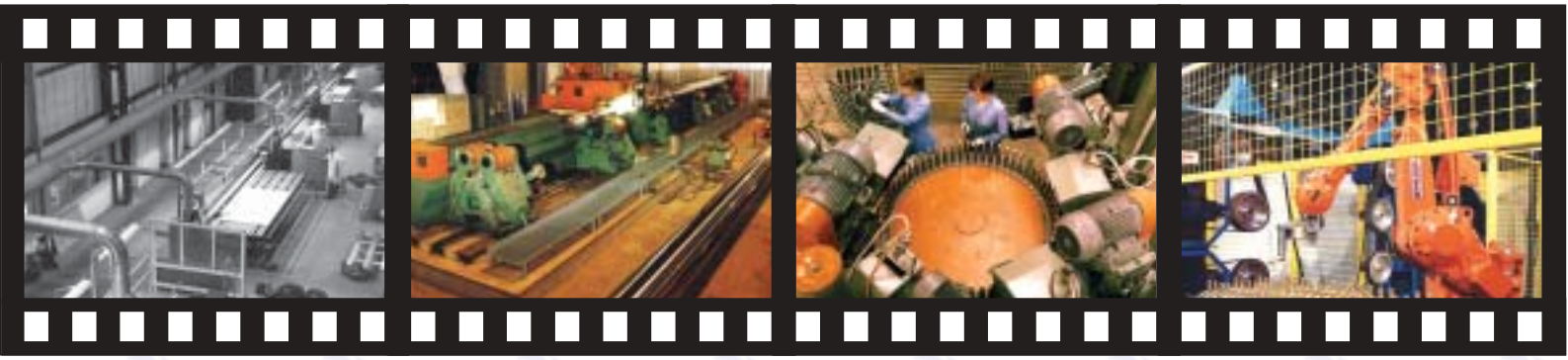
Surtech

Highlights

A brief summary of major projects,
each with a value of between
£ 50,000 and £ 1,000,000,
managed by SURTECH
spanning almost 40 years



How it began...

1973...

SURTECH was formed in 1973 as a family private limited Company.

Our aim was to provide the latest available mechanical surface finishing equipment from anywhere in the world, constantly reviewing the needs of our customers and tailoring the product range accordingly.

1978...

SURTECH moved into new 15,000 sq. ft. premises in Heneage Street, in the centre of Birmingham, which is where they still are. today.

1979...

Saw the opening of the SURTECH Abrasive Test Centre and a Service and Repair Workshop.

The Abrasive Test Centre is the largest in the UK with more than 50 machines for grinding, deburring and polishing.

Customers are encouraged to bring their own parts and discuss their requirements with Surtech's skilled engineers, who will also set up practical demonstrations.

2005...

The day to day running of the Company was taken over by the 2nd family generation.

2007...

A new logo was developed to reflect that SURTECH was ready to embrace new technology head on and to keep their customers fully informed of changing techniques and equipment.

1972

CASHMORES, Walsall

3 off Johannsen automatic narrow belt stainless steel sheet and plate grinding and polishing machines. With facility to remove surface faults and polishing of the whole surface.

Cashmores were the first stainless steel stockist to invest in polishing machines.

The Johannsef the wide bn narrow belt machines were the forerunners oelt machines which at the time were only available in the USA but then became widely available in Europe.

The Johannsen machines were slower than wide belt machines but much more flexible. They could grind and polish heavy plate with uneven surfaces which was not possible on wide belt machines.

Johannsen type machines are still available today.

1974

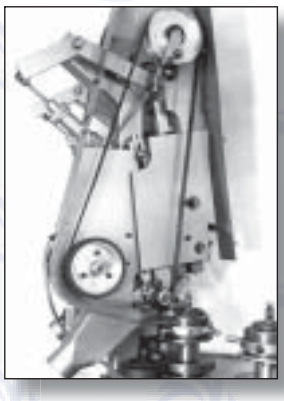
LEADING MANUFACTURER OF ALUMINIUM CHAIR LEGS IN ITS DAY, South of England

(Company no longer in existence, records lost)

Dedicated rotary table machines for linishing and polishing of office chir legs. At the time this was a very difficult operation to automate because only mechanical controls were available.

