

Technical Information Guide: Final Polishing & Preparation Guides

QUICK REFERENCE GUIDE TO FINAL POLISHING SOLUTIONS

Material	Final Polishing Solutions Choices		
Ceramics Alumina Glass-Sapphire Silicon Nitride Metal Ceramic Composites	MASTERPOLISH® 2 Propriety 0.06 µm formulation Chemomechanical polishing action for superior finish Fast removal rate Reacts chemically with surface of ceramic material to allow abrasives to cut more efficiently		MASTERMET® 2 0.02 µm non-crystallizing colloidal silica ≈10.5 pH Slower less aggressive
Steel Tool Steels Ni-based Alloys Co-based Alloys	MASTERPREP™ Non-agglomerated alumina (0.05 µm) Yields best surface finish Best for Burst and auto dispensers	MASTERMET® 0.06 µm collidal silica in basic solution Cuts without deformation due to high ≈10pH Reacts chemically with surface of material to allow abrasives to cut more efficiently	MASTERPOLISH® A proprietary blend of high purity 0.05 µm alumina and colloidal silica Provides high material removal due to combination of high ≈9pH and the abrasive blend material removal Superior surface finish Effective for ferrous materials, Ni & Co base materials, and metal composites
Nonferrous Aluminum Copper/Brass Lead-based Alloys Precious Metals Titanium	MASTERPREP™ Non-agglomerated alumina (0.05 µm) Yields best surface finish Best for Burst and auto dispensers	MASTERMET® 0.06 µm collidal silica in basic solution Cuts without deformation due to high ≈10pH Reacts chemically with surface of material to allow abrasives to cut more efficiently	MICROPOLISH® II Deggglomerated alumina Non-freeze glycol base MICROPOLISH® POWDER Alumina must be mixed with water
OTHER PCB Plastics Electronics Thermal Spray Coatings	MASTERPREP™ Non-agglomerated alumina (0.05 µm) Yields best surface finish Best for Burst and auto dispensers	MASTERMET® 0.06 µm collidal silica in basic solution Cuts without deformation due to high ≈10pH Reacts chemically with surface of material to allow abrasives to cut more efficiently	