables



Abrasive belts: Aluminium Oxide, Zirconia, Silicon Carbide, Conglomerate



Abrasive Cup Brushes



Structured Abrasive belts



Non Woven Nylon belts



Polishing Felt belts



Cotton and Sisal Polishing Buffs



Polishing Compo

ISOJET Weld Cleaner & Marker



- Removes oxidation and passivates stainless steel welds by an instant thermo-chemical reaction
- Cleans welds at a rate of up to 2m/min
- Quick change heads of varying sizes and designs will reach most welds
- Unlike abrasives, thermo-chemical cleaning will not damage highly polished surfaces
- Marks stainless steel surfaces with logo, names, codes, etc. (optional equipment and chemicals)



The main components of the system.

1 - Transformer, 2 - Cables,
3 - Handle, 4 - Head.



A range of heads to reach most welds.



Insulated handle with 2.5m long cable. Heads screw on to the end of the handle.



Standard paddle head with connection to handle (for cleaning with glass fibre pad)



Optional corner head with connection to handle (for cleaning with glass fibre pad)



Optional flat head with connection to handle (for cleaning with glass fibre pad)



Optional etching head with cotton pad for marking



Before and after

Surtx ISOJET Kit



Contains:

AC Transformer, 55/80A, 220V, handpiece with 2.5m long cable, standard head, 3kg ISOL N cleaning fluid, container for ISOL N cleaning fluid, latex gloves, goggles, ACT 800S spray, glassfibre pads, manual. All packed in large plastic case with hinged lid and carrying handle.



*A range of
amazingly useful
products for
stainless steel
fabricators*

MCT 201 T

This paste has no equal for the removal of severe discolourations, oxidation spots, rust attacks, etc. Will leave polished surfaces brilliantly clear. Ideal for cleaning badly contaminated stainless steel surfaces from exposure to the weather, ie bus shelters, hotel entrances, sculptures, street furniture, etc. Safe and simple use. Without the Health and Safety hazards of pickling paste.

330 g trial pack or 1 kg container.



MCT 800-S

MCT 800-F

We believe this to be the best stainless steel cleaner/protector on the market. Cleans thoroughly and with antibacteria action. Leaves protective film to prevent renewed contamination. Recommended for both internal and external use.

MCT 800-S = 400 ml aerosol

MCT 800-F = 1 l bottle.



FUN@WELDING

One of the most popular anti spatter sprays at a competitive price. A high performance separating agent that protects workpiece and welding equipment. Prevents weld spatter adhering to metal surfaces.

500 ml spray bottle.



INOX CARE

A highly refined oil for the care and protection of stainless steel, aluminium and non ferrous metals. Leaves a soft gleaming protective film. Protects against finger prints and the influences of the weather.

500 ml spray bottle.



INOX CLEAN

Highly concentrated water based gel cleaner for stainless steel, aluminium and non ferrous metals. Removes surface corrosion, mineral deposits and contaminations. Passivates stainless steel surfaces and produces new corrosion resistant layer.

Recommended for both internal and external use.

1000 ml spray bottle.



RUBOIL ABRASIVE BELT LUBRICANT

A refined natural products that has been used for generations as a lubricant/coolant for abrasive belts. Reduction of friction reduces heat, prevents damage to the metal and prolongs belt life. Regular application of RUBOIL prevents abrasive belts clogging and improves their cutting action with lower contact pressures.

500 ml spray bottle.



FINAL TOUCH

Cleans stainless steel leaving a residue free finish. Does not produce a protective film. Fast drying. Recommended for internal use. Ideal for cleaning stainless steel, aluminium, non ferrous, glass, etc. at exhibitions, in hotels, restaurants and at home.

500 ml spray bottle.



INOX TOP

Cleans stainless steel. Removes finger prints. Leaves a shiny matt surface. Leaves a protective film. Recommended for internal use.

500 ml spray bottle.



GLANZ-ZINK SPRAY

A mixture of 98.5 pure zinc and 96% pure aluminium for long term protection of all metal surfaces. Adheres well to all metal surfaces. Fast drying within 20 to 30 minutes. Can be painted and spot welded. Leaves shiny silver colour.

400 ml aerosol.



MECHANICAL CLEANING

We can also supply several abrasive products which are specifically designed for mechanical cleaning:

ABRASIVE IMPREGNATED NYLON WHEELS

Available 100mm & 150mm dia x 12mm thick. One grit size only.

Mandrel No. 900-6 for 100mm and mandrel No. 8 for 150mm wheel. Recommended speed: 100mm = 3500 rpm, 150mm = 2500 rpm.



