



Simplify Machining™

Mirror Surface Finish in ONE Pass!

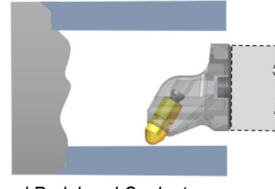
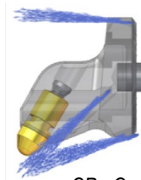
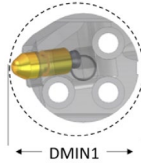
Up To 15xD!

MAQ's Diamond Burnishing process for internal surfaces is known for its capacity to create a shiny surface finish with reduced friction, combined with the advantage of a hardened surface layer for wear resistance and a dense surface topology for its chemical resistance. **Mounted on an MAQ STMD Turning Tool Holder**, the burnishing tool will bring all these advantages to your turning machine, even for the internal turning operation, without even changing the setup of your workpiece clamping.

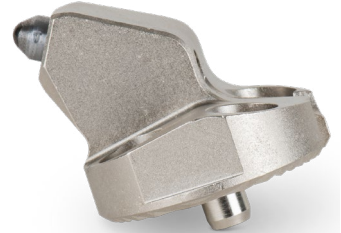
You just change the cutter head from your turning head to the burnishing head and run it!

## Diamond Burnishing Heads

(with a diamond nib installed)



CP - Central and Peripheral Coolant



CALIBER Order Number	Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	$\alpha$ (°)	Burnishing Nib	Nib Crew	Weight (kg)	SALE PRICE
330-300631	SL20 DB CP	SL 20	21	21	12	30	R 061402	IS M3x7	0,02	\$1,302.00
330-300632	SL25 DB CP	SL 25	30	25	16	30	R 061402	IS M3x7	0,04	\$1,302.00
330-300633	SL32 DB CP	SL 32	38	33	20	30	R 061402	IS M3x7	0,07	\$1,432.20
330-300634	SL40 DB CP	SL 40	43	34	24	30	R 061402	IS M3x7	0,14	\$1,453.90

## APPLICATIONS

The MAQ diamond burnishing tool works on carbon steel, tool steel, cast iron, ferrous and non-ferrous (P, M, K, N, S) materials. Suggested starting machining parameter to all materials:

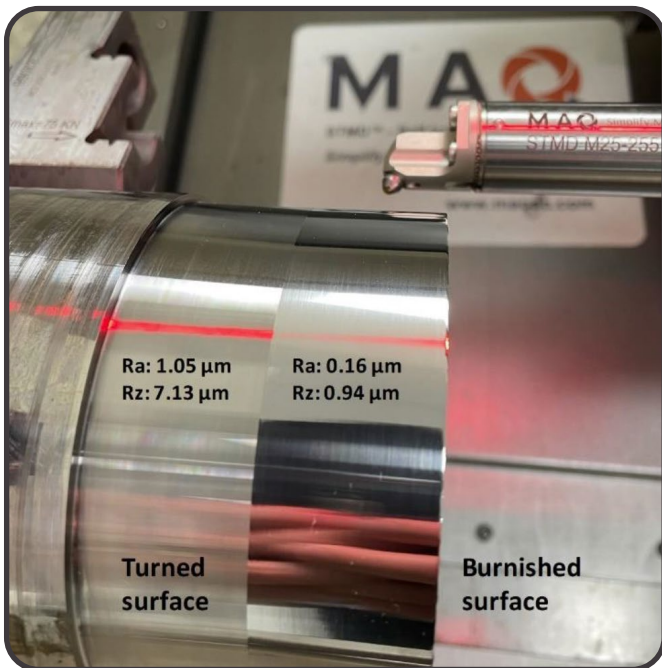
Interference with workpiece material 0.05-0.2 mm (0.002-0.003 inch)

- Cutting speed 60-230 m/min (200-750 SFM)

- Feed rate 0.08-0.15 mm/rev (0.003-0.006 IPR)

We recommend a feed rate at 70% of the feed rate in previous turning operation. Start with interference of 0.1 mm (0.004 inch) and increase the interference if the surface finish is not reached. Recommended surface finish prior burnishing operation is  $R_a < 1.6 \mu\text{m}$  (64  $\mu\text{inch}$ ). After burnishing, the surface finish can normally reach  $R_a < 0.3 \mu\text{m}$ .

**Note:** diamond burnishing normally has negligible impact on the size of the bore. A typical bore size change in burnishing of high alloy steel 4340 is within 10-15  $\mu\text{m}$  (0.0004-0.0006 inch).



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Watch This Quick Demo!



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