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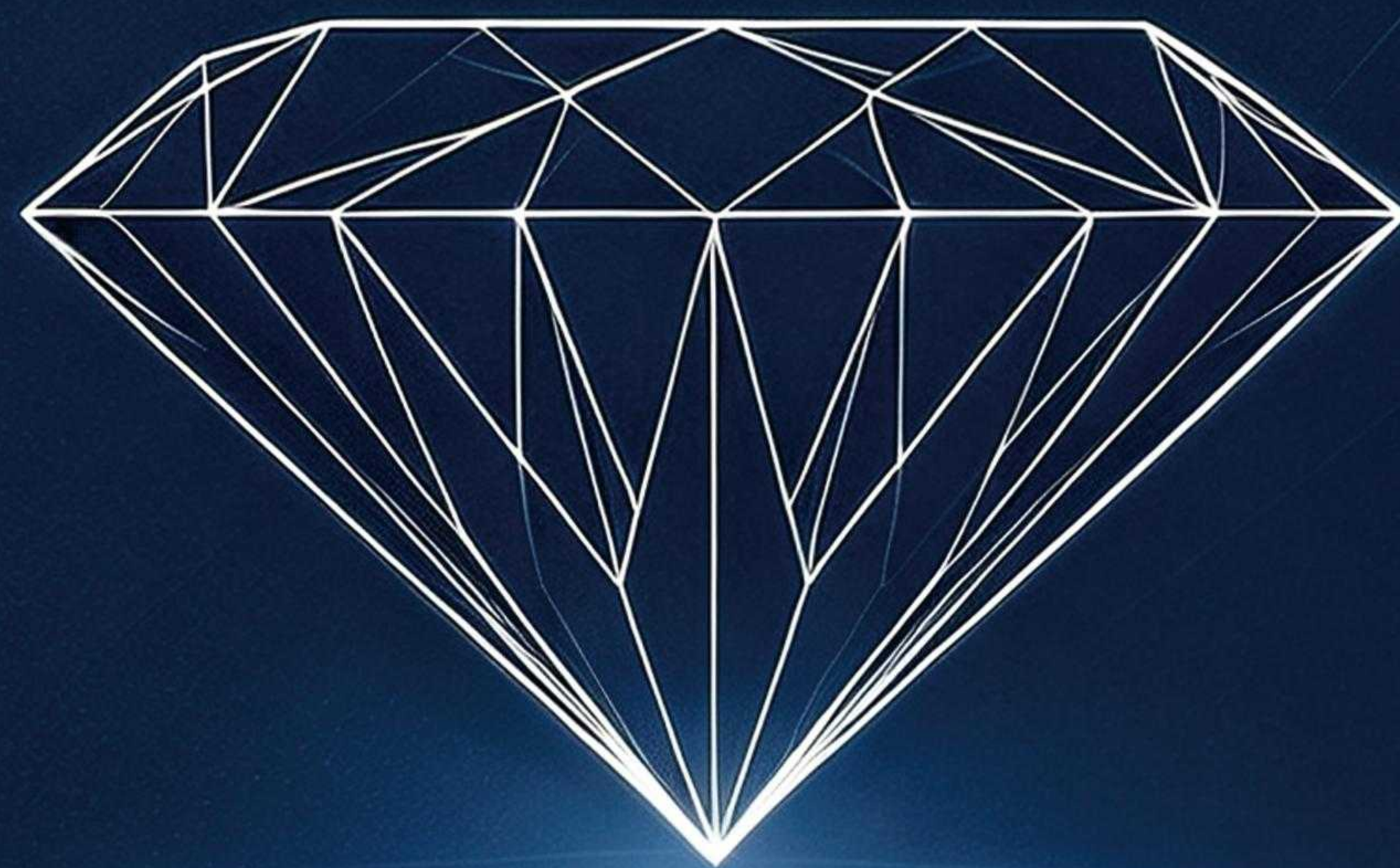
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WhatsApp



Website



Consistent Quality



HNHONGXIANG

SYNTHETIC DIAMOND POWDER

Solutions for Stone & Ceramic Tool Manufacturers



Engineered for Better Tool Performance.

COMPANY PROFILE

HNHONGXIANG is a professional manufacturer of synthetic diamond powder, serving stone and ceramic tool manufacturers for many years.



Full Product Range

Complete sizes and specifications to meet various applications.



Precise Particle Size & Consistent Quality

Advanced production and strict control ensure consistent performance.



Customized Service

Tailored specifications and coatings to fit your exact needs.

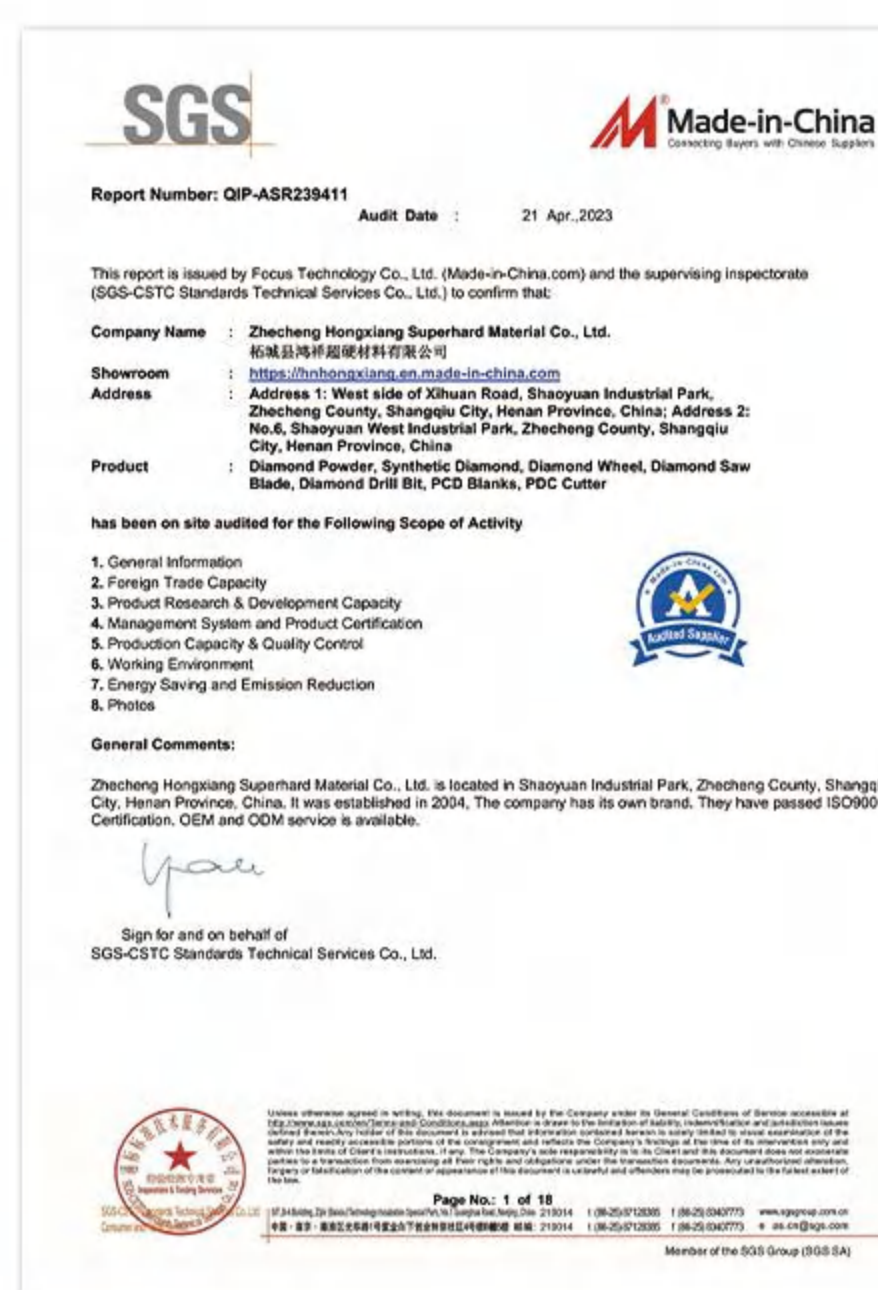


Fast Response

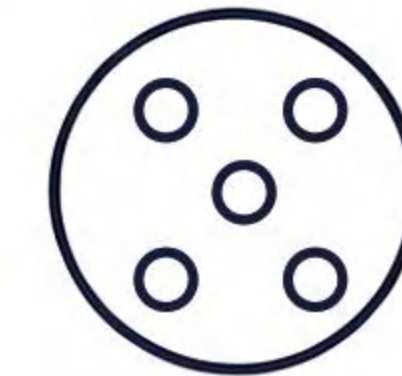
Efficient communication and on-time delivery you can rely on.



Reliable one-stop supply of synthetic diamond powder for stone & ceramic tool manufacturers.



PRODUCTION PROCESS

-  Raw Diamond
-  Crushing/Classification
-  Shape Selection/Purification
-  Precision Grading
-  Surface Treatment Purification
-  Inspection
-  Packaging



KEY PROCESS NOTES

-  Crushing shapes particles for resin bond tools.
-  Classification and sieving ensure accurate size control.
-  Purification removes metallic and non-metallic impurities.
-  Quality control is performed at every step.



