
MICROBLADE
Sheffield, England
TOTAL QUALITY CONTROL GIVES YOU THE WORLD'S FINEST ORBITAL SAW BLADES
MICROBLADE
MADE IN SHEFFIELD-ENGLAND

Joining the latest in technology with the 200 year old craftsmanship born of Sheffield, England

Circular saws up to 812mm (32") diameter in any bore size, bevel length, or thickness in a wide variety of specifications and materials

For slitting

- Paper
- Soft tissue
- Cardboard
- Rubber
- Plastics
- Synthetic materials
- Cork

Manufactured to exacting standards

- At Microblade, we pay particular attention to the run-out tolerances of our log saw blades.

  Normal standard tolerances:

  Lateral Tolerance – ±0.15mm (0.006")

  Axial Tolerance – ± 0.25mm (0.010")
- All bevels are polished to a very high surface finish to reduce friction and heat during operation.

Using the best materials in the world

Quality blades begin with quality materials. We are experienced with selecting alloys to get the durability and toughness needed to produce excellent results during the blade's operation.

Our specifications are rigorous, and we don't accept anything less from our suppliers. The result is that you get consistent quality from one order to the next.

Machined with unerring accuracy

Inside diameters. Key-ways. Slot holes. Specially shaped bores. Give us your specifications and we'll do the rest.

You can trust our machining - it ensures that your log saw blades fit accurately onto your log saw spindles every time. There's no such thing as "close" or "almost" with our log saw blades.

Three Microblade Advantages

Filtered Coolants to hold dimensional tolerances and deliver better surface finishes.

Microblade uses a special system in which the coolant itself is cleaned and cooled during grinding.

New to European production procedures, this system produces a saw blade that reduces friction and heat build-up.

The result? less dusting and more even cuts.

Roller tensioning to minimise dusting and skewed cuts.

Roller-tensioning is a strengthening process which does not hammer the steel, yet it fortifies the steel so that the saw holds steady at operational speeds. Your advantage? Minimal flogging, or tip whipping, the key cause of dusting and skewed cuts in the log saw operation.

Fiber-optics to measure sharpness to lessen your grind-in time.

Microblade's inspection sensors (an exclusive to Microblade) can identify an area along the cutting edge which is wider than the accepted standard.

What does that mean to you? Your saws go into production faster because you spend less time finish-grinding them.

High-tech heat-treating under scrupulous supervision

We have always heat-treated our own knives, and our expertise in tempering blades is second to none.

The dilemma knife-makers face in improving hardness is this: heightening hardness lessens toughness, making the knife more brittle and prone to breaking and cracking at the edges. We have solved this problem – we have increased hardness 2.0-2.5 points on the Rc scale without any loss of toughness. All hardening and tempering is carried out at Microblade using our specially designed equipment.

Because flatness, rigidity, and durability are all vitally important to the performance of the saw, a full martensitic structure must be reached after hardening.

Smithed to perfection

No machine – even in these days of computerised technology – can work steel the same way a smither does. A large diameter/thin cross-section saw cannot be made without the contribution of this ancient craft. Our blades undergo four hand-flattening operations to ensure that the blade will retain its operating tolerance throughout its life.

Then roller-tensioned

This process increases the saw's natural strength, and by doing so prevents the saw's flogging. You produce paper with clean edges and less dust.

Hi-tech grinding - a surface finish to minimise friction

Flat and bevel grinding are performed on some of the most advanced machinery available – a process which produces perfect parallelism, dimensional accuracy, and a surface polish that reduces friction.

The cutting edge of the blade is ground after bevelling to guarantee that the blade will run perfectly true to bore during use.

Our exclusive Super Sharp Edge

All Microblade log saw blades are bevel-finished to our exclusive Super-Sharp Edge. This edge treatment means that the blade can be ground-in faster than any other blade on the market.

Our customers report a grindin-time of less than 2 minutes per blade.

Operator protection to prevent injuries

Mounting and fitting orbital saw blades to converting machinery is a hazardous process.

We've solved the problem by adding a thermoplastic rubber guard to the edge of our blades. The guard stays in place until the blade is fully mounted.