1975

STANLEY TOOLS



3 dedicated rotary table abrasive belt grinding machines for claw hammers and ball pein hammers.

The three machines replaced about 30 operators who had previously ground hammers manually.

1976

TOOLCHROME, Uxbridge

Two head abrasive belt centreless machine for polishing hydraulic round bar prior to and after chrome plating. Final finish was between 6 and 8 CLA.

1977

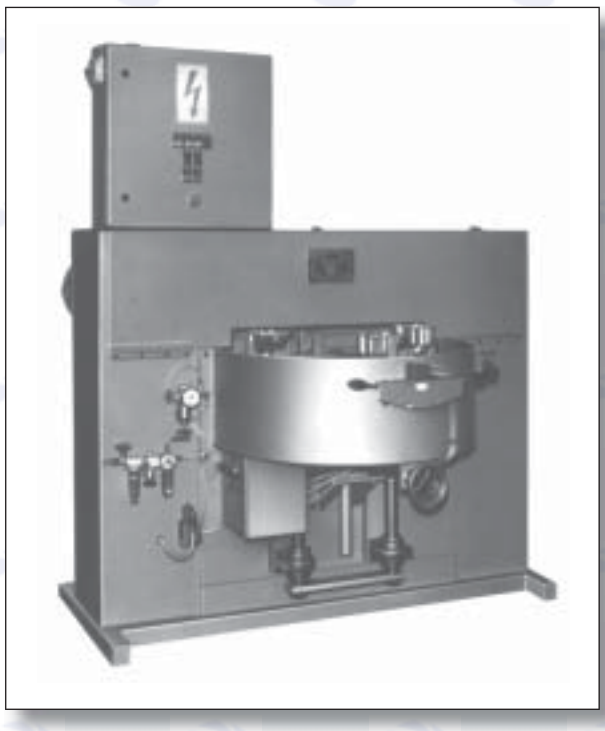
ALUMINIUM CLOSURES, Dublin

60 spindle rotary table polishing machine for polishing of aluminium perfume bottle tops.

When machine worked at full capacity of around 1000 parts per hour it needed 2 operators to load and unload.

1979

TRUECAST, Isle of Wight



A dedicated abrasive belt rotary table machine with 4 jigs and a horizontal abrasive belt head for flat grinding of feeders on turbine wheels.

1981

ORION

1 off Reichmann abrasive belt power grinder with vertical table and incremental feed.

1982

SANDVIK TUBES, formerley TI STAINLESS TUBE, formerly STERLING TUBES, Walsall

A two head abrasive belt centreless machine for polishing of nuclear tubes. With automatic loading from a belt magazine and with automatic unloading. For tubes up to 30m long.

1983

DOWTY MINING, Gloucester

Fully automated abrasive centreless machine for grinding and finishing of hydraulic tubes 60 - 300mm dia x 300 - 2000mm long. With automatic loading and unloading. Max. part weight 500 kg.

1984

WYMAN GORDON, formerly CAMERON IRONWORKS, Livingston

Dedicated abrasive belt roll and pipe grinding machine.

For max. 1200mm dia and max. 12,000mm length. With 55 KW abrasive belt driving motor. For max. part weight of 20 tonnes.

This was the largest abrasive belt grinding machine in the UK, only surpassed by a sister model in the Netherlands for finishing hydraulic rams used in installations for land reclamation.

1985

RALPH MARTINDALE, Birmingham

2 off abrasive belt flatbed throughfeed machines for grinding and finishing of forged machete blades. The blades tapered along the length and the width and being forged they were not consistent.