Consistent Quality



Full Product Range



Custom Service

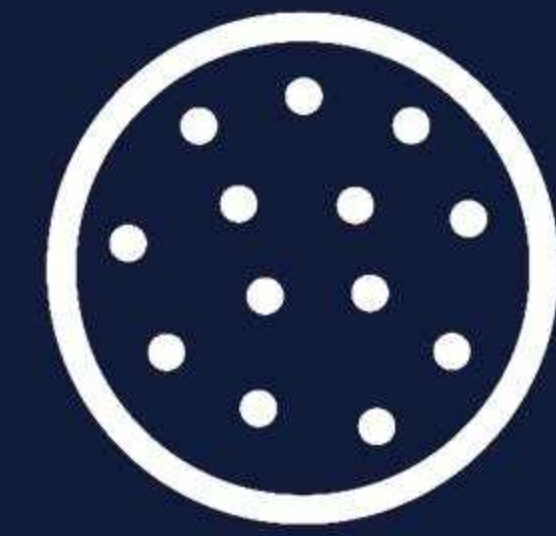


Global Support



QC PROCEDURES

Testing Instruments



01

PARTICLE SIZE ANALYSIS

Laser particle size analyzer and precision sieving.



02

CHEMICAL PURITY ANALYSIS

Impurity and chemical content analysis.



03

SEM MORPHOLOGY ANALYSIS

Scanning electron microscope for crystal shape and surface morphology.



04

TI & TTI TESTING

Toughness Index (TI) and Thermal Toughness Index (TTI) testing.



QC PROCEDURES



1 INCOMING MATERIAL INSPECTION

Verify supplier documents and conduct visual inspection.



2 LOT SAMPLING

Take representative samples per standard procedure.



3 LABORATORY TESTING

Perform particle size, purity, morphology, and performance tests using calibrated instruments.



4 RESULT VERIFICATION

Review and validate test results against specifications.



5 RELEASE APPROVAL

Quality manager approves for release to production or shipping.



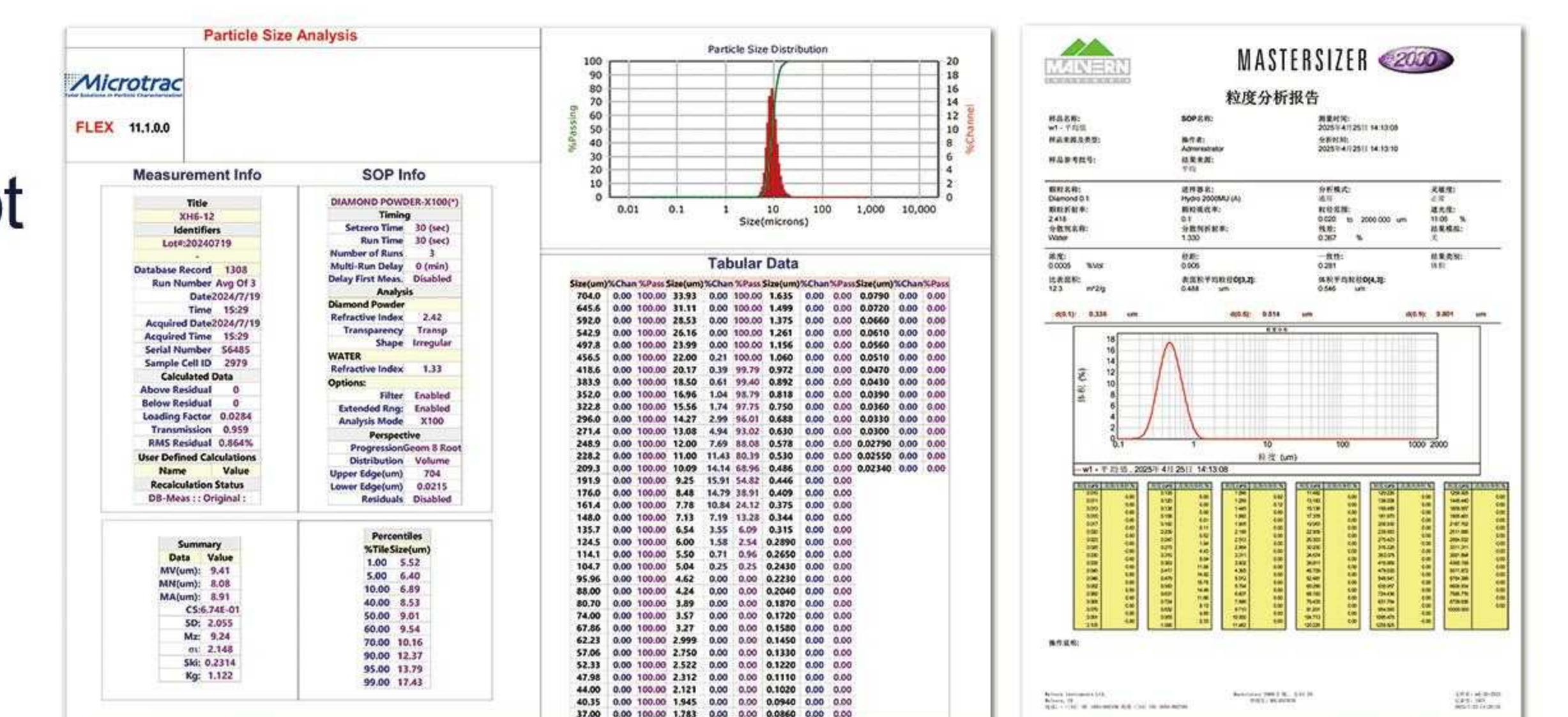
6 RETAIN SAMPLE / TRACEABILITY

Retain samples and label by lot for full traceability.



7 REPORT ISSUANCE

Issue Certificate of Analysis (COA) with full test data.



QUALITY COMMITMENT

- ✓ Full-batch inspection with report
- ✓ Traceable process control
- ✓ Customized testing available on request

INDUSTRY APPLICATIONS

Synthetic diamond powder for stone & ceramic tool applications.



HNHONGXIANG supplies premium synthetic diamond powder used in stone and ceramic tool applications. We do not manufacture the tools.



APPLICATION-BASED DIAMOND SELECTION GUIDE

INDUSTRY	BOND TYPE	TYPICAL TOOLS	RECOMMENDED SERIES	TYPICAL GRIT SIZE
 STONE PROCESSING	Metal Bond	Saw Blades, Segments, Wire Saw Beads, CNC Tools Grinding Wheels	MBD/SMD	18/20-120/140
	Electroplated	Hand Pads, Profile Wheels, Router Bits, Core Drills	MBD/Coated	60/70-170/200
	Resin Bond	Resin Grinding Wheels, Resin Fickert, Frankfurt	HDYR/HDGR	80/100-325/400
	Polishing	Fickert, Frankfurt, Polishing Pads	HDY/HDG	400#-8000#
 CERAMIC PROCESSING	Metal Bond	Cutting Blades, Squaring Wheels, Chamfer Wheels, Grinding Wheels	MBD/SMD	30/35-140/170
	Electroplated	Profiling Wheels, Engraving Tools, Core Drills	MBD/Coated	80/100-230/270
	Resin Bond	Resin Squaring Wheels, Resin Grinding Wheels, Lappato Tools	HDYR/HDGR	80/100-325/400
	Polishing	Lappato, Polishing Tools	HDY/HDG	400#-8000#



Application-Focused
Solutions for stone and ceramic tools



Wide Selection
Complete range of series and grit sizes

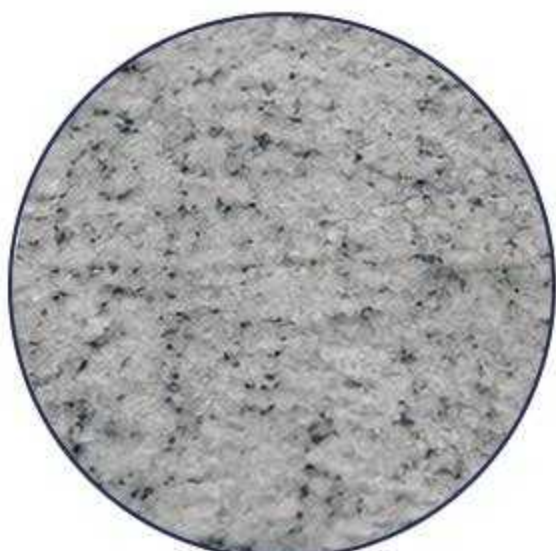
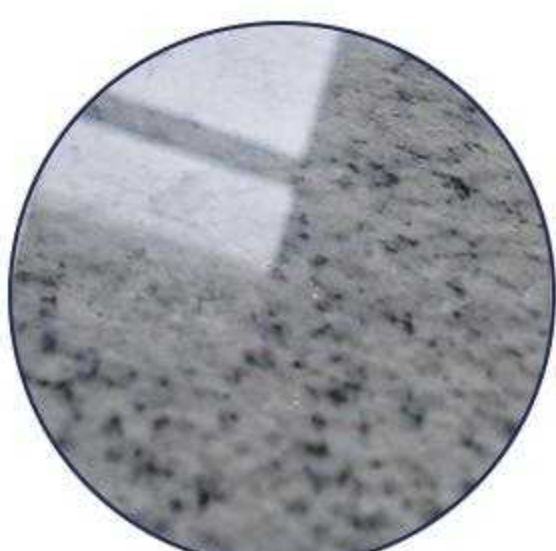


