



## Carbide-Roll Burnishing Tools

### Outside Surface



Now available  
with metric shanks!

### Boring Bar Style



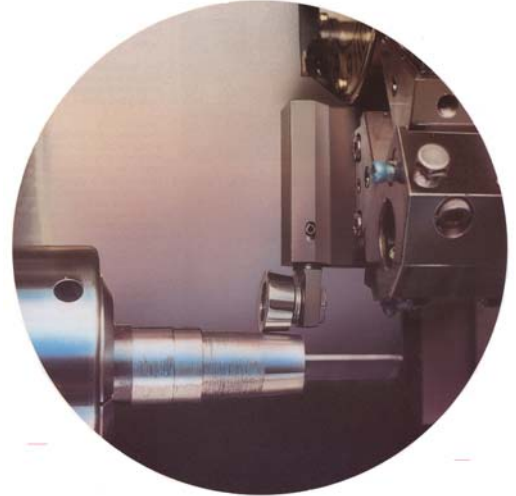
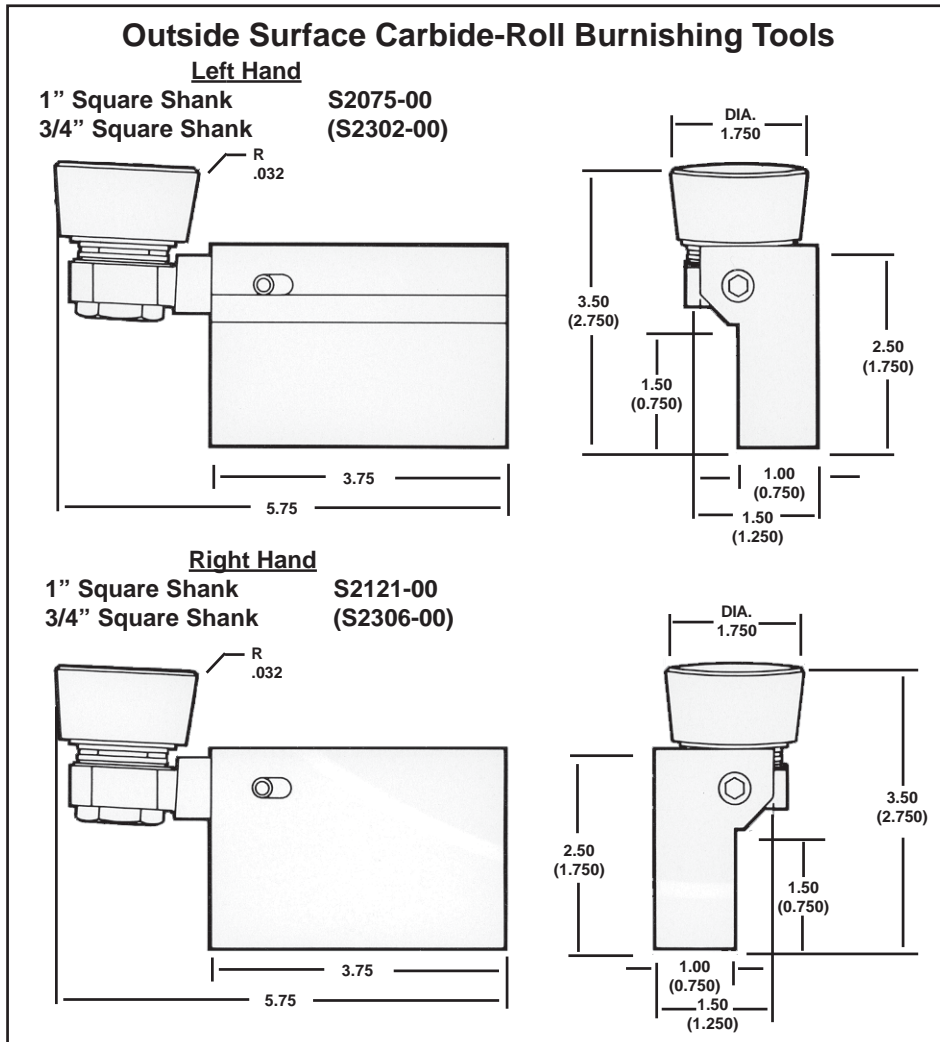
- **Mirror-like surface finish**
- **Economical and Easy to use**
- **Eliminate secondary operations**

Ask about our  
Carbide-Roll  
Re-Conditioning Service!

