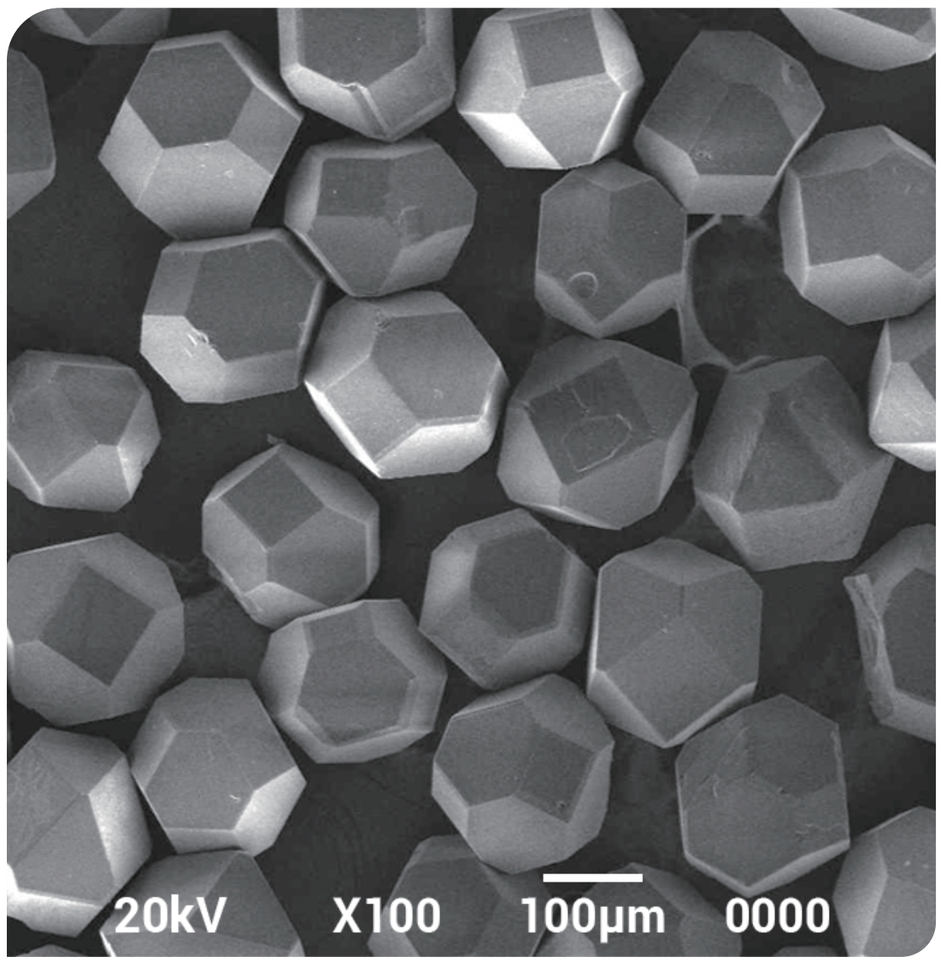


Metal Bond Mesh Diamond

The MBD series encompasses M100, M200, M500, and M700.

This graded series of products extends from M100, which is a relatively low-strength crystalline abrasive to MBD700.

MBD series products are widely used for drilling, grinding, and polishing applications in the optical glass, stone processing, machinery processing electronics industries, etc.

Product features

- Symmetrical and regular crystal shape.
- Yellow color and good transparency.
- High impact toughness and thermal stability.
- Complete hexahedron or octahedron, equal-area shape.

Customized for your particular requirement

Appliactions

- Sapphire

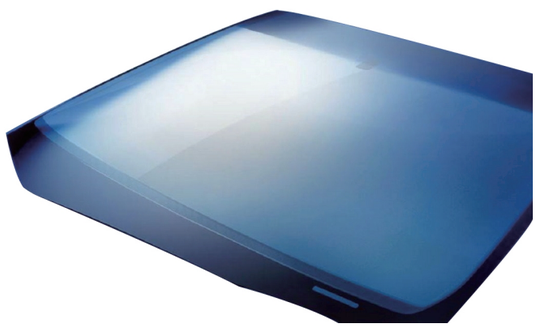
- Industrial ceramics

- Polysilicon

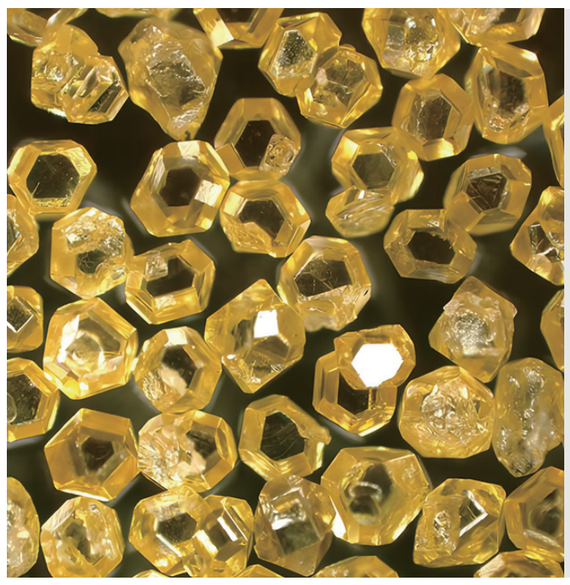
- Monocrystalline silicon

- Magnetic materials

- Auto glass



Metal Bond Mesh Diamond



BRD-M100

Characteristic: Relatively complete shape of medium transparency. Good self-sharpening, medium impact toughness, ideal balance between tool life and surface finish requirements.

