SINTEZ CIP
CARBONYL IRON POWDER

Carbonyl iron powder, grade	Fe, %	C, %	N, %	O, %	SiO2, %	Particle size distribution, µ d10	d50	d90	Tap density, g/cm³	Mesh analysis
	Metal Injection Molding									
HK-1	≥97	0.6–1.2	≤0.9	≤0.4	–	≤4	≤8	≤15	–	yes
HC	≥97	0.6–1.2	≤0.9	≤0.4	–	–	–	8–12	–	yes
HC-C1	≥97.5	0.7–0.9	0.5–0.9	≤0.9	0.4–0.7	1.4–2.4	3.4–4.4	6.4–8.4	≥3.8	yes
HC-2	≥97.5	0.75–0.86	≤0.9	0.15–0.3	–	1.7–2.3	3.5–4.5	7.2–9.2	3.8–4.2	yes
HM-C	≥97	0.6–0.9	≤0.9	0.4–0.7	0.6–0.8	≤2.5	≤5	≤8	3.8–4.4	yes
BC-1	≥99	≤0.05	≤0.1	≤0.3	–	≤3	≤6	8–12	≥3.5	yes
BC-C1	≥99.5	≤0.03	≤0.01	0.18–0.35	0.08–0.14	1.7–2.7	3.8–5.3	6.5–10.0	3.6–4.3	yes

SPC data and more options for metal injection molding available upon request.

	Fe, %	C, %	N, %	O, %	SiO2, %	Particle size distribution, µ d10	d50	d90	Tap density, g/cm³	True density, g/cm³	Ni, %	P, %
	Diamond tools											
BK	≥98.5	0.02–0.1	≤0.02	≤0.3	–	≤4.5	≤9	12–25	–	–	–	–
BK-3	≥99.5	0.02–0.1	≤0.01	≤0.3	–	3–4	6–8	13–25	3.1–3.7	≥7.4	–	–
BK-G	≥99.5	≤0.05	≤0.02	≤0.4	–	1–3	4–8	10–18	–	–	–	–
BC-2	≥99.5	0.02–0.1	≤0.02	≤0.3	–	≤3.5	≤7	8–12	–	–	–	–
BM-1	Balance	0.02–0.1	≤0.02	≤0.5	–	≤2.5	≤4.5	≤6	–	7.4–7.7	–	–
HM	Balance	0.6–1.2	≤0.9	≤0.4	–	≤2.5	≤4.5	4–8	–	–	–	–
FeP-2	Balance	0.1–0.7	≤0.2	≤1.0	–	≤3.5	≤6.5	≤18	–	–	–	≤10
NiP	–	–	≤0.01	≤1.0	–	–	≤17	–	–	–	Balance	9–11

More options for diamond tools production available upon request.

	Fe, %	C, %	N, %	O, %	SiO2, %	Particle size distribution, µ d10	d50	d90	Mi	Qrel	Core loss, mW/cc	Surface resistance, Mohm
	Electronic components											
BK-4	Balance	≤0.04	≤0.01	≤0.3	–	–	–	–	≥25	–	–	–
BK-C	Balance	≤0.04	≤0.01	≤0.4	≤0.2	–	–	–	≥25	–	–	>200
BC-CR	≥98.5	≤0.04	≤0.01	≤0.35	≤0.2	1.5–2.5	3.0–4.5	6.0–8.5	19–25	–	1500–1600	>200
R-10	Balance	≤1.2	≤1.0	≤0.4	–	≤4	≤8	≤15	13–15	1.85	–	–
R-20	Balance	≤0.9	≤0.9	≤0.4	–	≤3	≤7	≤10	12–14	2.0	–	–
HM-C1	≥97	0.6–0.9	≤0.9	0.4–0.7	–	≤1.8	≤3.5	≤6.5	10–12	–	≤200	>200

More data and options for electronic components/powder cores available upon request.

	Fe, %	C, %	N, %	O, %	SiO2, %	Particle size distribution, µ d10	d50	d90	Other
	MRF - Magneto-rheological fluids								
BC	≥99.0	0.02–0.1	≤0.1	≤0.3	–	≤3	≤6	8–12	Si ≤ 0.1
HM-1	Balance	0.6–0.9	≤0.8	≤0.4	–	≤2.5	≤4	≤6	–

More options for magneto-rheological fluids available upon request. Please, see our contact details.

The above list does not represent a full range of carbonyl iron powder grades available and applications developed. Please, visit us at www.sintez-cip.ru or contact our sales department for more information.