



The originator and industry leader in
Deburring Tools

COGSDILL TOOL PRODUCTS
BURRAWAY @ 6.0MM USA FEB-22

NO MORE BURRS

Deburring • Chamfering • Countersinking

ONE-PASS DEBURRING

cogsdill.co.uk

Both Sides in One Pass

A burr is found on the entrance and exit of a drilled hole and the degree and size of the burr is dependent on the material and sharpness of the drill.

Deburring holes is usually a costly and time-consuming operation, with the back sides of holes being particularly difficult as they are frequently inaccessible with conventional deburring tools. We eliminate the need to deburr by hand by providing different styles of tools to suit many applications.

Cogsdill is the industry leader and the originator of 'one-pass deburring', proudly trusted to ensure the precision finishing of countless components from leading manufacturers around the world. By allowing the user to easily deburr the front and back of the holes in one single pass, unwanted material on both sides is deburred in seconds!

Complete with different coatings, blade styles and cutting-edge geometry options to match every scenario and suit different materials – as well as simple change mechanisms and tension adjustments – both flat and irregular shapes can be finished to exacting standards in a fast and simple manner. Cogsdill gives you the most flexibility of any deburring tool and ensures production time is maximised without negating precision, performance or accuracy.

The tools range from 1.57mm / 0.093" (3/32) through to 50mm / 2 inches in both metric and imperial as standard, with other sizes available upon request. The Deburring tools are suited for CNC set-ups, power tools as well as hand-finishing to suit your own specific manufacturing requirements.

Tools available:

Hole deburring tools (inc. Elliptical deburring)

Offers a consistent deburring of even and uneven bore edges – both front and back – in one operation.

Chamfering tools (inc. Back-Spotfacing)

An economic way for front and back chamfering in one operation, complete with easy blade changes.

Countersinking tool

The ultimate in precision countersinking to enlarge and bevel the rim of any drilled hole.



ACTUAL SIZE



Meet the Micro Burraway

The smallest tool in our deburring range!



Here are just some of the applications:

- Prop Shafts
- Derailler Gears
- Coupling Flanges
- Turbine Shafts
- Rotor Hubs
- Alloy Wheels
- Wheel Hubs & Spacers
- Drilled Brake Discs
- Common Rails
- Spindle Housings
- Pivot Bolts
- Cylinder Heads
- Crankshafts
- Valve Guides
- Connecting Rods
- Manifolds
- Differentials
- Fly Wheels
- Turbochargers
- Gear Housings
- Steering Joints

Simple tool adjustments. Multiple cutting geometries.

Incredible cost efficiencies.

Taking the edge off

Burraway tools suit a variety of machines from manual to CNC – and can even be used in a hand-drill with excellent results.

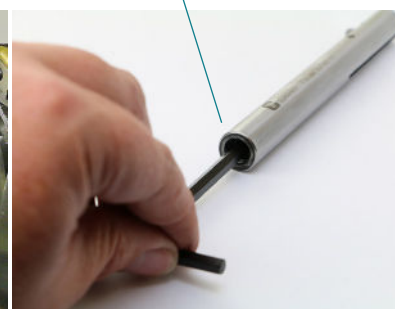
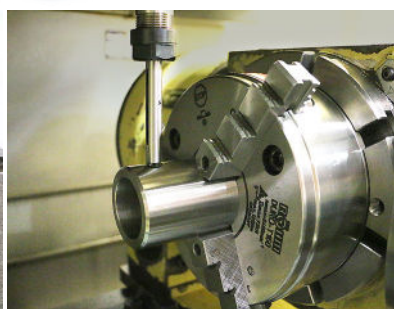
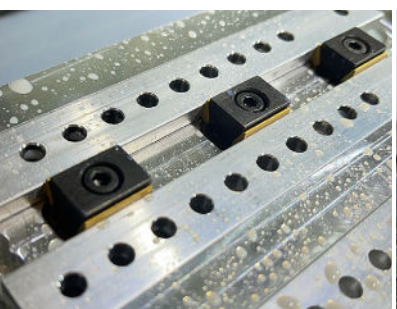
They are available in an assortment of metric and imperial sizes ranging from 2mm to 50mm / 0.093" (3/32") to 2 inches, with a range of standard size tools and blades always held in stock.