The problems were overcome by specially designed jigs with a “floating” mechanism that would compensate for tapers and inconsistent sizes.

1986

TERRILL BROS

1 off Reichmann abrasive belt power grinder with vertical table and incremental feed.

1987

AVESTA, formerly ROLLO HARDY, formerly STELCO HARDY, Blaenrhondda

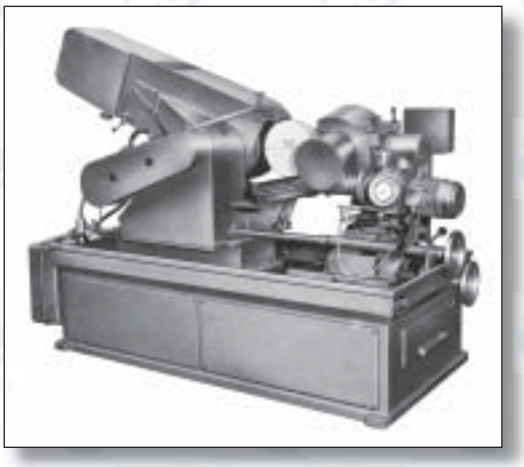
1 off 10 head abrasive belt centreless tube polishing machine. Running at 10 m/sec.

1 off 7 head abrasive belt centreless tube polishing machine.

1 off 3 head abrasive belt centreless tube polishing machine.

1987

DESFORD TUBES, Leicester



2 off extra heavy duty abrasive belt centreless machines for grinding of hardened and tempered hollow bar. Up to 300mm dia. With 20 HP motor.

1987

ACCLES AND POLLOCK, NUCLEAR DIVISION, Oldbury, Birmingham

A six head abrasive belt centreless machine for polishing nuclear tube.

From 6mm dia to approx. 75mm.

1988

APOLLO SPORTS TECHNOLOGIES LTD (formerly ACCLES AND POLLOCK), Oldbury, Birmingham

Two 5 head abrasive belt centreless machines for polishing tapered and stepped golf shafts.

With automatic loading and unloading. Production rate shaft every second. Each machine could run with one operator only.

These two machines replaced about a dozen single headed fifty year old machines, each with an operator.

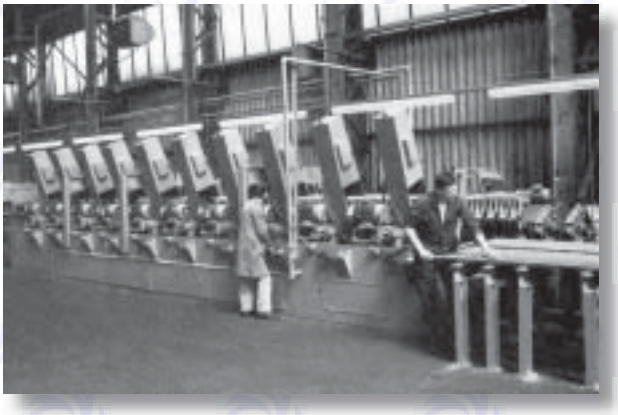
1988

AVESTA, formerly ROLLO HARDY, formerly STELCO HARDY, Blaenrhondda

1 off 7 head flatbed throughfeed machine.

1989

ENERGY TUBES, Coventry



Ten head abrasive belt centreless tube polishing for fully automated operation and automatic loading and unloading.

For tube sizes 12mm to 100mm dia and from 350mm to 6500mm long.

1989

BRITISH STEEL, Sheffield

Automatic Johannsen abrasive belt machine for grinding faults and entire surface of large steel plates up to 3m wide and 10m long.

With GEC PLC. Hot rolled, annealed and descaled. Up to 125mm thick and up to 11 tones in weight.

The machine could be programmed to automatically grind spot faults and then to grind and blend the entire surface. Plates were inspected and spot faults marked and then programmed into the machine's controls.

It then automatically recognised the spot faults and removed them. For difficult faults the machine could be operated manually from a gantry.