Consistent Quality
Stable performance for reliable results



Expert Support
Professional guidance for your selection

QUICK SELECTION FOR STONE PROCESSING

PROCESS STAGE	TYPICAL DIAMOND TOOLS	RECOMMENDED DIAMOND SERIES	TYPICAL GRIT SIZE	
Coarse Grinding	Resin Fickert/ Resin Grinding Tools	HDYR/HDGR	80/100-120/140	
Medium Grinding	Resin Fickert/ Resin Grinding Tools	HDYR/HDGR	140/170-230/270	
Fine Grinding	Resin Fickert/ Resin Grinding Tools	HDYR/HDGR	270/325-325/400	
Pre-Polishing	Resin Fickert/ Polishing Tools	HDG/HDY	400#- 1200#	
Fine-Polishing	Resin Polishing Pads / Tools	HDG/HDY	1300#-3000#	
Final Polishing	Resin Polishing Pads / Tools	HDG/HDY	5000#-15000#	

QUICK SELECTION SUMMARY



COARSE TO FINE GRINDING
Use HDYR/HDGR series from 80/100 up to 325/400



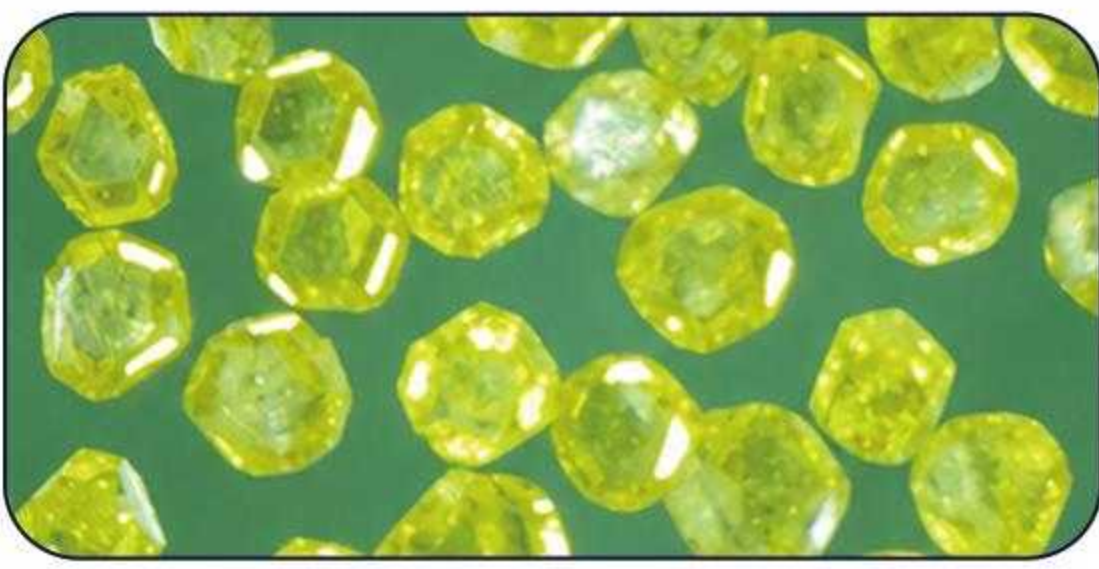
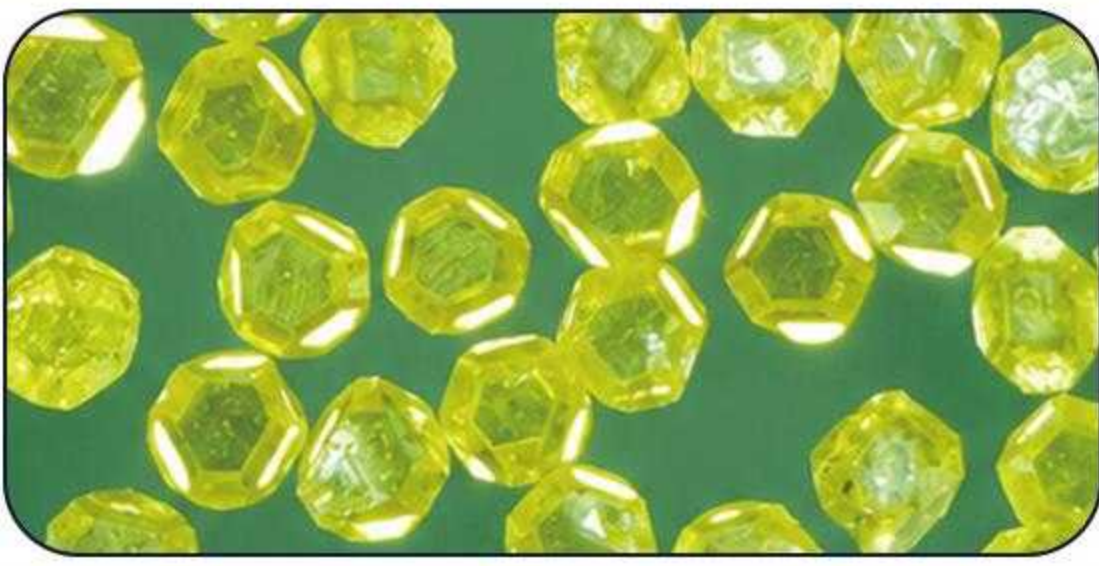
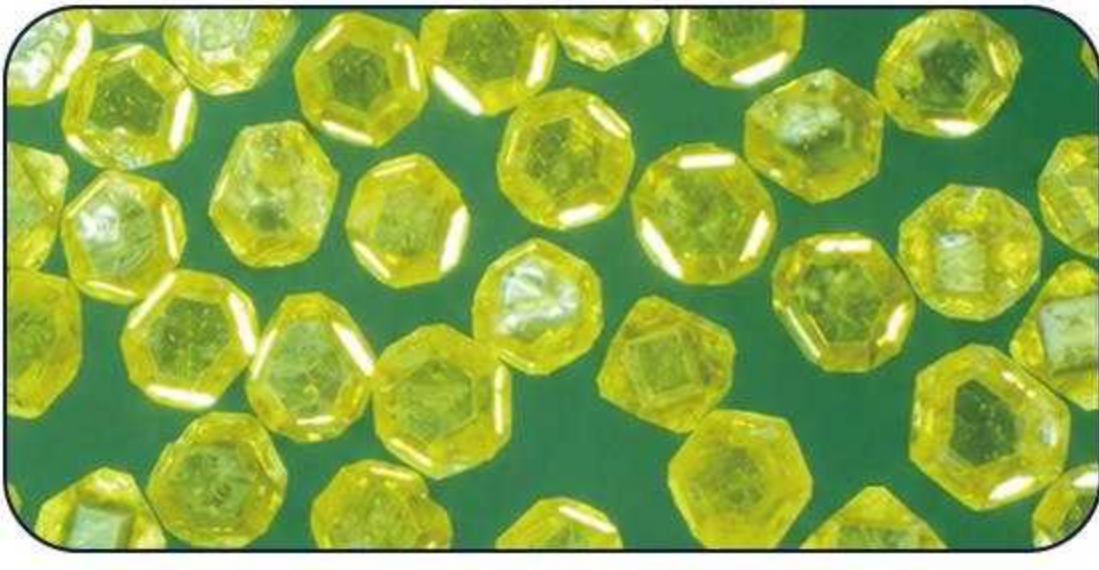
PRE-POLISHING TO FINAL POLISHING
Use HDG / HDY series from 400# up to 15000#