Marketed by:



# ELLIOTT OUTSIDE SURFACE CARBIDE-ROLL BURNISHING TOOLS



- Reduce machining cost
- Eliminate secondary operations and machines
- Burnish on CNC turning centers and manual lathes
- Produce 4 to 20 microinch (0.1 to 0.5 μm) surface finishes
- Economical tool life with carbide rolls and roll reconditioning program



Tool Number	Shank Size (square)	Left/Right Hand	Roll Radius
S2075-00	1"	LH	0.032" (0.787mm)
S2075-00M	25mm	LH	0.032" (0.787mm)
S2121-00	1"	RH	0.032" (0.787mm)
S2121-00M	25mm	RH	0.032" (0.787mm)
S2548-00	1"	LH	0.062" (1.57mm)
S2548-00M	25mm	LH	0.062" (1.57mm)
S2549-00	1"	RH	0.062" (1.57mm)
S2549-00M	25mm	RH	0.062" (1.57mm)
S2327-00	1"	LH	0.093" (2.36mm)
S2327-00M	25mm	LH	0.093" (2.36mm)
S2233-00	1"	RH	0.093" (2.36mm)
S2233-00M	25mm	RH	0.093" (2.36mm)
5900-100-80477	1"	LH	0.125" (3.175mm)
5900-100-80477M	25mm	LH	0.125" (3.175mm)
5900-100-80558	1"	RH	0.125" (3.175mm)
5900-100-80558M	25mm	RH	0.125" (3.175mm)
S2302-00	3/4"	LH	0.032" (0.787mm)
S2306-00	3/4"	RH	0.032" (0.787mm)
S2427-00	3/4"	LH	0.093" (2.36mm)
S2488-00	3/4"	RH	0.093" (2.36mm)
S2313-00	1-1/4"	LH	0.032" (0.787mm)
S2384-00	1-1/4"	RH	0.032" (0.787mm)

Notes: Other sizes and specials are available on request

### Burnish multiple surfaces after turning

The Outside Surface Carbide-Roll Burnishing Tool is mounted in the turret of a CNC turning center or tool post on a manual lathe.

Part surfaces are turned to an 80 to 100 microinch finish using speeds consistent with good machining practices. The carbide burnishing tool then follows the same path at comparable speeds to the turning operation, producing a 5 to 8 microinch finish. This eliminates secondary operations and additional equipment.

The outside surface tool is offered in multiple designs (see chart above). The carbide rolls are available from stock in four radii; .032", .062", .093" and .125".

## BORING BAR STYLE CARBIDE-ROLL BURNISHING TOOLS

- Reduce machining cost
- Eliminate secondary operations and machines
- Burnish on CNC turning centers and manual lathes
- Produce 4 to 20 microinch (0.1 to 0.5  $\mu\text{m}$ ) surface finishes
- Economical tool life with carbide rolls and roll reconditioning program