Abrasive belts were 300mm wide and over 20m long. The British Steel machine had 2 belt heads.

The machine replaced two dozen operators who previously ground the surface with portable power tools.

1990

BRITISH STEEL, Dalzell Works, Motherwell

Fully automatic Johannsen abrasive plate grinding machine for removing spot faults and for grinding and blending the entire surface. Very similar to the machine at British Steel in Sheffield but slightly smaller.

Abrasive belts were 300mm wide and over 20m long.

The machine replaced more than five "barrow buffing machines", ie manually operated floor grinders.

1990

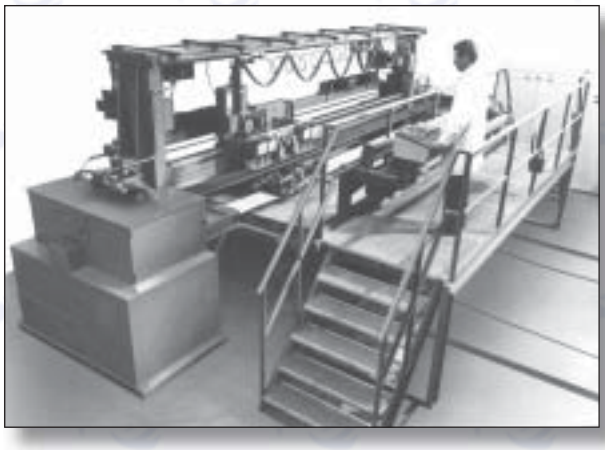
EDBRO, Bolton

Multihead abrasive belt polishing machine. With automatic load and unload facility for polishing of hydraulic cylinders for tipper lorries.

After extensive tests had been carried out this was the first time that diamond abrasive belts were used on a production machine.

1991

SILLAVAN, Bury



Automatic Johannsen abrasive belt grinding machine for grinding and polishing of plate for the nuclear industry.

Plates had to be finished to a very high standard which could only be achieved with the Johannsen. Abrasive belts were 300mm wide and approx. 15m long

This machine was of the same design as the machines at British Steel in Sheffield and Motherwell, just smaller.

1993

EMA, Turbine blade factory in Naples, Italy. In conjunction with Rolls Royce.

Abrasive belt grinding, and polishing machines and variable speed polishing machines to equip an entire new finishing department.

All machines were designed for manual operation and modified to comply with Rolls Royce's specification after lengthy trias in Surtech's Abrasive Test Centre.

1994

DONCASTERS DERITEND, Droitwich

2 off Reichmann abrasive belt power grinders with horizontal reciprocating table and incremental feed.

For grinding feeders off large turbine blades. Fully automated and programmable.

1995

ROLLS ROYCE, Derby

3 off Timesavers abrasive belt power grinders for grinding large feeders on turbine blades.

2 off machines with horizontal tables, 1 off machine with vertical table, All with 75 HP abrasive belt drive motors.

1995

WILLIAM LEE, Sheffield

A fully automated REMA grinding wheel machine for deflashing the OD of round castings from 150mm to 240mm dia. With 37 KW main motor.

1995 - 1999

MICROFINISHING ROLL GRINDER AND LATHE ATTACHMENTS PARK CROSS, COPE ENGINEERING, CYLINDER RESURFACING, PILKINGTON GLASS, B.Y.C., HOTCHKISS ENGINEERING, MARTIN TAYLOR ENGINEERING, HUNT & MOSCOP, BELOIT WALMSLEY, BOOTHAM, PRAXAIR, BEL GROUP, WALL COLMONOY, PARMARCO, AYLESFORD NEWSPRINT, TULLIS RUSSELL, VOITH SULZER, AUTOMOTIVE PRECISION, BURY ELECTROPLATING

After the 3M Company had developed Microfinishing Film, Surtech were the first and only Company to promote this revolutionary new system together with microfinishing machines from the American GEM Company.