The Burraway tools feature an inexpensive, replaceable cutting blade which adjusts to control the amount of edge break and can be easily replaced within a few seconds. A range of cutting-edge geometry options to suit different materials are offered, and as standard, tools are supplied already fitted with a double acting blade.

The crowned and polished top surface of the blade will not mar the inside surface of the hole.

All Burraway tools support a simple method for easily adjusting cutting pressure and chamfer size via a tension adjustment screw.

Polished blades are designed **not** to damage the bore.



Design features

There are three types of Burraway tools – Types A, B & C – that correspond to differing diameters.

Type A tools

Two-piece construction (arbor assembly and adapter).

- Metric: hole sizes from 2 to 5mm
- Imperial: hole sizes from .093 through .203 in.

Type B tools

A single-piece construction.

- Metric: hole sizes from 5.5 through 19mm
- Imperial: hole sizes from .218 through .750 in.

Type C tools

A single-piece construction.

- Metric: hole sizes from 20 through 50mm
- Imperial: hole sizes from .750 through 2 in.

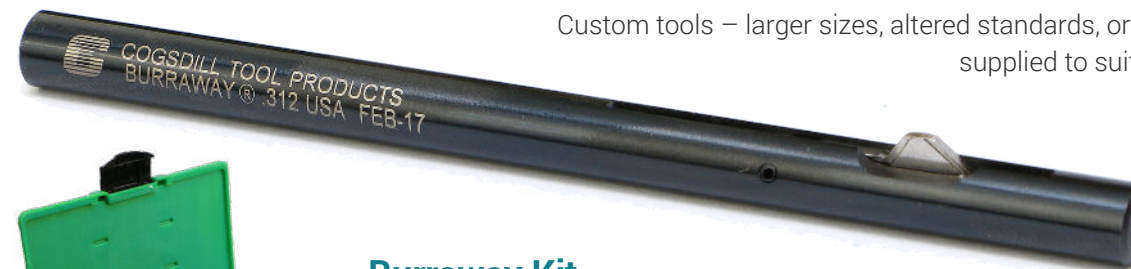


Simple Adjustments. Multiple Options.

A variety of tool designs to meet your needs

Burraway tools are available for both metric and imperial hole sizes. Standard drill sizes are available from stock.

Custom tools – larger sizes, altered standards, or special designs – can also be supplied to suit your particular requirements.



Burraway Kit

A durable box containing five deburring tools with replacement blades in popular imperial hole sizes:

1/8 in. • 5/32 in. • 3/16 in. • 7/32 in. • 1/4 in.

SMALLEST JUST GOT SMALLER

Micro-Burraway for your small hole applications from Ø 1mm

Both Sides in One Pass



How Burraway tools work:

- 1 Upon entry, spring tension holds the cutting blade in the extended position as it removes the burr on the front of the hole.
- 2 As the feed load increases, the pre-set spring tension is exceeded and the blade retracts automatically as the tool passes through the workpiece.
- 3 Spring tension again causes the blade to extend as it emerges from the ID of the part; the burr is removed on the back side of the hole on the return stroke.

Blade information

Various blade rake angles and spring tension options are available and recommended for deburring specific material types.