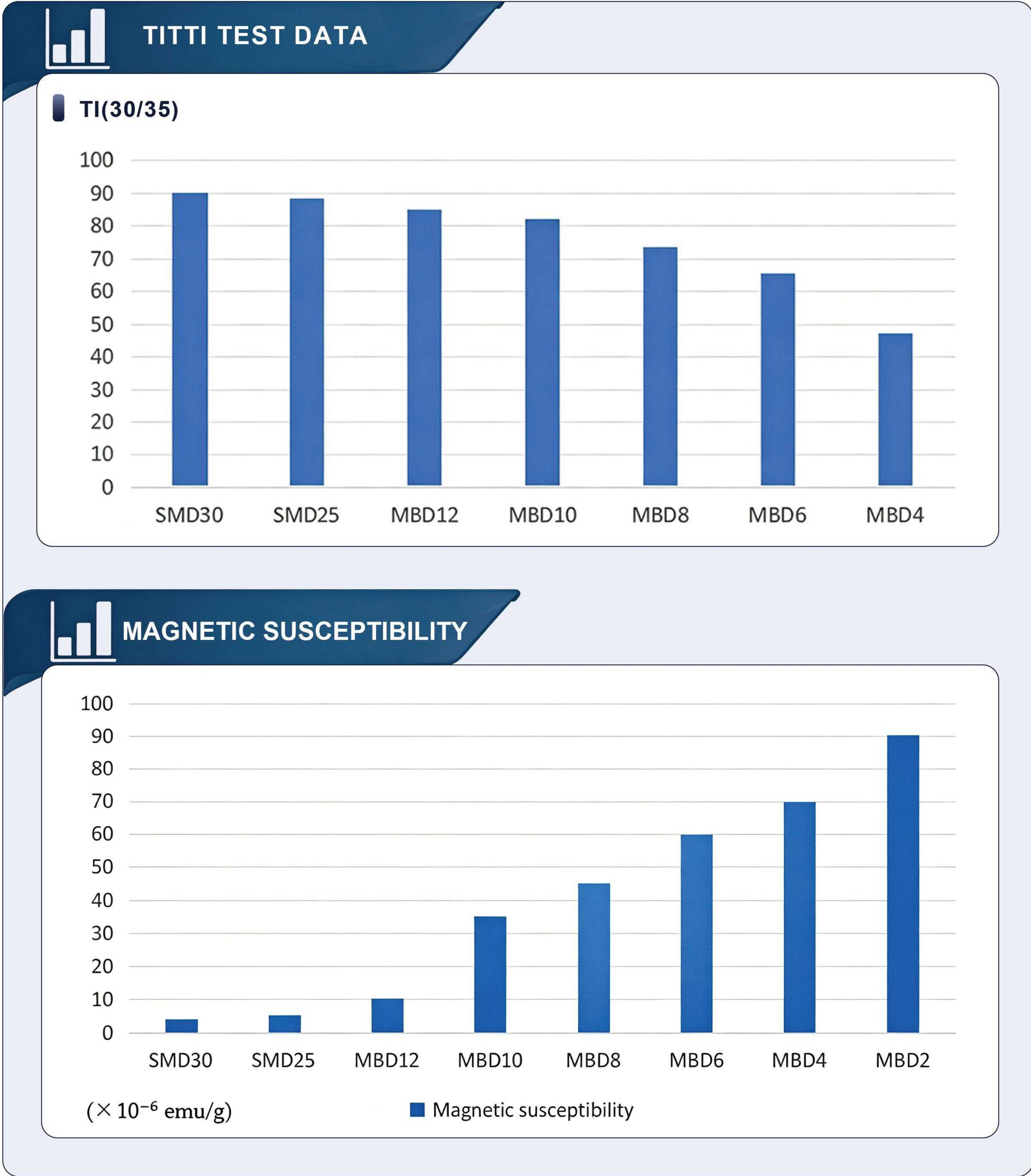
OPTIMAL RESULTS
Match the right grit size to each process stage

MBD SERIES FOR METAL BOND TOOLS

Premium synthetic diamond for high-performance metal-bond stone tools.

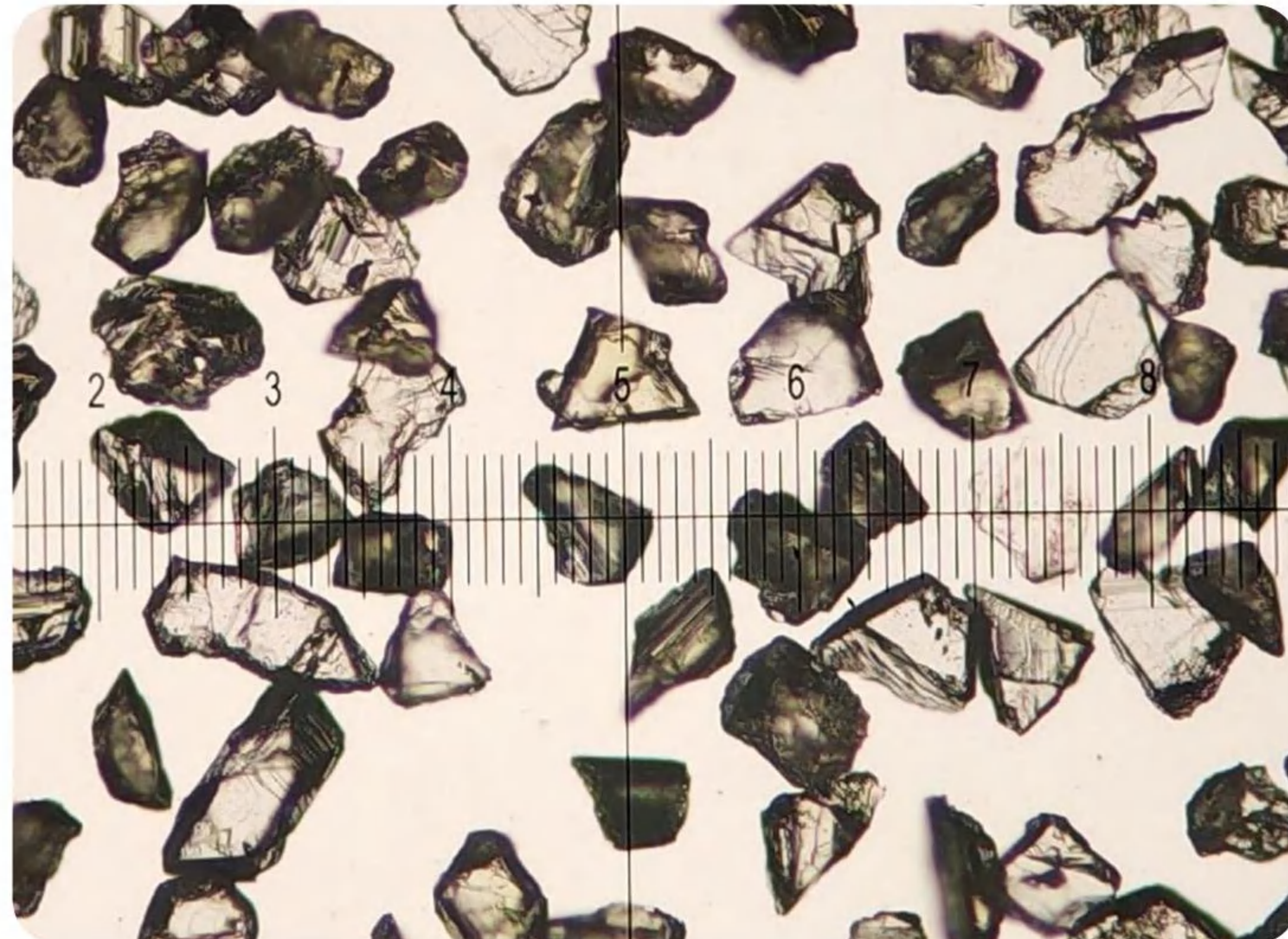
GRADE	CRYSTAL SHAPE	STRENGTH	THERMAL STABILITY	IMPACT TOUGHNESS	RECOMMENDED MATERIALS
MBD2		★★★★	★★★★	★★★★☆	Soft stone,marble, limestone
MBD4		★★★★☆	★★★★☆	★★★★☆	Soft to medium stone, terrazzo, engineered stone
MBD6		★★★★☆	★★★★☆	★★★★☆	Medium stone, granite, sandstone
MBD8		★★★★☆	★★★★★	★★★★☆	Medium to hard stone, granite, quartz, concrete
MBD10		★★★★☆	★★★★★	★★★★☆	Hard stone, quartz, engineered stone
MBD12		★★★★☆	★★★★★	★★★★☆	Very hard stone, quartzite, hard granite
SMD25		★★★★☆	★★★★★	★★★★☆	Ultra-hard stone, quartzite, ceramic
SMD30		★★★★★	★★★★★	★★★★★	Extremely hard stone, ceramic, ultra-hard materials

MBD DETECTION



HDGR/HDYR SERIES FOR RESIN BOND TOOLS

HDGR



Economical grade:

1. Irregular and sharp shape;
2. Lower strength;
3. Fragile and good self-sharpening.

Usage:

For making resin bond diamond grinding wheel, diamond abrasive fickert, diamond pad and other diamond tools, etc.

Standard grade:

1. Irregular and sharp shape;
2. Higher strength and wear-resistance;
3. Fragile and good self-sharpening, fine cutting efficiency;
4. Less impurities and lower magnetic.

Usage:

For making resin bond diamond tools, vitrified-bond diamond tools and electroplated diamond tools for gemstone, carbide, steel, glass, ceramic, stones and etc processing.

