DIANAMIC® ELECTROPLATED SUPERABRASIVE WHEELS

Recommended Operational Wheel Speeds, In-Feeds, and Cross-Feeds

OPERATIONAL SPEED RECOMMENDATIONS

PARAMETER TYPE	RECOMMENDED OPERATIONAL VALUE	ABSOLUTE MAXIMUM LIMIT	ENGINEERING GUIDELINES & EXCEPTIONS
Surface Speed (SFPM)	**5,500 – 6,500 SFPM**	**12,000 SFPM**	Single-layer superabrasive grinding wheels operate most effectively and efficiently at speeds lower than the maximum safe operating threshold. Keeping below 12,000 SFPM is highly recommended.
In-Feed Rate	**.002" – .004" per pass**	--	General operational in-feed baseline tailored specifically to single-layer electroplated tool surfaces.
Cross-Feed Velocity	**2" – 3" per minute**	--	Standard cross-feed baseline parameter to ensure precise grinding engagement and cut consistency.

CRITICAL OPERATING CONDITIONS

COOLANT DELIVERY REQUIREMENT

Crucial Performance Factor: Without a proper and adequate coolant supply, the electroplated wheel will not perform effectively and will face premature, catastrophic bond failure. Please consult the *DIANAMIC® Coolant Questionnaire* for detailed guidelines regarding fluid selection, velocity parameters, and nozzle delivery system geometry.

SAFETY & COMPLIANCE STANDARDS

Always refer directly to the **ANSI B7.1** grinding wheel safety standards for regulatory instructions covering the safe handling, speed verification, mounting procedures, and long-term storage of superabrasive grinding products.

TECHNICAL REFERENCE NOTES

- **Single-Layer Optimization:** While 12,000 SFPM represents the absolute maximum safe operating structural speed for electroplated cores, running at lower recommended surface speeds significantly maximizes wheel life, improves surface finish, and optimizes crystal retention.
- **Core Address Info:** Product manufacturing engineering facilities are located at 2566 Industrial Row, Troy, Michigan 48084, USA.

Manufactured in Troy, Michigan USA with 100% US labor and globally sourced materials.

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