- Positive rake – Ideal for steels and stainless steels
- Negative rake – Ideal for softer materials such as brass or hard plastics
- Neutral rake – Ideal for aluminum



Double-Acting (DA)

For deburring both front and back of holes



Back-Acting (BA)

For deburring back of hole only



Front-Acting (FA)

For deburring front of hole only

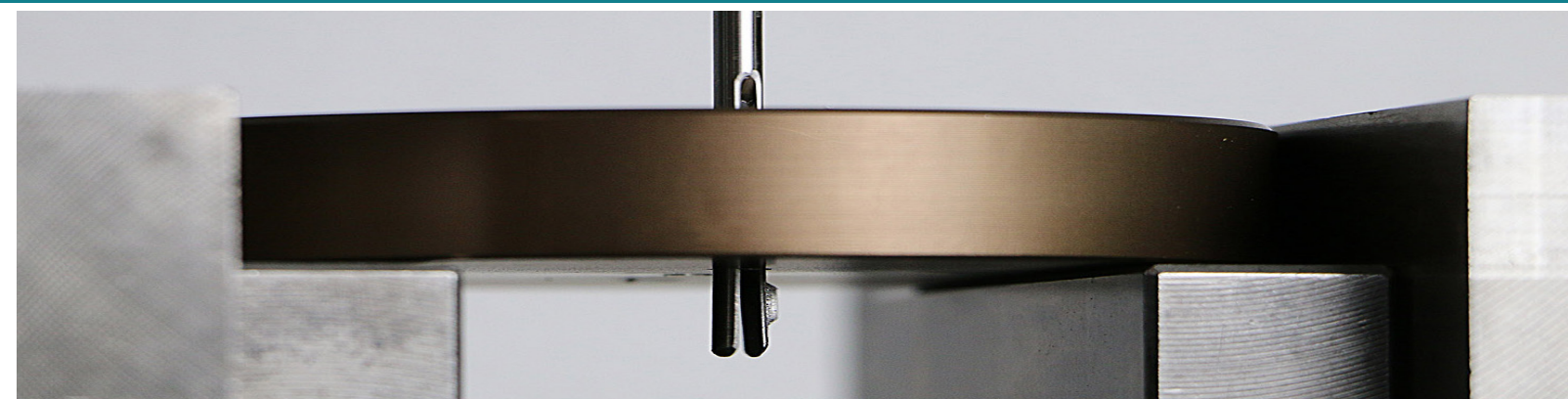


The original “Clothes Pin” tool

Often copied but never beaten, Burr-Off is one of the most efficient and economical hole de-burring tools ever made for mass production.

Cogsdill originated the “Clothes Pin” tool over half a century ago. The Burr-Off is a simple one-piece construction. Delivering super efficient hole deburring in a wide range of sizes. The Burr-Off operates on the same basic principle as the Burraway, but is designed for high-production, automated deburring operations, where hole alignment can *not* be guaranteed – and primarily for ferrous materials. The open-slot design of the “clothes pin” tool allows chips to clear easily, which makes the tool ideal for automatic equipment and multi-spindle machines. Just like the Burraway, the Burr-Off deburrs the front, back, or both sides of holes in one fast pass.

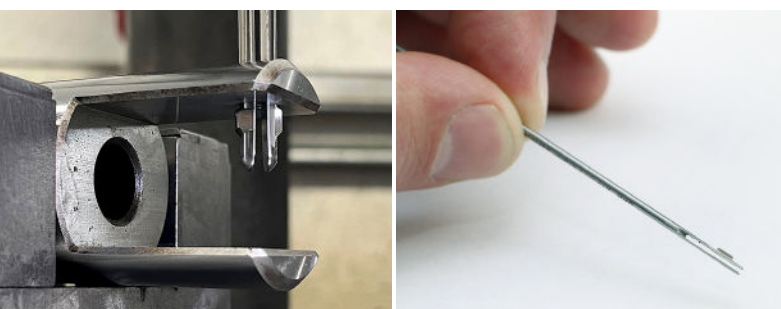
*Burr-Off tools
 CP-04 through CP-13
 are for hole sizes from
 1.57mm (.062 inch) through
 5.56mm (.219 inch) and have
 a single cutting edge. Larger tools
 feature two cutting edges.*



High volume. No adjustment.