Applications:



Resin Fickert &
Frankfurt & Lappato



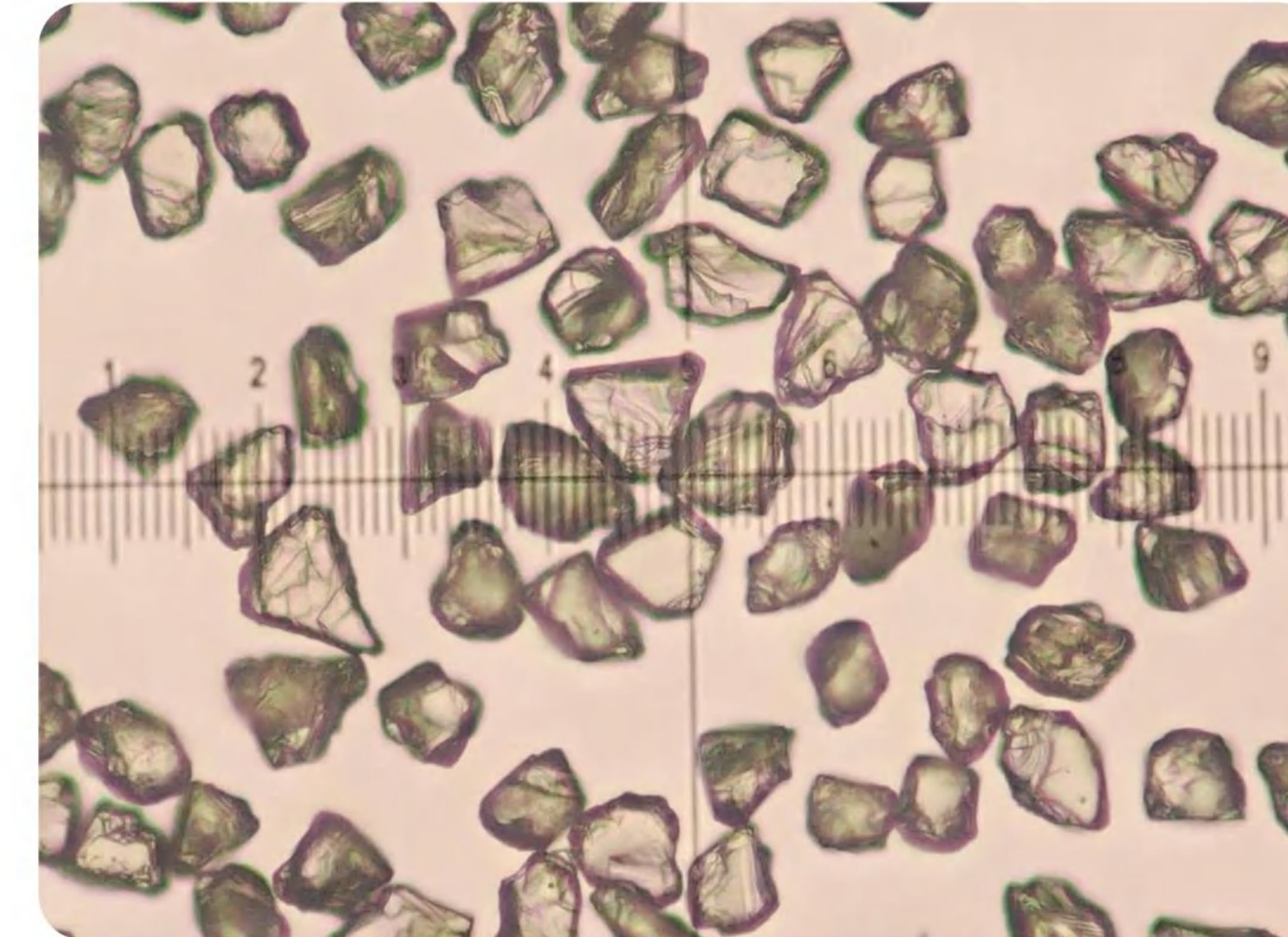
Resin diamond pad



Resin Squaring &
Chamfering Wheel

HDG/HDY SERIES FOR POLISHING

HDG



Feature:

1. Economical grade;
2. Low strength and fine self-sharpening;
3. Relatively regular crystal form;
4. Standard particle size distribution.

Usage:

For polishing gemstone, diamonds, ceramic parts, tungsten/silicon carbide seals, wire drawing dies, metal parts etc and making diamond pad, diamond abrasive fickert, diamond grinding wheel and etc.

Feature:

1. Regular and uniform crystal form;
2. High purity and good polishing effect;
3. Concentrated diamond particle size distribution;
4. Good dispersion, not easy to agglomerate;
5. High strength and wear resistance.

Usage:

For polishing gemstone, diamonds, ceramic parts, tungsten/silicon carbide seals, wire drawing dies, metal parts etc and Making diamond pad, diamond abrasive fickert, diamond grinding wheel and etc.

Applications:



Resin Fickert &
Frankfurt & Lappato

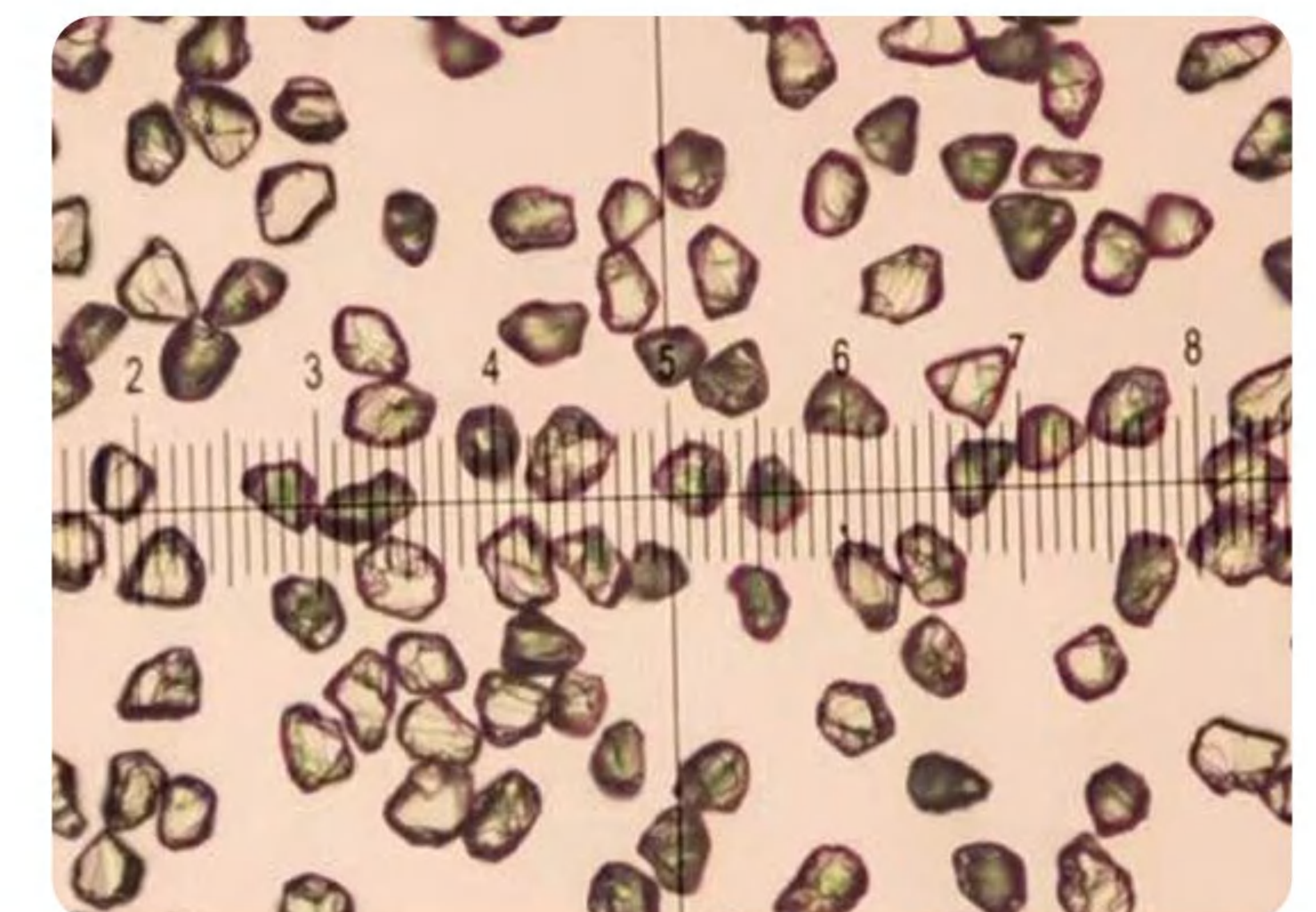


Resin diamond pad



Resin Squaring &
Chamfering Wheel

HDY



GRIT RECOMMENDATION TABLE

Select the right grit size for your application and surface finish requirements.