For the first time it was possible to produce surfaces from approx. 60 CLA to below 1 CLA on rolls of all sorts of materials.

More than 25 machines were sold before other manufacturers appeared on the market with dumping prices.

1995

ROLLS ROYCE, East Kilbride

Half a dozen specially designed abrasive belt machines for grinding and finishing of refurbished turbine blades.

All with variable speed controls and the facility to change quickly from 25mm dia. to 200mm dia. contact wheels. Because the abrasive belts were driven from the rear, independently from the contact wheels the abrasive belt cutting speed remained the same no matter what size contact wheel was used.

The machines were height adjustable. Operators sat down.

1995

DONCASTERS DERITEND, Droitwich

1 off Reichmann abrasive belt power grinder with vertical table and incremental feed.

For grinding feeders off turbine blades.

1995

CENTAUR, Sheffield

1 off Reichmann abrasive belt power grinder with rise and fall table.

For grinding feeders off turbine wheels.

With robot loading and unloading and vision control check.

1996

BRITISH AEROSPACE AEROSTRUCTURES LTD, Filton, Bristol

2 off Timesavers abrasive disc machines, model CS 360 and model CS 180 for deburring clad aluminium sheet after punching on Trumph machine. Wet operation including drying unit.

1996

HOWMET, Exeter

2 off Reichmann abrasive belt power grinders with vertical table and incremental feed.

1997

TANTOFEX, East Grinstead

1 off MAPOS robot cell for linishing and polishing brass taps.

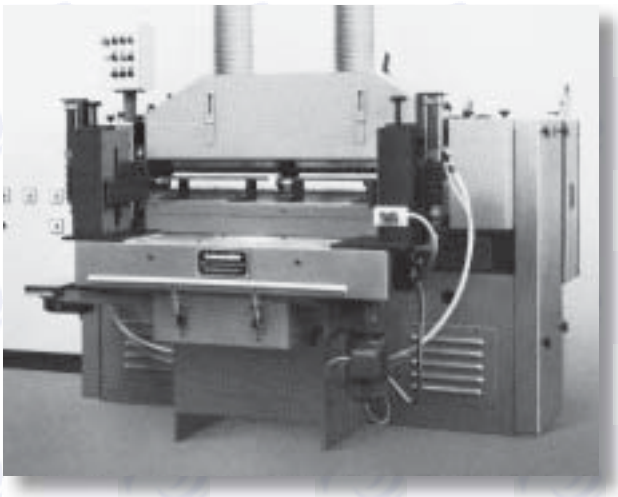
1997

BRITISH AEROSPACE DEFENCE, Brough

1 off Timesavers abrasive disc machine, model CS 360 for deburring clad aluminium sheet. Wet operation including drying unit.

1997

THESSCO, Sheffield



2 off fully automated polishing machines for cutlery and flatware. The first Sheffield Company to invest in new technology for a long time.

1998

ARMITAGE SHANKS, Wolverhampton

3 off MAPOS robot cells for linishing and polishing brass taps.

1998

SWANN MORTON, Sheffield

Automatic coil polishing and finishing line.

For stainless steel coil used in the manufacture of surgical knife blades.