ABRASIVE IMPREGNATED BRUSH



Available 75mm & 150mm dia. Several mounting systems. Grits 50 - green, 80 - yellow, 120 - white.

ABRASIVE CLOTH BRUSH



Available 100mm dia. Grits 80 - 240. Either in sections to be made up into the required width with tool holder No. 1 or shaft mounted with 4 sections. 8mm dia shaft. Recommended speed 1500 - 3500 rpm.

RECOMMENDED PORTABLE POWER TOOL



Model ROTO-VARIO USF1-6R, 1 KW, 2500 - 5600 rpm. 6mm or 8mm collets.

Wet Extractors for
non hazardous and
hazardous dusts

Dust Extractors for Surtech Abrasive Belt Grinding Machines

Dry Extractors for non hazardous
and hazardous metal dusts



W60 -
W220

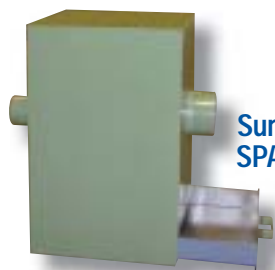


Dust Benches



Surtx DB

Spark Arresters



Surtx
SPAR

Used Extractors

All makes & models



ASP 700



DE 2000



FX3 - FX294



DCP 250



DVS



Dustomat 10

Coolant Filters



VRA

MODEL	Capacity Approx. CFM	Fan Motor HP / Voltage	Extraction Spigots in mm	W = Wet D = Dry	H = Hazardous NH = Non Hazardous
ASP 700	385	0.75 / 4000 or 230	80 or 100 or 150	D	NH
DCP 25	350	0.5 / 400 or 230	2 x 100	D	NH
DVS	380	0.5 / 400 or 230	2 x 75	D	NH
DE 2000	1000	1.8 / 400	2 x 80, 2 x 100	D	NH
FX3 - FX294	400-3500	0.7-10 / 400	vary by model	D	NH or H
DUSTOMAT10	420	1.4 / 400 or 230	1 x 100	D	NH and H
Suitable for aluminium and very fine dust from wood, plastics and lacquer					
W60 - W220	500-6000	1.4-20 / 400	vary by model	W	NH or H
Dust Benches - Designed and built to order. From 1000mm to 2000mm wide.					
VRA - Automatic coolant filter. 75 litre capacity. With paper filter.					
Used	All capacities	400 or 230	vary by model	W or D	NH or H

Do not forget
capture hoods,
ducting,
connectors, gates
and other optional
accessories
necessary for
a complete
installation.

Observe COSSH,
ATEX, DSEAR
regulations.

For more
information and
Health and Safety
matters ask for a
copy of our **EASY
GUIDE** for dust.

You are Invited to visit the UK's largest Abrasive Test Centre



More than 25 bench and pedestal grinding, deburring and polishing machines are always on show

At the Surtech Abrasive Test Centre where you will find the UK's largest selection of the very latest grinding, deburring, polishing, satin finishing & brushing machines.

Bring your own parts and discuss your requirements with our skilled engineers who will also set up practical demonstrations. See for yourself how our machines can be used to solve problems and improve efficiency.

Surtech was formed in 1973 to specialise in the manufacture and distribution of mechanical surface finishing equipment and materials.

Within this field we aim to provide the latest available technology from anywhere in the world. We are constantly reviewing the needs of our customers and we tailor our product range accordingly.

HOW TO ARRANGE A VISIT

Please Ring our sales office on 0121 359 4322 and tell us when you want to visit. We can fit you in most days. Please give a brief outline of what you want to see so that we can arrange to have the most suitable machines available. Surtech trained engineers will be on hand to advise and demonstrate.