For mass production hole de-burring with no tool adjustment necessary.

Ideal for where access is restricted, Burr-Off tools are perfect for interrupted or interference cuts, holes close to shoulders, bosses, back folded sections, multi-layer or multi-sectional parts – pipes, tubes, liners housings, flanges – whether cast, stamped, extruded or machined.



How Burr-Off tools work:

- 1 Integral cutting edges remove the burr from the front of the hole as the tool enters the hole.
- 2 The slotted design allows the tool to “collapse” under load as the tool feeds through the workpiece. The crowned and polished top surface of the cutting edges will not mar the inside surface of the hole.
- 3 The back of the hole is deburred on the return stroke.

Both Sides in One Pass

CROSS-HOLE DEBURRING



IDEAL FOR FERROUS

Variety of tools

Burr-Off tools are available for both metric and imperial hole sizes. Standard drill sizes are available from stock.

The integral cutting edges can be altered upon request for front or back-cutting only.

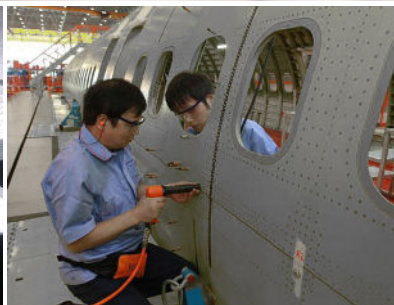
Custom tools – larger sizes, altered standards, or special designs – can also be supplied to suit your particular requirements.



Micro stop. Piloted countersink.

Precision depth control with accuracy and consistency.

IDEAL FOR AIRCRAFT



Countersink with precision

The Micro-Limit is a precision depth-control countersinking tool. Consisting of a drive with a piloted countersink and a depth control adjustment feature, suitable for hand held power tools or machine tools.

The Micro-Limit drive is designed and built for rugged production work with repetitive accuracy. The thrust load is taken up on ball bearings through a hardened steel stop collar. The drive shaft rides on needle bearings. This design makes our drive the most durable in the industry and why it is the preferred countersinking tool for high-production requirements, such as rivet hole preparation in aircraft manufacturing.

Three drive models cover a wide range of hole sizes. Adjustment is in increments of .025mm (.001 inch).

An array of interchangeable countersinks and pilots are available as standard.

The Micro-Limit is also offered with an overtravel unit built into the standard drive.



Elliptical Illusion

The Elipti-Bur® is designed for deburring irregular hole surfaces, such as those which are generated by drilling into curved surfaces, or by drilling at an angle. Enabling the user to perform these difficult deburring operations quickly and accurately, and without jigs, fixtures, or special operator skills.

This automatic self guiding feature produces a relatively uniform break on the edge of the hole.

Design Features

The Elipti-Bur features a spring-loaded and self-centering conical pilot to locate and seat the tool for consistent results. Upon contact with the part, the HSS blade disengages and floats, remaining free to oscillate and follow the irregular surface geometry of the hole. This ensures both radial displacement resulting from the elliptical shape of angular drilled holes and axial displacement ("rise and fall") from the saddle shaped configuration of holes drilled in cylindrical surfaces.

All essential tool parts are hardened and ground for durability.

Three models cover a range of hole sizes from 3.96 to 25.4mm (5/32 to one inch).



Curved surfaces.
Simply deburred.

IDEAL FOR OIL HOLES



Flippin' Genius

The Flipcut is designed to perform back-spotfacing or back-chamfering operations in one set-up.



