

DIAMOND PELLETS

DE Series

Diamond Pellets are primarily used to:

- Perform rough surface grinding of glass and glass-like materials
- Condition/break-in polishing pads
- Shape glass to desired rough curvatures

Diamond Pellets provide quick material removal with precision finishing. Diamond pellets are suited for superfine glass, sapphire, ceramics and other glass-like materials. It is recommended that pellets be used with one of UPI's coolants to maximize efficiency and surface quality.

APPLICATION

Pellets are typically affixed to a lap (flat or curved) with an epoxy setting adhesive (similar to UPI's Technicoll Epoxy) Set pellets to cover of 20% to 40% of the surface area of the lap. Rough-in of the finished lap with silicon carbide or boron carbide slurry with a lap tool is optional to ensure curve or flatness conformance. Typical processing conditions are peripheral speed 10 to 30 m/s and pressure range of 0.5 to 2 kg/cm².

PHYSICAL CHARACTERISTICS

TEST	APPROX. DIAMOND GRAIN SIZE	BENEFITS	TYPE	PART NUMBER
Roughing to Semi Finishing	100 - 400 µm	Fast cutting	Type K	DE1037, DE15610, DE10321
Semi Finishing	40 - 50 µm	Long life	Type V	DE10663, DE15664, DE15670
Fining	20 - 30 µm	Fast cutting	Type J	DE1031, DE15630, DE10628
Super Fining	15 - 20 µm	Fast cutting	Type P	DE1030, DE10615, DE15620, DE20315
		Long life	Type M	N/A
		Extra long life	Type N	N/A
Pre-polish grind	6 -9 µm	Fast cutting	Type O	DE1036, DE6310
		Long life	Type H	DE10640, DE10609

AVAILABILITY

6-20 mm diameter X 3-6 mm thickness