Grit		MBD2	MBD4	MBD6	MBD8	MBD10	MBD12	SMD25	SMD30
D46	325/400	✓	✓		✓		✓		✓
D54	270/325	✓	✓		✓		✓		✓
D64	230/270	✓	✓		✓		✓		✓
D76	200/230	✓	✓		✓		✓		✓
D91	170/200	✓	✓		✓		✓		✓
D107	140/170	✓	✓		✓		✓		✓
D126	120/140	✓	✓		✓		✓		✓
D151	100/120	✓	✓		✓		✓		✓
D180	80/100	✓	✓		✓		✓		✓
D213	70/80	✓	✓	✓	✓	✓	✓	✓	✓
D251	60/70	✓	✓	✓	✓	✓	✓	✓	✓
D301	50/60	✓	✓	✓	✓	✓	✓	✓	✓
D356	45/50	✓	✓	✓	✓	✓	✓	✓	✓
D426	40/45	✓	✓	✓	✓	✓	✓	✓	✓
D501	35/40	✓	✓	✓	✓	✓	✓	✓	✓
D601	30/35	✓	✓	✓	✓	✓	✓	✓	✓

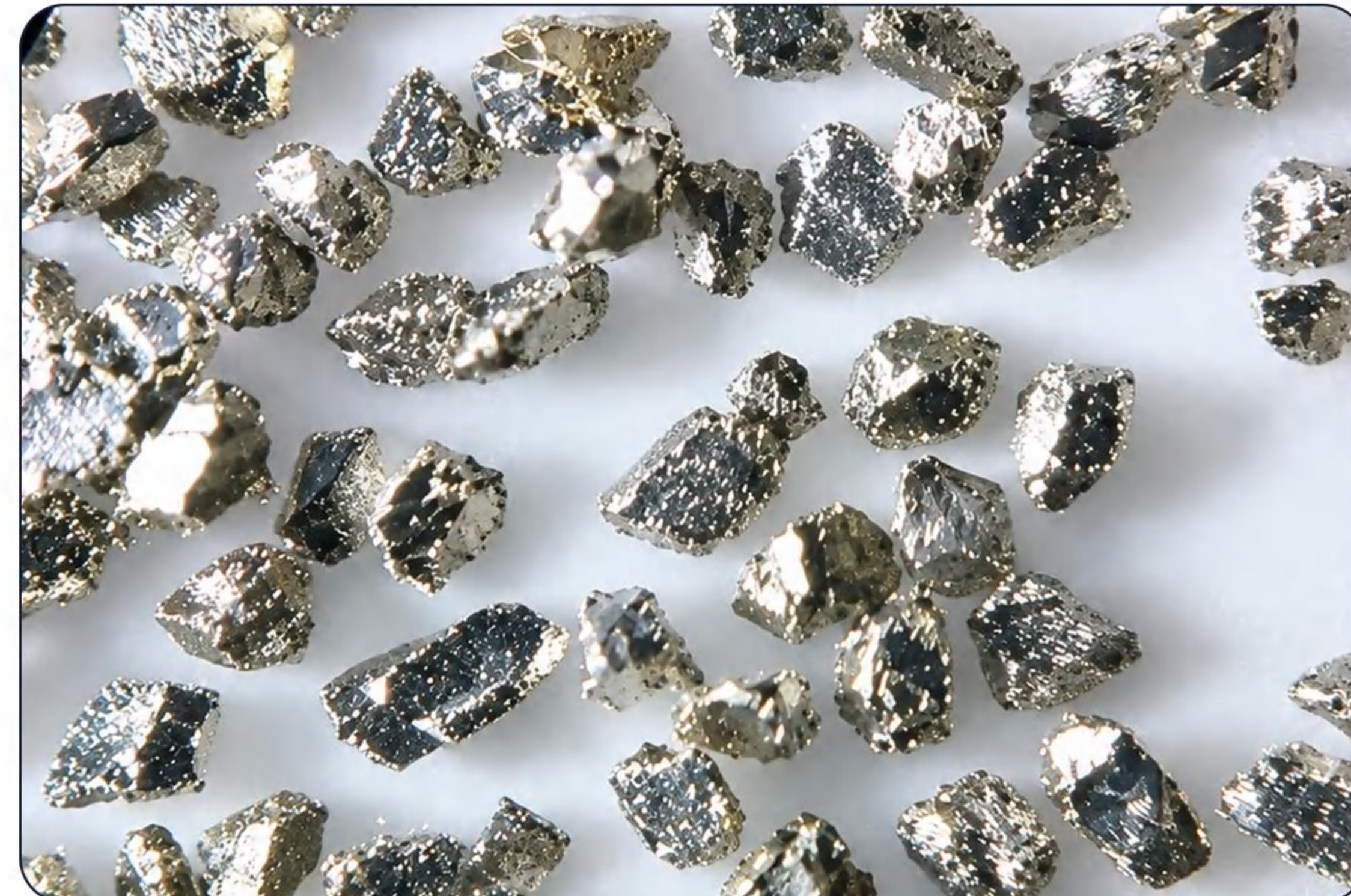


NOTE:
Higher grade is recommended for harder stone
and more demanding tool performance.

GRIT SIZE	MESH	HDG	HDY	HDGR	HDYR
80/100	80#			✓	✓
100/120	100#			✓	✓
120/140	120#			✓	✓
140/170	140#			✓	✓
170/200	170#			✓	✓
200/230	200#			✓	✓
230/270	230#			✓	✓
270/325	270#			✓	✓
325/400	325#			✓	✓
40-60	320#	✓	✓		
35-45	400#	✓	✓		
30-40	450#	✓	✓		
20-40	500#	✓	✓		
22-36	600#	✓	✓		
20-30	700#	✓	✓		
15-25	800#	✓	✓		
12-22	1000#	✓	✓		
10-20	1200#	✓	✓		
8-16	1300#	✓	✓		
8-12	1600#	✓	✓		
6-12	1800#	✓	✓		
5-10	2000#	✓	✓		
4-9	2500#	✓	✓		
4-8	3000#	✓	✓		
3-6	4000#	✓	✓		
2-5	5000#	✓	✓		
2-4	6500#	✓	✓		
1-3	10000#	✓	✓		
1-2	12000#	✓	✓		
0-2	13000#	✓	✓		
0-1	15000#	✓	✓		
0-0.5	30000#		✓		
0-0.25	60000#		✓		
0-0.1	100000#		✓		

COATED DIAMOND SERIES

Engineered Coatings for Superior Bonding & Durability



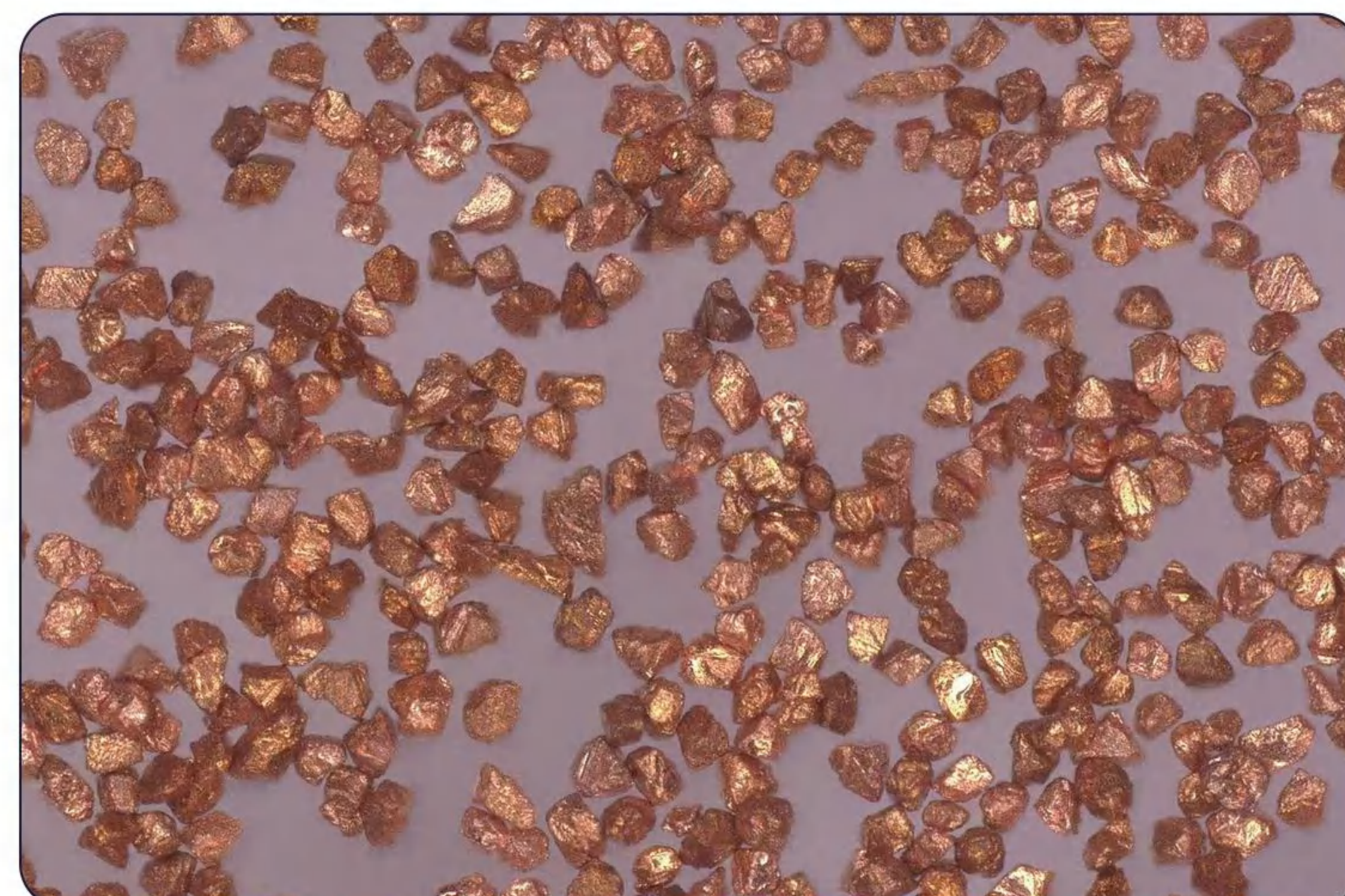
NICKEL-COATED DIAMOND

- Stronger mechanical retention with bond systems
- Uniform coating with controllable weight gain (e.g., 30% and 56%)
- Suitable for HDGR / HDYR and MBD



TITANIUM-COATED DIAMOND

- Improved interfacial bonding
- Excellent oxidation resistance
- Enhanced thermal stability



COPPER-COATED DIAMOND

- Used in metal-bond and resin-bond diamond grinding wheels and heat-dissipation-related applications
- Improved compressive strength
- Improved surface physicochemical properties



SELECTION NOTE:

Coating type and weight gain can be customized according to the bond system and application.