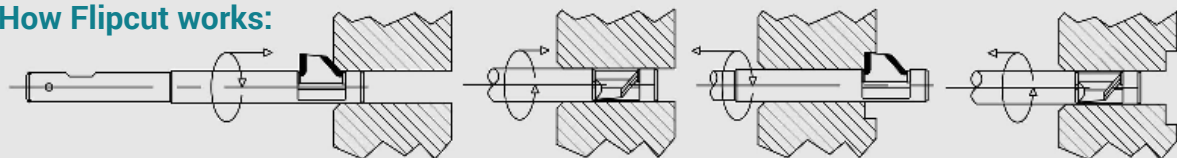
The cutter extends, with right-hand rotation of the tool. Left-hand rotation initiates positive mechanical closure of the cutter; assisted by centrifugal force. When the cutter is fully enclosed within the arbor pocket, the tool can be easily withdrawn from the bore. The steel body absorbs any shock.

Two standard cutters are available:

- Cutter designed for back-spotfacing and front-chamfering operations.
- Cutter designed for back- and front-chamfering operations

The brazed carbide cutting edges dissipate heat, for outstanding cutting performance.

How Flipcut works:



Nobur JB

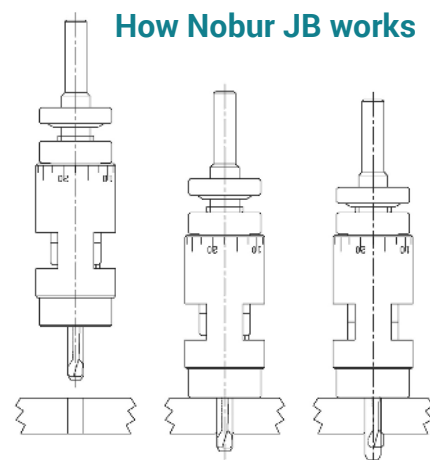
Automatic Back-Chamfering

For back-chamfering or deburring on drill presses, CNC machines, tool or turret lathes, multi-spindle machines and jig boring machines.

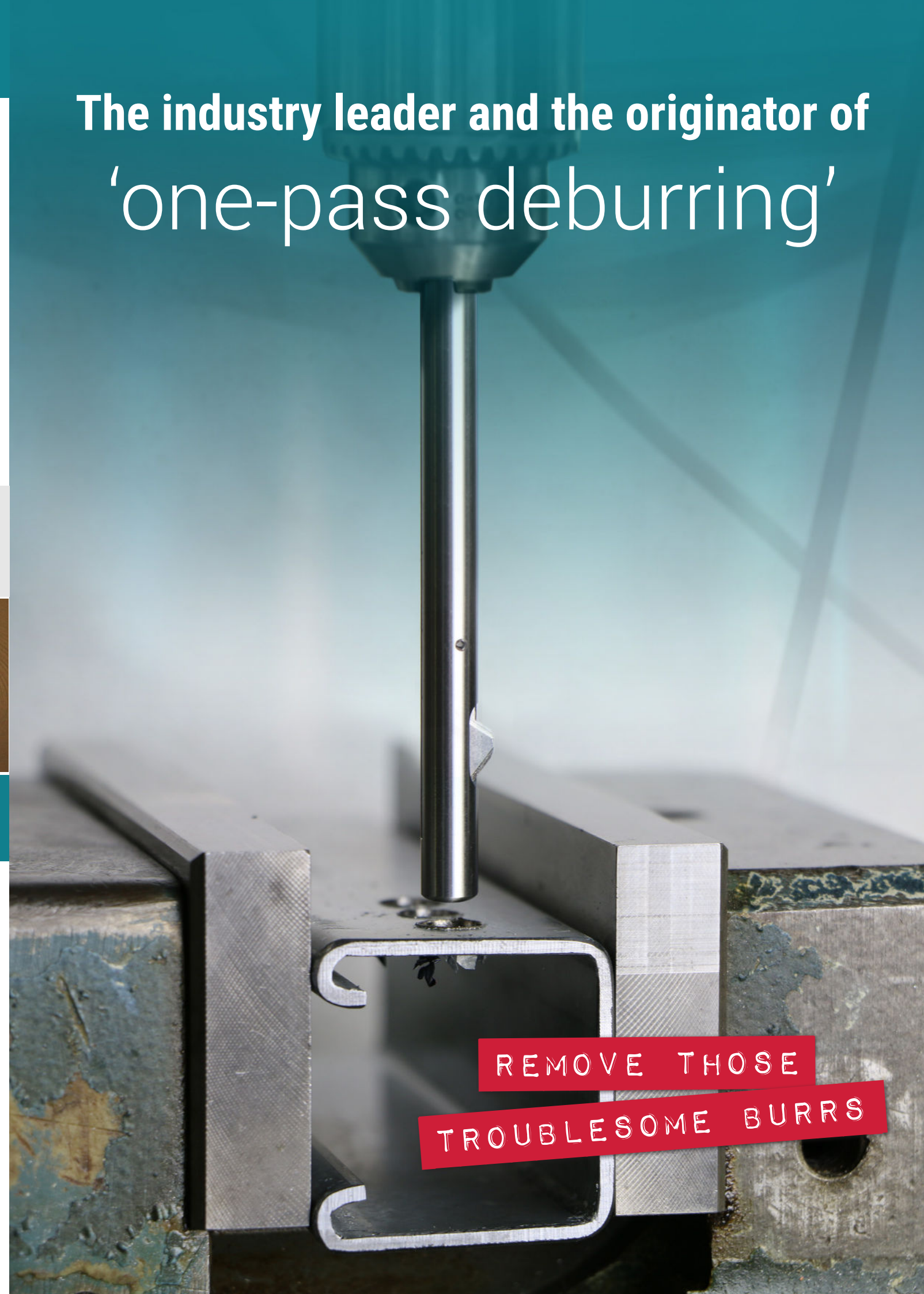
Features:

- Consistently accurate back-chamfering, deburring, and back-countersinking operations
- Pilots in hole for precise concentricity
- Rigid support of the cutter virtually eliminates deflection
- Micrometer-stop adjustment
- Standard pilots and cutters for hole sizes from 4.75 to 19.05mm (3/16 to 3/4")
- Special pilots and cutters upon request

How Nobur JB works



The industry leader and the originator of 'one-pass deburring'



REMOVE THOSE
TROUBLESOME BURRS

All the small things

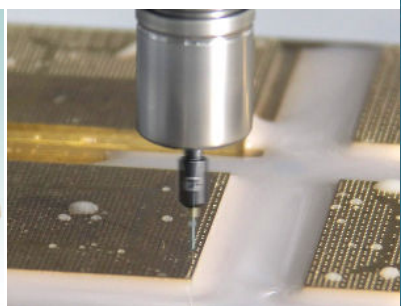
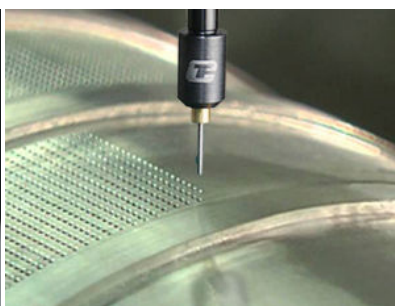
With medical, automotive and electronic applications ever demanding continually smaller sized holes, the Micro Burraway series of tools will deburr both sides of even the smallest of holes in one pass.

Suitable for materials such as aluminium, steel, stainless steel, titanium and even composites, these micro deburring tools suit holes ranging from 1.00mm (.040") to 2.33mm (.092").

Designed with a flexible blade that retracts into the arbor to adjust to the hole's diameter, the Micro Burraway series features inexpensive, replaceable cartridges which include the blade and arbor, and a standard cartridge holder that has a larger 6mm (.234") shank for convenient clamping. The cartridges are available in different sizes.

Micro Burraway is offered with two blade choices; Double-acting as standard (front & rear cutting) or Back-acting (rear cutting only).

A one-pass solution for your small hole deburring applications.



Small Hole. No Problem.



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See our tools
in action on



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