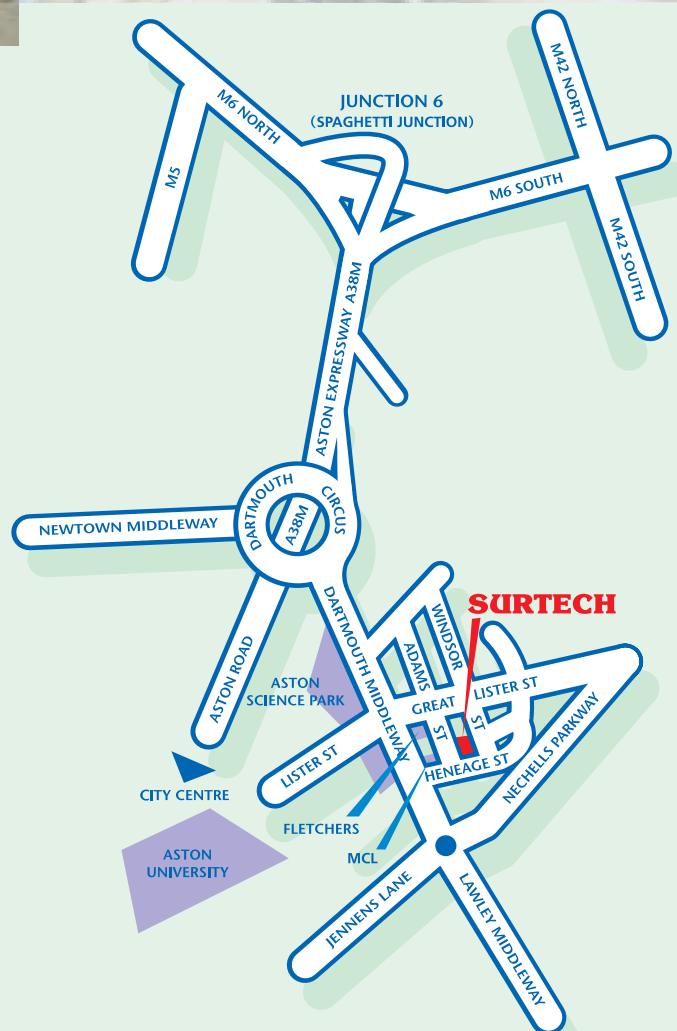
HOW TO FIND US

Coming from **M6 North** or **South** exit at '**Junction 6**' (**Spaghetti Junction**) following signs '**Birmingham Central A38 (M)**' stay in left lane. Ignore first A38 (M) exit signposted '**Aston, Perry Barr**'.

Follow overhead signs to '**Ring Road, City Centre, Bromsgrove (A38)**'. Stay in left lane to leave roundabout at first exit and follow signs '**Wholesale and Indoor Markets**' then signs to '**Convention Centre, National Indoor Arena**' and finally '**Ring Road And Other Routes**', '**Birmingham Airport, NEC, Lichfield**'.

Stay in left lane to set of traffic lights outside '**Fletcher's Autostore**'. Stay in left lane for approx another 100m and take first left turning into '**Heneage Street**', also signposted '**The Parkway Industrial Centre**'.

Surtech are the first Company on the left after '**Adams Street**'. Park outside or opposite on the industrial estate.



Surface Technology Products Ltd

244 Heneage Street, Birmingham B7 4LY

Tel: 0121 359 4322 Fax: 0121 359 1817

Email: sales@surtech.co.uk www.surtech.co.uk

Introducing the largest and most advanced range of
DEBURRING • GRAINING • FINISHING • POLISHING

*Machines, Tools, Accessories and Consumables for Sheet Metal
 Engineers • Sheet & Plate Fabricators • Profilers • Steel Centres*



Traditional wide belt machines
 from 600 - 1500mm working widths



Newly designed dedicated machines for deburring,
 corner rounding and oxide removal



Narrow belt throughfeed
 machines



Single and multi-head
 tube polishers



Single and twin long belt
 finishing machines



Sheet mirror polishing
 machines

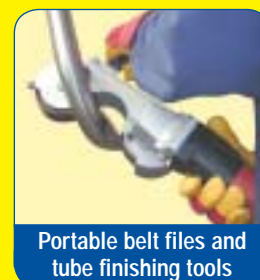
Surtech

For the
 Largest range of
 ABRASIVE GRINDING,
 DEBURRING AND
 POLISHING MACHINES
 IN THE UK

CLICK ON
www.surtech.co.uk
 or ring
 0121 359 4322



Portable abrasive wheel
 power tools



Portable belt files and
 tube finishing tools



Belt Grinders



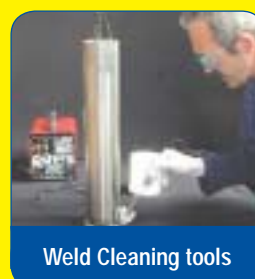
Dust extractors
 Dry and wet



Portable and automatic
 bevelling machines



Straight and bent tube
 polishing machines



Weld Cleaning tools



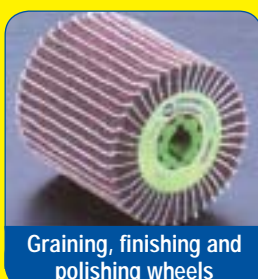
Manual sheet Deburrers



Pneumatic, expanding &
 standard contact wheels



Polishing mops
 and compo



Graining, finishing and
 polishing wheels



Narrow and wide abrasive belts for all applications