SPECIAL DIAMOND & POLISHING MEDIA

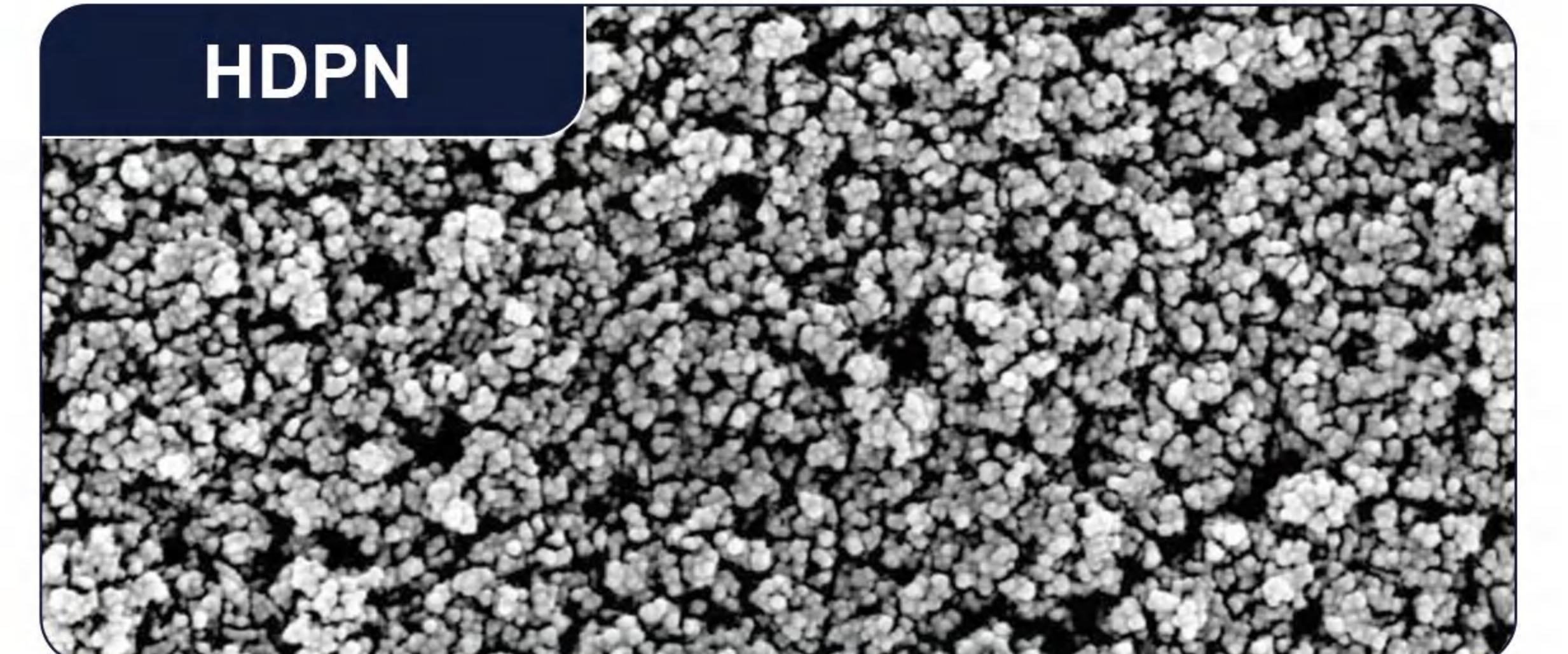
Advanced Materials for Precision Finishing & Ultra-Performance

