

EDM Graphite

Cross-Reference Guide to Comparing Brands & Grades of EDM Graphite

INTECH EDM
GEORG FISCHER +GF+ Manufacturing Technology



EDM Graphite – Grade Characteristics & Applications

Brands		Other grades are available. For Intech EDM grades, refer to table on next page																											
		Group 1				Group 2				Group 3				Group 4				Group 5				Group 6							
		Dense, fine grained, strong. Recommended for large area eroding & large radius molds where metal removal rate is more important than surface finish.				Isotropic superfine particle graphite. Strong, good surface finish, wear resistant, slightly better than MG-4.				Isostatically molded (non-directional grain). Good for roughing & finishing. Strong, low wear resistance, easy to machine (no flaking or chipping of edges).				Isostatically molded (non-directional grain). High density, good detail, low wear, high speed and finish. Recommended for erosion work using same electrode for roughing & finishing. Suitable for wire EDM'ing.				High density, very strong. Recommended for fine detail (such as engraving & thin electrode requirements). Excellent for wire EDM'ing. 1st choice for sharp corner splash flushing.				Average particle size less than one micron. Superior strength, fine surface finishes (7 Ra). Excellent metal removal rate. High resistance to wear.							
INTECH EDM	Micrograph	MG4								MG5				MG6				MG7											
	POCO	EDM 100								EDM 1		EDM 200		EDM 2				EDM 2		EDM 3		AF5							
	Belmont	US 500			US 600																								
	EDM Supplies	SG 15							SG 20									SG 30											
	Electrodes	ISO 55				ISO 60				ISO 61	ISO 63								ISO 88	ISO 90									
	Graphel	EMS 3800								EMS 5000										EMS 7000									
	Intermark	IM9			IM6						IM20							IM30											
	MWI						EC 12				EC 15									EC 17									
	Ohio Carbon				AR 12				AR 14									AR 16											
		<div style="display: flex; justify-content: space-between; align-items: center;"> Lower Higher </div> <p style="text-align: center;">Relative Cost/Performance</p>																											

Important Notes:

1) Intech EDM has exercised care and diligence in researching and compiling this comparison. However, the information contained herein is the opinion of Intech EDM, and is given by us in good faith and believed to be reliable, but does not constitute a warranty.

2) The EDM graphite manufacturing process has many variables. As a result, graphite brands and grades from

different companies, even though within the same group, are not absolutely identical and may not perform exactly alike.

3) For critical applications, users are urged to perform their own evaluations and tests on their equipment and

jobs, and independently determine the functionality and suitability of a particular grade of graphite.

4) The horizontal position of individual grades within groups has some significance and should be considered, particularly when an application or user requirement may span more than one group.

Intech EDM Graphite Grades – Technical Specifications

EDM Graphite

Grades	Average Particle Size (microns)	Average Particle Size (inch)	Flexural Strength (psi)	Average Apparent Density (g/cm ³)	Hardness (Shore)	Electrical Resistivity (ohm-in)
Micrograph 7C *	5	0.0002	15,150	2.93	75	0.000680
Micrograph 5C *	15	0.0006	15,171	2.90	55	0.000100
POCO EDM C3 *	< 5	0.0002	16,500	3.05	67	0.000120
POCO EDM C200 *	10	0.0004	13,000	3.00	60	0.000740
Micrograph 7	5	0.0002	14,295	1.91	75	0.000591
Micrograph 6	10	0.0004	10,667	1.85	70	0.000551
Micrograph 5	15	0.0006	9,245	1.80	60	0.000531
Micrograph 4	18	0.0007	7,112	1.75	53	0.000492
Micrograph 3	76	0.0015	4,400	1.79	45	0.000340
Micrograph 2	76	0.0015	3,100	1.65	35	0.000340
POCO EDM AF5	< 1	0.00004	17,000	1.80	87	0.000680
POCO EDM 3	< 5	0.0002	13,500	1.81	76	0.000540
POCO EDM 2	< 5	0.0002	10,000	1.74	73	0.000620
POCO EDM 1	< 5	0.0002	7,500	1.66	70	0.000740
POCO EDM 200	10	0.0004	9,000	1.82	64	0.000480
POCO EDM 100	15	0.0007	6,500	1.72	58	0.000480

* – Copper impregnated grades

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