Application: Cut-off wheels for glass, honing cylinder, tungsten carbide, dental burrs, single crystal and polysilicon, plastic and other non-metallic brittle materials.

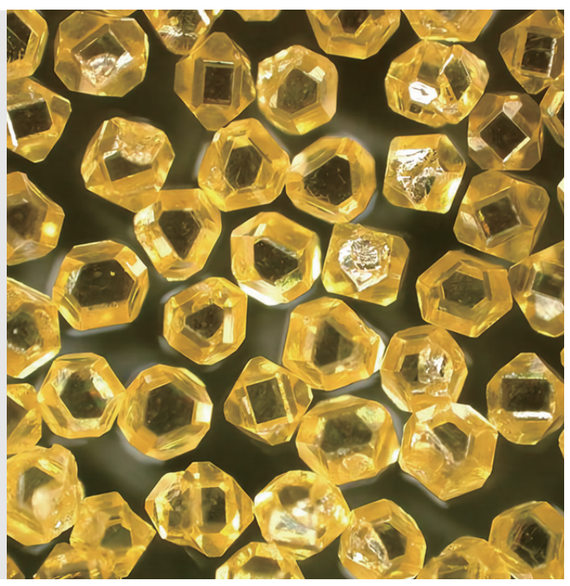
Available size: 60/70 - 500/600

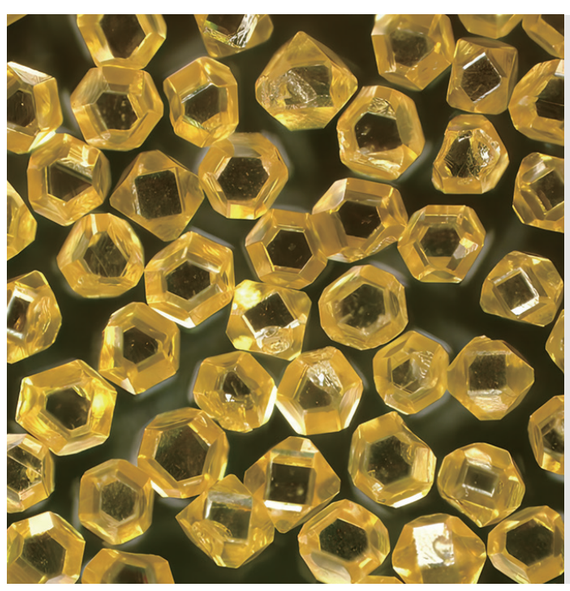
BRD-M200

Characteristic: Uniformed shape with high impact toughness and thermal resistance.

Application: Decorative grooving of crystal & glass PD grinding of crystal, core drilling of glass. Middle stage grinding of crystal & granite OD grinding of silicon nitride.

Available size: 60/70 - 500/600





BRD-M500

Characteristic: Well-defined cubo-octahedral, minimized impurity, superior thermal impact.

Application: Suitable for processing non-metallic materials such as ruby, sapphire, optical glass, sawing of granite & ceramic tiles, grinding of ferrite motor core, electronics industry and etc.

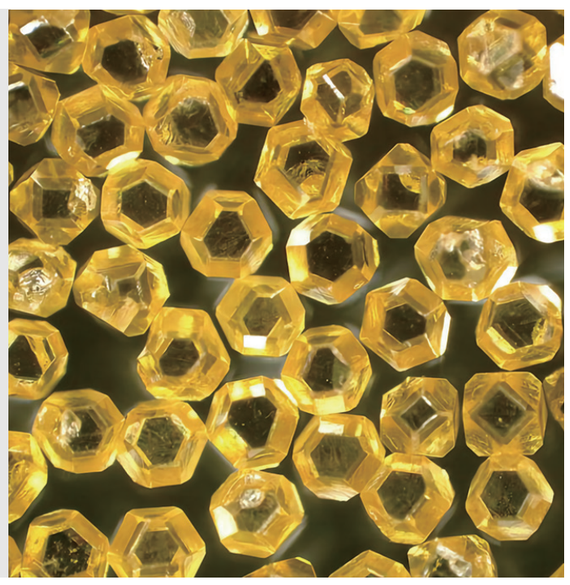
Available size: 60/70 - 400/500

BRD-M700

Characteristic: Perfect cubo-octahedral lowest impurity and super transparency, outstanding strength and thermal stability.

Application: Suitable for making diamond cutting blades, saw blades, and hard materials such as hard alloy, cutting tools, composite super-hard materials cutting tools, super-hard ceramics tools, electronics industry and etc.