HDP/HDYP



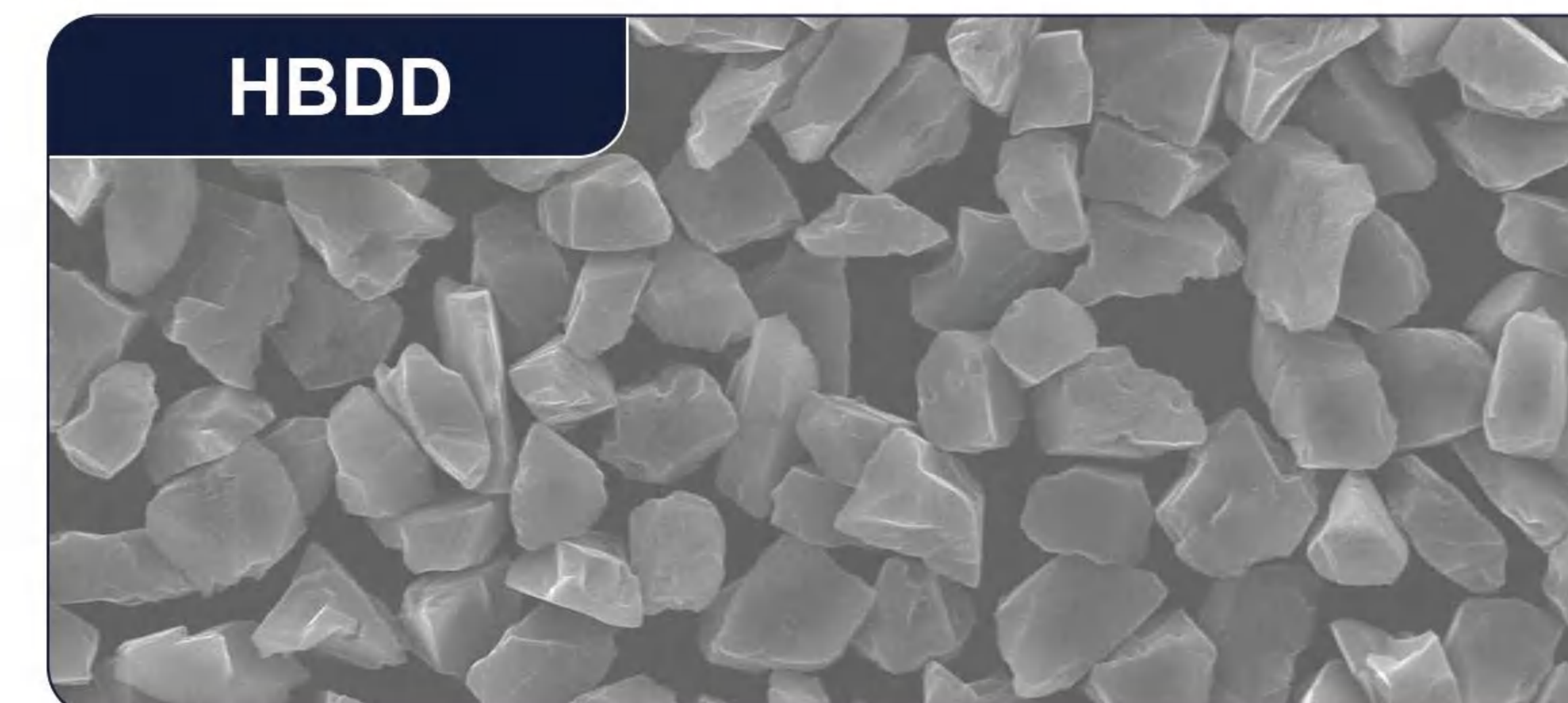
POLYCRYSTALLINE DIAMOND

HDPN



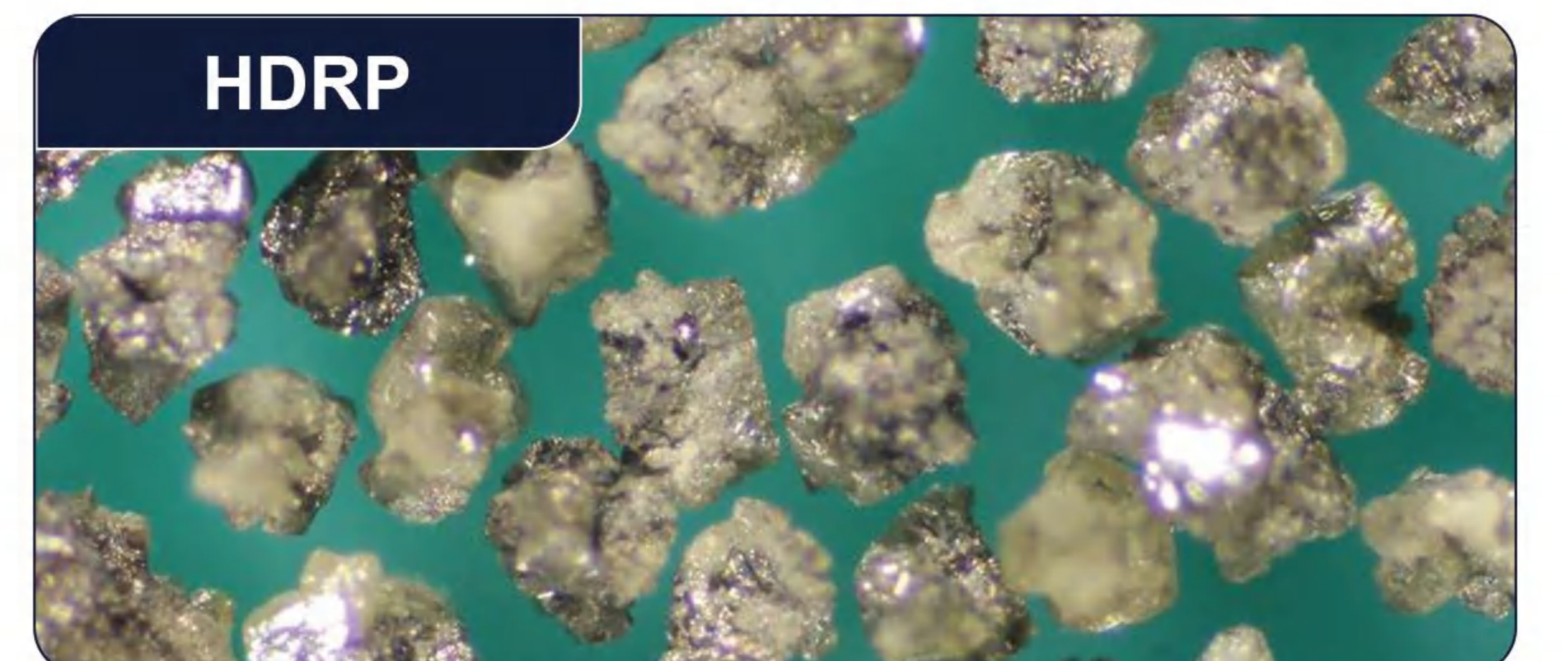
NANO DIAMOND

HBDD



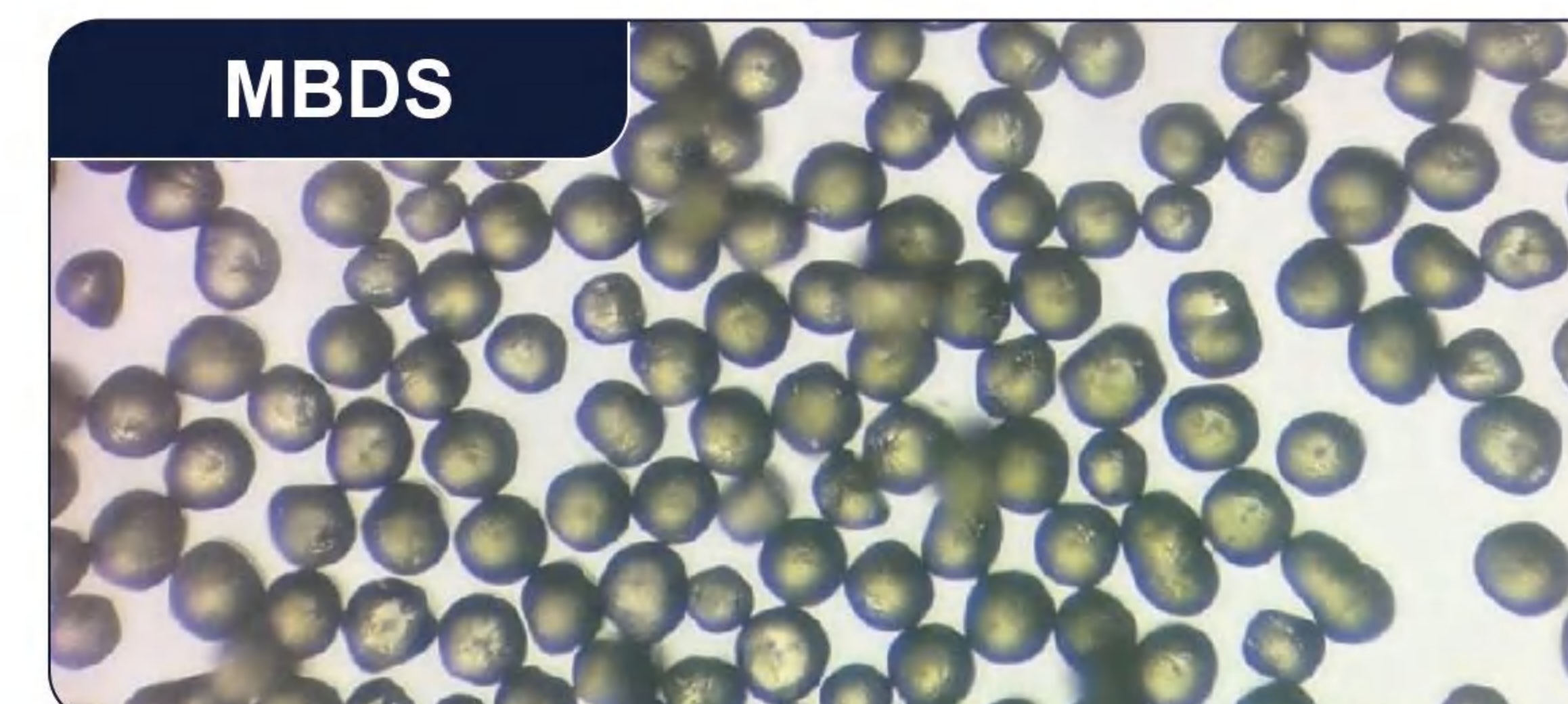
BORON-DOPED DIAMOND

HDRP



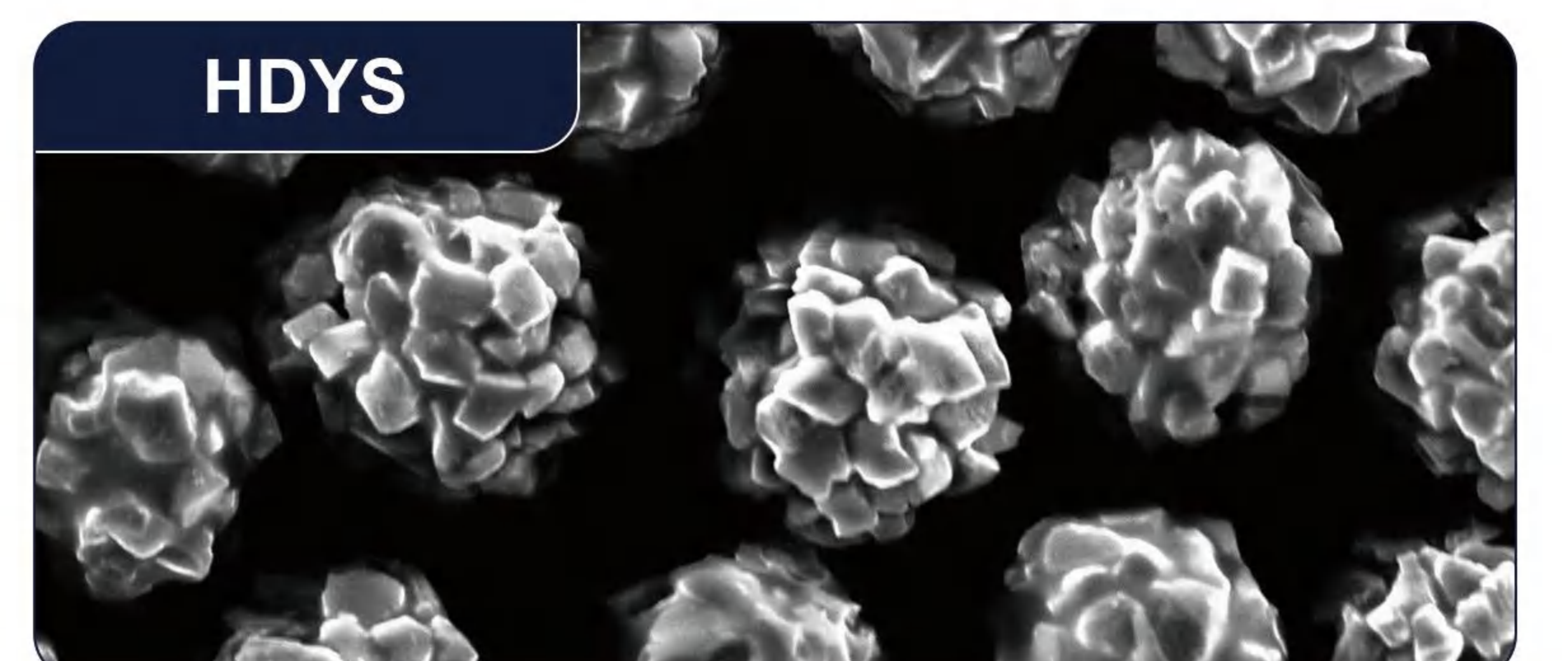
POLYCRYSTALLINE DIAMOND
FOR RESIN BOND

MBDS



ROUND DIAMOND POWDER

HDYS



AGGLOMERATED DIAMOND /
GRANULATED DIAMOND POWDER



DIAMOND PASTE



DIAMOND SUSPENSION