WE SOLVE THE PROBLEMS OF SPECIAL JOBS

Alternative surface finishes

Microblade offers a complete coating service for special applications. Consult with us to select the most suitable coating for your operation. For example:

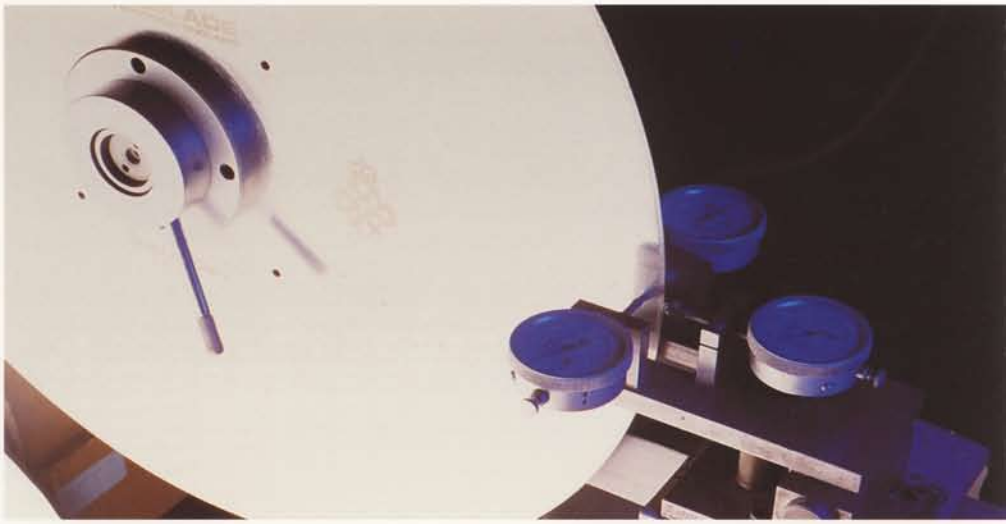
For adhesive materials

Similar coatings can be used to prevent product adhesion when slitting adhesive-backed tapes, bitumen-based materials, and other tacky materials that are difficult to work with.

Rubber and other adhesion cutting applications

Circular knives used in these industries must withstand very high cutting forces: the material is dense, the friction produces extreme heat, and product adhesion is a resulting problem.

High surface finish and the accuracy of the blade's axial run-out are critical to success in these operations. We can help you solve these problems.



Packing, inspection and distribution

Before leaving our factory, all blades are tested for axial and lateral run-out.

Protective guards are applied to the blade, and they are packed in water-resistant paper and wooden packing cases.

Such care ensures that the blades reach you in the same condition as they left Microblade. We use only the most efficient and careful shippers.

How did Microblade become the world market leader and win the Queen's Award for Export Achievement in under 5 years?

Dedication to crafting saws and serving customers has made Microblade Limited the world's leading log saw manufacturer. The company was founded on the principles of good business:

- High quality blades
- Efficient service
- Competitive prices
- On-time deliveries
- Unflagging quality control

We begin with only the finest material. Our specifications are so demanding that only two mills in the world have been able to satisfy our rigid standards.

We then laser-cut our steel to minimise stressing and to maintain flatness in the saw blade.

We heat-treat "in house" because we believe this step is too critical to trust to sub-contractors. The result? A fine- grained tool steel with excellent wear—resistance and the toughness to do its job.

After hardening and tempering, the saws go through a number of finish-grinding and smithing processes.

Our smithers are so skilled that they smith the saws without leaving hammermarks. Hammermarks eventually cause cracking in the blade.

MICROBLADE
Sheffield, England

Registered Office:
Microblade Limited, 102 Fitzwalter Road,
Sheffield S2 2SP, England
Tel: (0742) 758577 Fax: (0742) 758417

THE WORLD'S PREMIER FAMILY OF KNIFE MAKERS

KINETIC

MICROBLADE
Sheffield, England

ORBITAL SAW

ROLLER TENSIONED
SUPER SHARP PLUS
EDGE EXTREMELY
SHARP AND CAN
CUT YOU!