Diagrind
SUPER ABRASIVE INTERNAL GRINDING WHEELS

Diagrind, Inc.
10491 W. 164th Pl.
Orland Park, IL 60467
Website:
www.diagrind.com

Phone: 708.460.4333
Fax: 708.460.8842
Email:
sales@diagrind.com

Diagrind Bond Selection Guide

DIAMOND	BOND TYPE	CBN
Size Range: .020" - 1" Diameter Application: Grinding carbide Coolant: Synthetic coolant recommended on wheels 1/2" and larger. 20 to 1 ratio	**VM** **Standard or Vitreous Metal Bond** Grey in color Cutting Speed: 1,000 to 3,000 S.F.P.M. Cannot be conventionally trued, wheels shipped ready to use Wheels should be indicated within .0005" T.I.R. prior to grinding	Size Range: .020" - 1" Diameter Application: Grinding tool steels hardened 50 Rockwell "C" or above Coolant: Oil or water soluble oil recommended on wheels 1/2" or larger. 8 to 1 ratio
Size Range: .030" - 3" Diameter Application: Grinding ceramic and glass Coolant: Synthetic coolant recommended 20 to 1 ratio	**M** **Metal Bond** Bronze in color Cutting Speed: 4,000 to 6,000 S.F.P.M. Cannot be conventionally trued, wheels shipped ready to use Wheels should be indicated within .0005" T.I.R. prior to grinding	Size Range: .030" - 3" Diameter Application: Soft and case hardened steel Coolant: Oil or water soluble oil 8 to 1 ratio
Size Range: .3/32" - 3" Diameter Application: Grinding carbide, ceramic or glass Coolant: Not required. However, if desired, synthetic coolant is recommended 20 to 1 ratio	**B** **Resin Bond** Light Brown in color Cutting Speed: 4,000 to 6,500 S.F.P.M. Wheels shipped ready to use Wheels should be indicated within .0005" T.I.R. prior to grinding May be trued with nibs designed for superabrasives followed by a dressing stick	Size Range: 3/32" - 3" Diameter Application: Grinding tool steels hardened 50 Rockwell "C" or above Coolant: Not required. However, if desired, use oil or water soluble oil 8 to 1 ratio
Size Range: 1/8" - 2" Diameter Application: Grinding carbide Coolant: Synthetic coolant recommended for wheels over 2" 20 to 1 ratio	**V** **Vitrified Bond** Dark Grey in color Cutting Speed: 4,000 to 6,000 S.F.P.M. Wheels may be trued in the machine by cluster or impregnated diamond tools	Size Range: .1/8" - 2" Diameter Application: Grinding steel Coolant: Oil or water soluble oil recommended for wheels over 2" 8 to 1 ratio

Size Range: .015" - 3" Diameter Application: Grinding carbide, ceramics, glass, fiberglass, and abrasive composites Coolant: May be used without a coolant, only a spray mist of synthetic needed if desired.	**BM/DM Plated** Metallic grey to shiny silver in color Cutting Speed: 4,000 to 6,000 S.F.P.M. Single layer plated products cannot be trued Wheels should be indicated within .0005" T.I.R. prior to grinding	Size Range: .015" - 3" Diameter Application: Grinding stainless steel, exotic super-alloys, and tool and die steels hardened 55 Rockwell "C" or above Coolant: May be used without a coolant, only a spray mist of oil or water soluble oil is recommended
	Carbide Internal Grinding Tools Solid carbide burr with diamond cut pattern and end cutting teeth Designed to machine mold and die steel hardened up to 60 Rockwell "C" Cutting Speed: 1,000 to 3,000 S.F.P.M. (One and one half faster for stainless steel) Wheels shipped ready to use; should be indicated within .0005" T.I.R. prior to grinding May be used without coolant. If desired, use a synthetic coolant.	