Tool Number	Shank Size (cylindrical)	OAL	Effective Reach	Roll Radius
S2289-00	Ø1.5"	9.5" (241.3mm)	3.1" (78.74mm)	0.032" (0.787mm)
S2289-00M	Ø40mm	9.5" (241.3mm)	3.1" (78.74mm)	0.032" (0.787mm)
S2289A00	Ø1.5"	9.5" (241.3mm)	3.1" (78.74mm)	0.093" (2.36mm)
S2289A00M	Ø40mm	9.5" (241.3mm)	3.1" (78.74mm)	0.093" (2.36mm)
S2289B00	Ø1.5"	9.5" (241.3mm)	3.1" (78.74mm)	0.062" (1.57mm)
S2289B00M	Ø40mm	9.5" (241.3mm)	3.1" (78.74mm)	0.062" (1.57mm)
S2320-00	Ø2"	12" (304.8mm)	6" (152.4mm)	0.032" (0.787mm)
S2320-00M	Ø50mm	12" (304.8mm)	6" (152.4mm)	0.032" (0.787mm)
S2340-00	Ø2"	12" (304.8mm)	6" (152.4mm)	0.093" (2.36mm)
S2340-00M	Ø50mm	12" (304.8mm)	6" (152.4mm)	0.093" (2.36mm)
CB127-00	Ø2"	12" (304.8mm)	6" (152.4mm)	0.062" (1.57mm)
CB127-00M	Ø50mm	12" (304.8mm)	6" (152.4mm)	0.062" (1.57mm)
S2320A00	Ø2"	18" (457.2mm)	12" (304.8mm)	0.032" (0.787mm)
S2320A00M	Ø50mm	18" (457.2mm)	12" (304.8mm)	0.032" (0.787mm)
CB168-00	Ø2"	18" (457.2mm)	12" (304.8mm)	0.062" (1.57mm)
CB168-00M	Ø50mm	18" (457.2mm)	12" (304.8mm)	0.062" (1.57mm)
S2340A00	Ø2"	18" (457.2mm)	12" (304.8mm)	0.093" (2.36mm)
S2340A00M	Ø50mm	18" (457.2mm)	12" (304.8mm)	0.093" (2.36mm)

Notes: Other sizes and specials are available on request

**Model S2320-00** with a 1.75" diameter roll and a .032" radius is for burnishing parts with a minimum ID of 2.25" and with an OAL of 12" can easily burnish as deep as 8" to 9". This tool is also available with a .062" radius roll (CB127-00) and with a .093" radius roll (S2340-00).

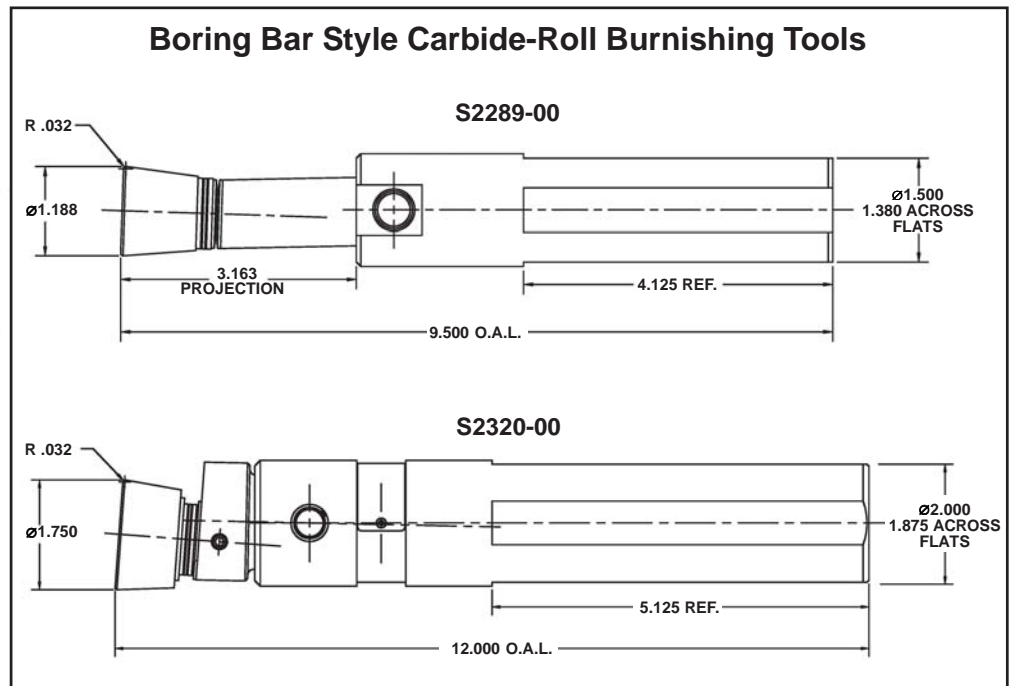
**Model S2320A00** is a longer version of model S2320-00. It has an OAL of 18" and can easily burnish as deep as 14" to 15". This tool is also available with a .062" radius roll (CB168-00) and with a .093" radius roll (S2340A00).