Available size: 60/70 - 230/270



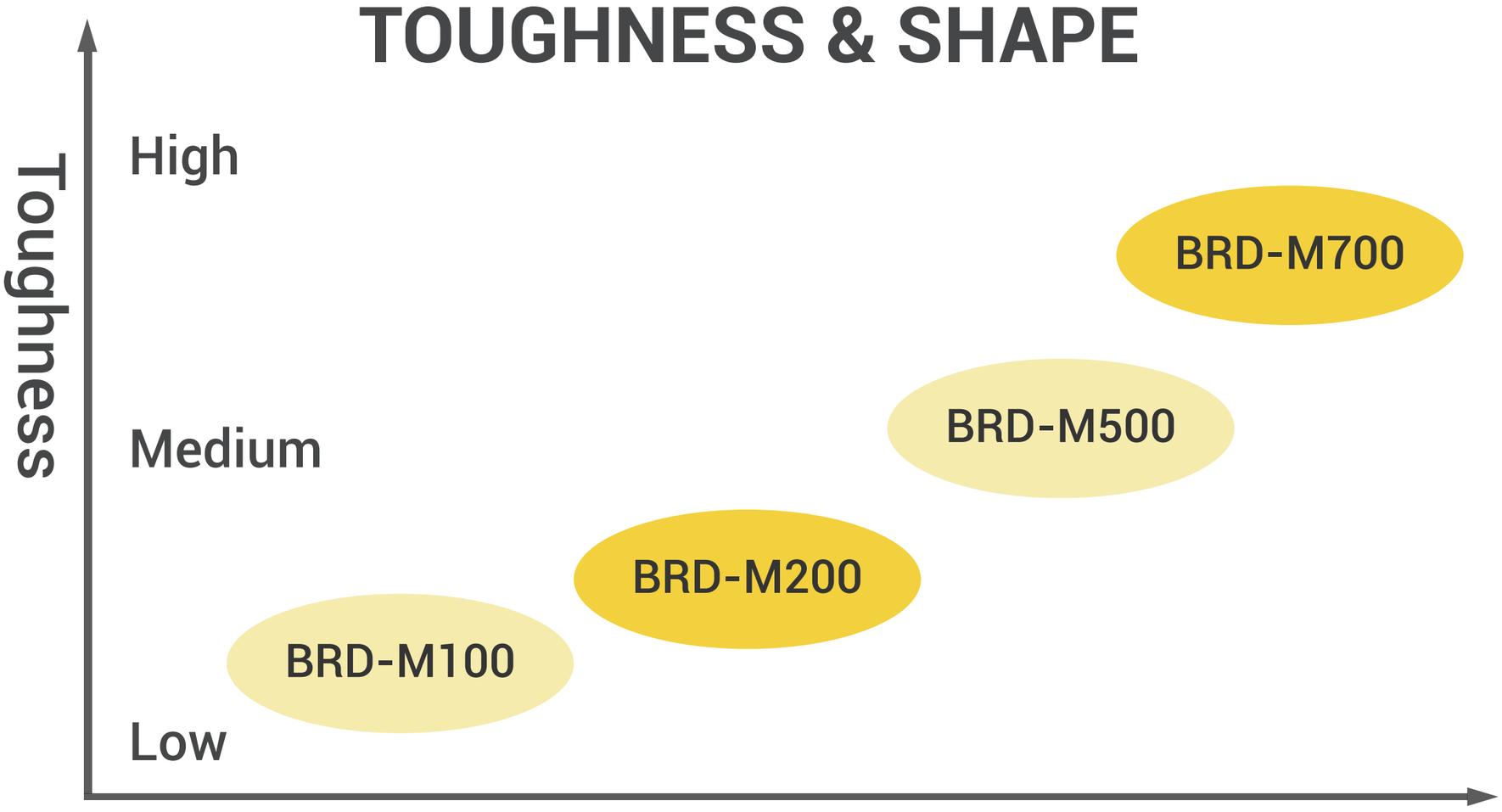
Available Size

Grade/Size	60/70	70/80	80/100	100/120	120/140	140/170	170/200	200/230	230/270	270/325	325/400	400/500	500/600
M100	○	○	○	○	○	○	○	○	○	○	○	○	○
M200	○	○	○	○	○	○	○	○	○	○	○	○	○
M500	○	○	○	○	○	○	○	○	○	○	○	○	
M700	○	○	○	○	○	○	○	○	○				

Special requirements can be customized.

○ =Available

TOUGHNESS & SHAPE



Performance Index

Vickers hardness	8000km/mm^2-10000kg/mm^2
Density	3.52cm^3
Young's modulus	850GPa
Thermal conductivity	1200W/mk-2000W/mk
Chemical stability	Insoluble in all acids and bases
Fracture toughness	350Mpa
Coefficient of thermal expansion	1.0+/-0.1ppm/K(300k) 4.4+/-0.1ppm/K(1000K)
Poisson's ratio	Poisson's ratio
Parallelism	Parallelism
Thickness tolerance	Thickness tolerance
Roughness of growth surface	Roughness of growth surface
Roughness of nucleation surface	Roughness of nucleation surface
The thickness of the standard	The thickness of the standard