1998

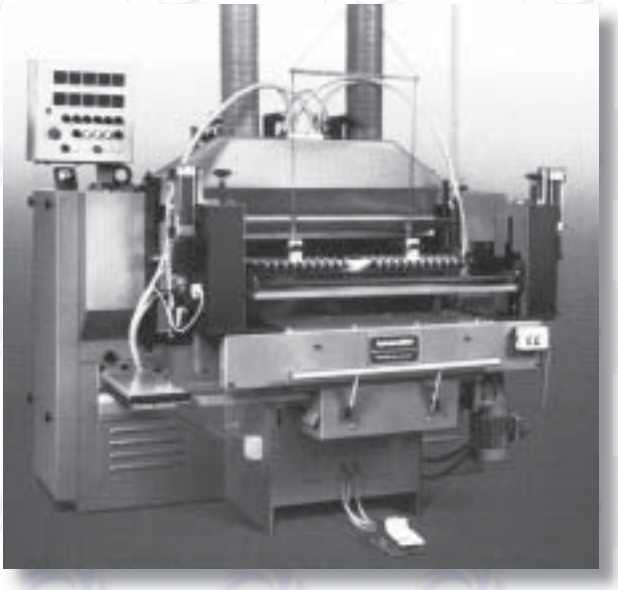
HOWMET, Exeter

A horizontal, reciprocating abrasive belt milling machine for grinding feeders on large turbine blades. With incremental feed.

This was and probably still is the largest and most powerful abrasive belt rapid grinding machine in the UK.

1999

CARRS, Sheffield



2 off fully automated HAUSCHILD cutlery and flatware polishing machines. Together with the machines at Thessco the most modern polishing machines in the Sheffield cutlery trade.

2000

EUROTECH INDUSTRIES, Wednesbury, West Midlands

2 off robot cells for linishing and polishing castings.

At the time Eurotech were the largest subcontract polishing Company for aluminium castings with more than 50 manual polishers.

The robots were the first step to automation.

2002

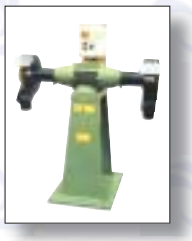
ROSS AND CATHERALL, Sheffield

Automatic machine for grinding the OD and the end faces of cast bar. With automatic load and unload. Programmable for automatic operation or for manual operation to remove spot surface faults.

Machine shown here without enclosure. Automatic loading on left. Grinding unit in the middle. End face grinder and automatic unloading on right.

2002

KCE METALS DIVISION, Dubai



Machines for equipping a new stainless steel fabrication department. Combined graining and polishing machine for sheet and other flat parts, 2 off centreless tube polishing machines, polishing lathe, range of portable abrasive power tools.

2003 - 2009

UK SUBCONTRACT POLISHERS

3 off stainless steel Marbling machines.

The machine automatically produces the circular marbling effect on stainless steel sheet and at the same time applies protective tape.

2005

TTI GROUP, Birmingham

2 off modified Rotary Table Polishing machines for finishing ball joints for the automotive industry.

2007

JRI, Sheffield

More than ?? linishing and polishing machines for finishing of surgical implants.

All machines were specially designed and modified after extensive tests in our Abrasive Test Centre to comply with the exact requirements f JRI. All with variable speed controls.

2009

ANONYMOUS UK COMPANY

The largest and most advanced abrasive disc cutting machine in the UK.

For cutting feeders from large turbine blades.

2009

ANONYMOUS UK COMPANY

The latest version of a well proven abrasive belt power grinder with reciprocating horizontal table, incremental feed and heat control to prevent material cracking.

Surtech will continue to offer the latest abrasive grinding, deburring and polishing machines from around the world.

Our Product Range

METAL FABRICATION

- Portable abrasive power tools
- Tube polishers
- Belt grinders
- Tube notchers
- Sheet polishing machines
- Throughfeed machines

AEROSPACE

- Dedicated portable abrasive machines
- Dedicated bench grinding and finishing machines
- Dedicated pedestal grinding and finishing machines
- Heavy duty belt grinders for the foundry
- Cut-off machines
- Power grinders

AUTOMOTIVE

- Robot cells for polishing trim
- Brake drum and disc grinders
- Engine block and cylinder head grinding and deburring machines
- Ball joint polishing machines
- Microfinishing machines

MEDICAL

- Dedicated manual machines for finishing surgical implants and surgical instruments
- Robots for finishing surgical implants
- Dedicated grinding and finishing machines for orthotics