**Model S2289-00** is ideal for smaller parts being run on turning centers, with a 1.188" diameter roll with a .032" radius roll for burnishing parts with a minimum bore diameter of 1.375" and maximum of approx. 2.25" and to a depth of 3". This tool is also available with a .062" radius roll (S2289B00) and with a .093" radius roll (S2289A00).

The above tools all have the capability to burnish OD surfaces if required. The carbide rollers can be reconditioned several times. Ask us for details on our carbide roll reconditioning program. These tools are also available with metric shanks.



### Boring Bar Style Carbide-Roll Burnishing Tools



# Spherical Surface Burnishing Tool



This carbide roll has a .125" radius and is excellent for burnishing spherical and contoured surfaces.

Our customers have produced surface finishes as low as 2 to 8 Ra microinch.

Tool Number	Shank Size (square)	Left/Right Hand	Roll Radius
5900-100-80477	1"	LH	0.125" (3.175mm)
5900-100-80477M	25mm	LH	0.125" (3.175mm)
5900-100-80558	1"	RH	0.125" (3.175mm)
5900-100-80558M	25mm	RH	0.125" (3.175mm)

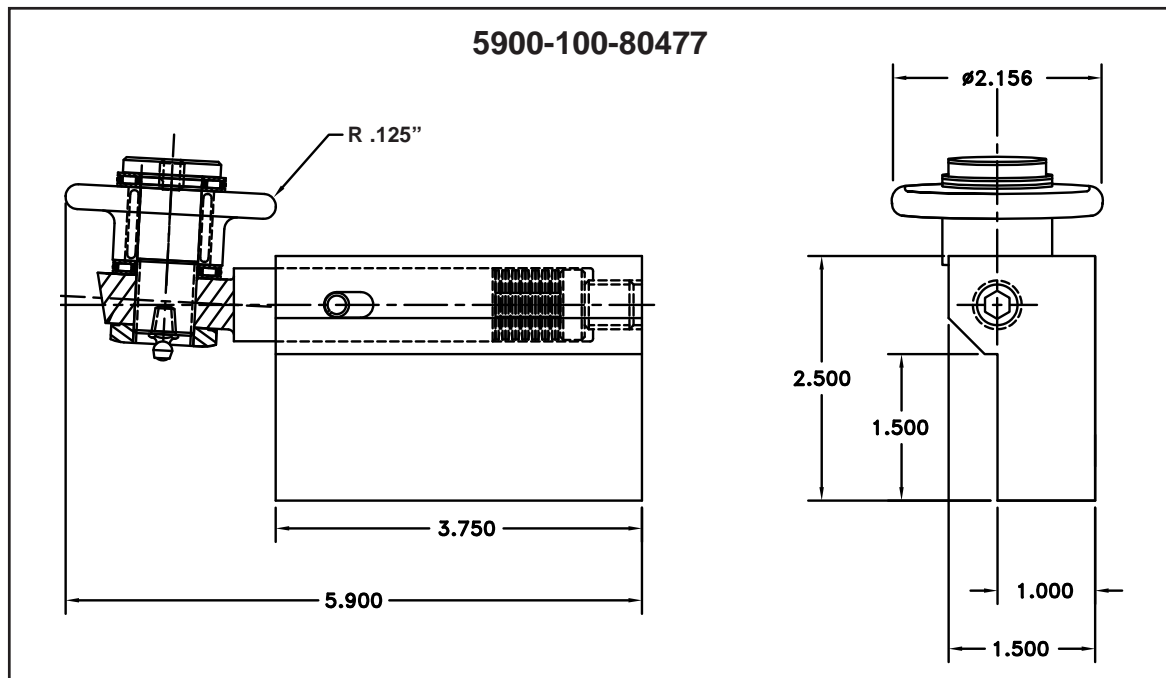
\*Other sizes and special designs available on request

Application examples:



Ball Stud

Differential Gear Blank



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