



Sourcing Technology Globally

Universal

Diamond Burnishing Tools



SHINE BRIGHT

like a diamond (burnished surface)

ELIMINATE GRINDING!

cogsdill.com



Universally speaking

The latest addition to the Cogsdill Burnishing portfolio is the Universal Diamond Burnishing Tool Series (UDBT). UDBT are designed to produce mirror-like finishes on any surface; from carbon steels to tool steels, cast iron to alloys, and most ferrous and non-ferrous metals up to 55 HRC.

With most metals, a turned or ground part with a prepared 1.02–1.54 µm (40–60 µin) finish can be burnished to a 0.10–0.20 µm (4–8 µin) finish in seconds. Cast iron can be burnished to an 0.20–0.38 µm (8–15 µin) finish.

Using Cogsdill's proven diamond insert geometry, our premium range of burnishing tools can achieve low Ra surface finishes in one pass – achieving results not attainable from any other metal removal process.



Standard model ranges available from stock:

- UDBT-S-25 (Straight Shank with 25mm square section)
- UDBT-S-0750 (Straight Shank with 3/4" square section)
- UDBT-S-1.00 (Straight Shank with 1" square section)
- UDBT-C4, UDBT-C5 and UDBT-C6 – integrated Capto Shank supplied with through coolant capability

Other shanks available upon request:

- KM50 and KM63 – integrated KM with through coolant capability

For when size matters



The range has just got bigger (actually, it's just got smaller!)

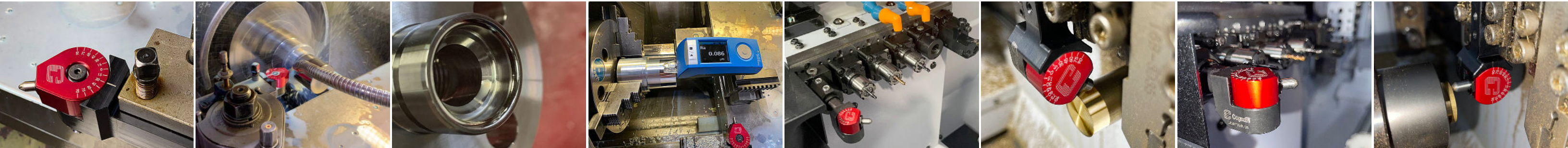
Following on from the success of the original UDBT, we are pleased to introduce a smaller sibling designed specifically for CNC sliding head lathes (Swiss-type).

Cogsdill Universal Diamond Burnishing Tool Mini Series (UDBTM) is a compact burnishing solution, with the adjustment head not much bigger than a penny (as shown in the illustration). But don't let its small size fool you, this tool offers huge return on investment.



There are currently two different models available from stock:

- UDBTM-S-12 (Square Shank with 12mm section + included clamp plate assembly)
- UDBTM-R-16 (Round Shank with 16mm diameter)



Simple and Efficient

UDBT are designed to be adjustable through 180 degrees, which makes them the ideal choice tool for lower volume batch components where a designated orientated tool is not required.

This single tool streamlines operations significantly as it can be utilized in either left or right-handed machine configurations – eliminating the need for multiple tools in specific environments.

Further more, set up and operation is relatively simple, no special operator skills are required.

As a result, Cogsdill UDBT offers incredible production efficiencies and cost effectiveness.

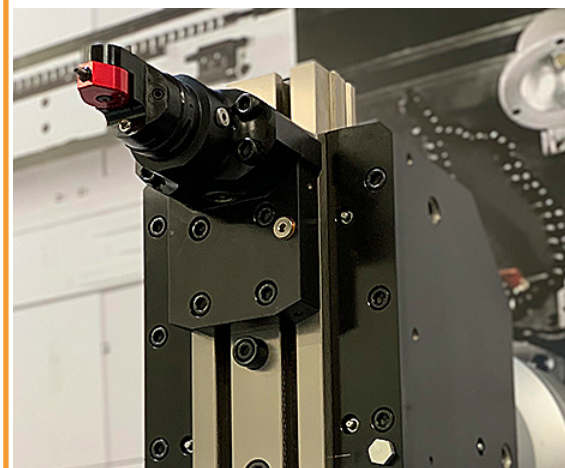
UDBT offers flexibility for burnishing large bores, outside diameters, tapers and faces to achieve superior surface finishes not possible by turning alone.



The quick and simple castellated adjustment makes this the most versatile diamond burnishing tool on the market.

Did you know?

By combining Cogsdill's premium range of burnishing tools with the ZX facing heads, you can now achieve low Ra surface finishes in one pass from a single set-up.

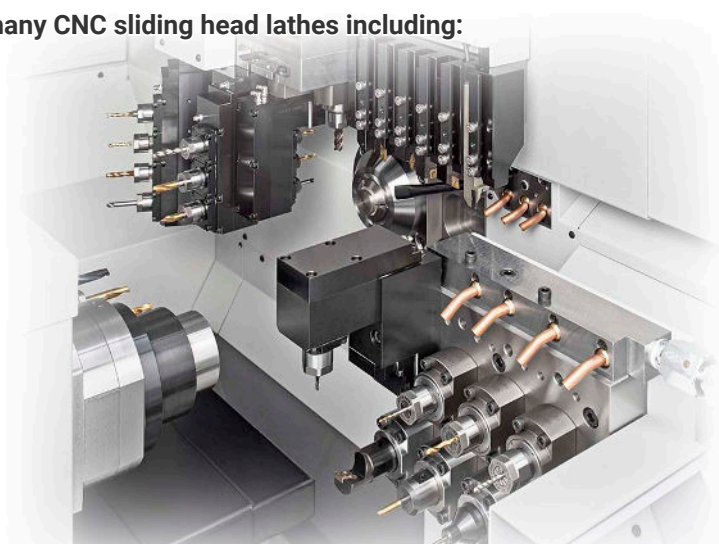


Machine tool requirements

Developed as a solution for burnishing on CNC Swiss-type sliding head machines, this single tool streamlines operations significantly as it can be utilised in either left or right-handed machine configurations, with either round or square shanks to suit tool post or collet installation.