FOUNDRIES

- Heavy duty belt grinders
- Cut-off machines
- Grinding machines
- Power grinders
- Cutting machines for alloy bar
- Grinding machines for alloy bar
- Brake drum and disc grinding machines
- Engine block and cylinder head grinding and deburring machines

SHEET METAL AND PLATE

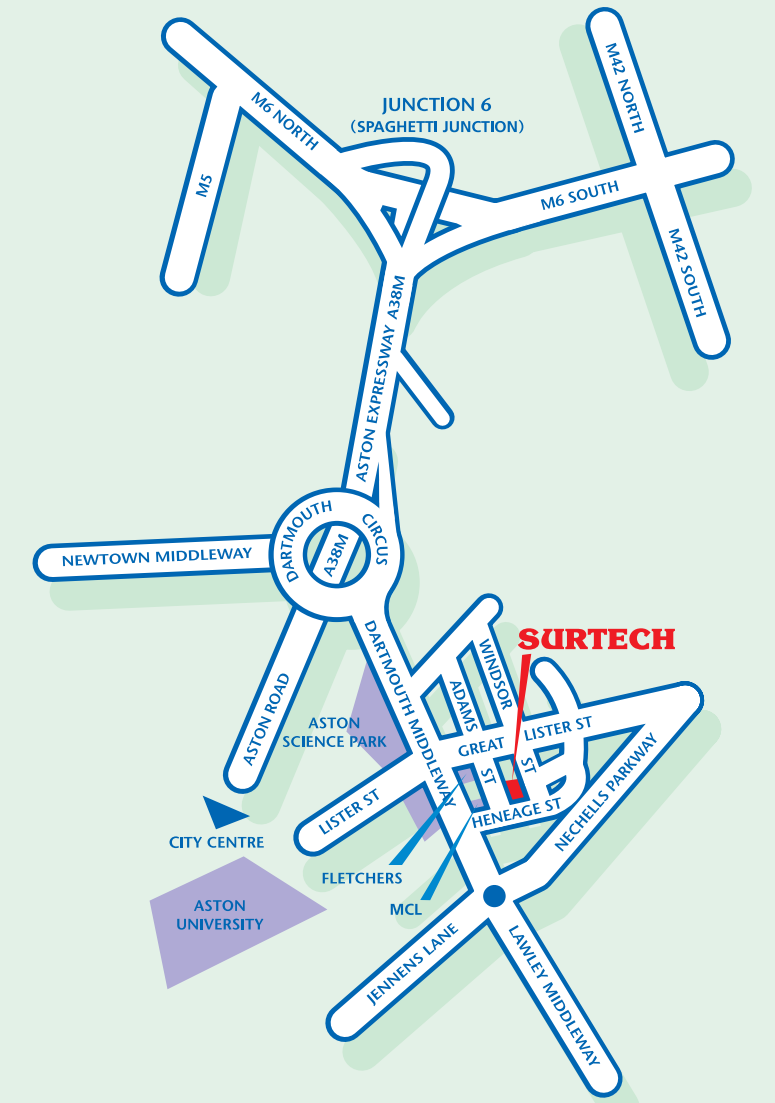
- Wide belt graining machines
- De-slagging machines
- Narrow and wide belt sheet deburring machines
- Throughfeed deburring machines with planetary deburring heads
- Cross belt deburring machines
- Sheet mirror bpolishing machines
- Marbling machines

TUBES, ROUND BAR, ROLLS

- Centreless grinding and polishing machines
- Weld seam blending machines
- Tube end deburring machines
- Microfinishing machines
- Tool post grinders
- Bar cutting machines
- Bar grinding machines
- Hollow section and flat bar finishing machines

WELDING

- Welding tables
- Bevelling machines
- Radiusing machines
- Floor grinders



Surtech

Surface Technology Products Ltd
244 Henege Street, Birmingham B7 4LY
Telephone: 0121 359 4322 Fax: 0121 359 1817
Email: sales@surtech.co.uk www.surtech.co.uk