Compatible with many CNC sliding head lathes including:

- star
- Mazak
- NOMURA SWISS
- TORNOS
- NEXTURN SWISS TURN LEADER
- CITIZEN
- DN SOLUTIONS

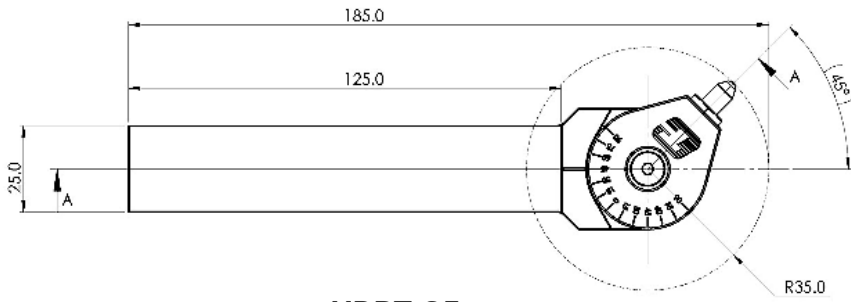


All diamonds that Cogsdill use in their tool manufacturing are sourced via De Beers and adhere to their Code of Origin to provide assurance that it is natural, conflict free and meets industry-leading ethical standards.

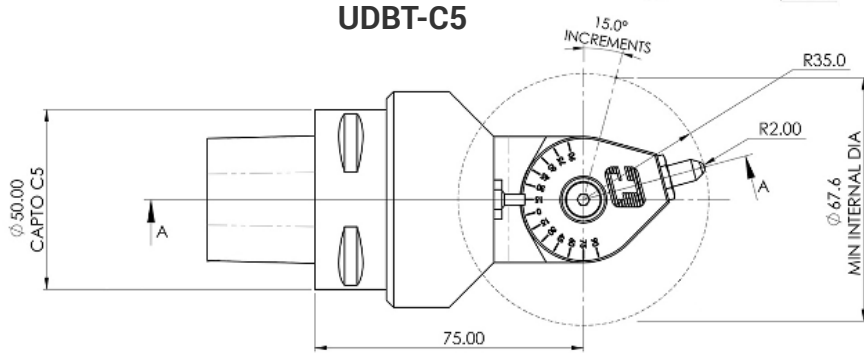


Standard Series

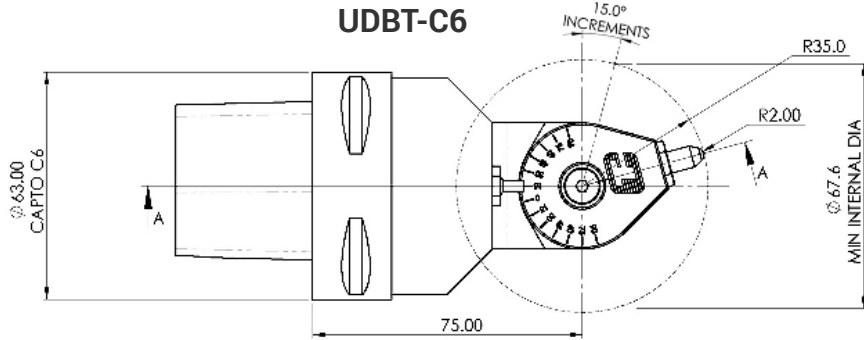
UDBT-S-25



UDBT-C5

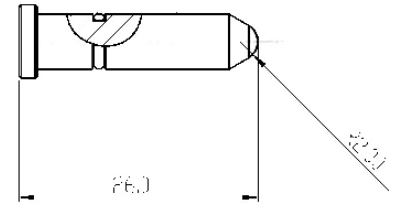


UDBT-C6



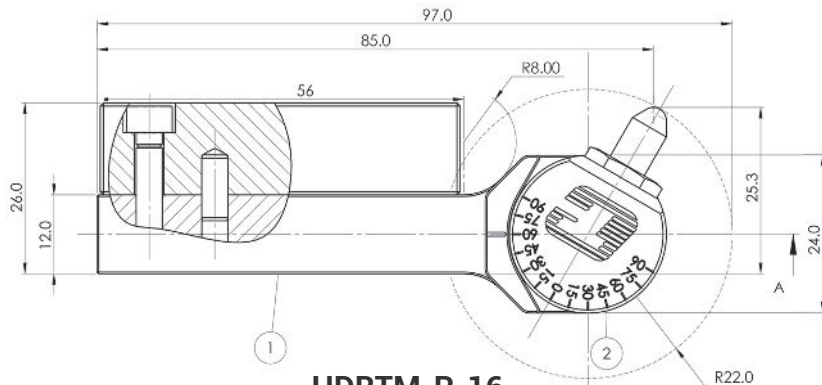
Replaceable Diamond Nibs

The Diamond nibs are easily replaced once they have worn. The nibs are interchangeable between all sizes and styles across the UDBT/M series.



Mini Series

UDBTM-S-12



UDBTM-R-16

