

Carbide Grade	Chemical Composition % by mass					Average Grain Size μm	Physical Properties		
	WC	Co	TaC/NbC	TiC	Cr3C2		Density g/cm ³	Hardness HV 50	Transverse Rupture Strength N/mm ²
H01MS	94	6	-	-	-	0.8	14.8	1800	3800
H021MS	90	10	-	-	-	0.8	14.25	1600	4300
H062MS	88	12	-	-	-	0.5	14.1	1720	4200

E11	96.85	3	-	-	0.15	0.8	15.3	1925	3300
H01	93.9	6	-	-	0.2	0.8	14.95	1750	4200
658	91.65	8	-	-	0.35	0.8	14.65	1700	2300
KX10	89.5	10	-	-	0.5	0.8	14.45	1600	2800
GX30	83.5	15	1.5	-	-	0.6	13.95	1320	2700

H10	94	5.5	0.5	-	-	1.2	14.95	1700	2300
H20	93	6.5	0.5	-	-	1.5	14.9	1580	2200
H30	91	8.5	0.5	-	-	2	14.65	1455	2300
GF12	88	11.5	-	-	0.5	1.2	14.33	1455	2800
H40	87	12	1	-	-	2	14.3	1295	2850
G30	85	15	-	-	-	5.5	14	1030	2800
G30 Sol	86	14	-	-	-	1.5	14	1200	3200
GF15	84.5	15	-	-	0.5	2	13.95	1250	1250
G40	80	20	-	-	-	5.5	13.6	910	3000
G50	75	25	-	-	-	5.5	13.1	810	2700

P10 S	68	9	5	18	-	2	10.65	1500	1400
P20 S	76	9	5	10	-	2	12.05	1500	1650
P25 S	78.5	9	5	7.5	-	2	12.55	1450	1800
P30 S	80.5	9.5	5	5	-	2	13	1400	2050
P40 S	79	11	5	5	-	2	12.9	1350	2050

M10	83.95	6.02	2.65	7.38	-	2	12.95	1650	1700
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This table represents guidance only and may be changed at any time

Ni binder against corrosion and non-magnetic possible on resquest

Areas of use

Standard rods - Centerless rules - Machining of plastics, glass, cardboard, paper
Standard rods - Blanking and machining tools
Standard rods - Fine blanking and finish machining tools

Die cores (wire drawing, drawing, shearing) - Wearing parts (sealing rings, wire guide, drill bushings, nozzles)
Die cores (wire drawing, drawing, shearing) - Machining of plastics, glass, cardboard, paper - Metrology (balls, Pads, Wedges)

Cutting tools : Milling cutters - Inserts for milling cutters - Inserts (for non ferrous and bar turning tools) - Reamers, Milling Cutters, Drills -

Compression Moulds - Cutting tools : milling cutters - Inserts for milling cutters - Inserts (for non ferrous and bar turning tools) - Reamers, Milling Cutters, Drills -

Cutting tools, Stamping - Die cores (Wire drawing, drawing, shearing) -

Die cores (Wire drawing, drawing, shearing) - **Machining** : Reamers - Milling cutters - Drills - **Wearing parts** (Sealing rings, Wire Guide, Drill Barrels, Nozzles) - Cutting inserts (for non ferrous and free cutting tools) - Pads, Wedges, Metrology balls

Die cores (Wire drawing, drawing, shearing) - **Wearing parts** (Sealing rings, Wire guide, Drill barrels, Nozzles) - inserts for woodworking - Centerless rules - Compression moulds - Machining of plastics (glass, cardboard, paper) - Pads, wedges, metrology balls, etc.)

Die cores (Wire drawing, drawing, shearing) - Cores for drawing shapes (Stamping, Spinning) - inserts for Woodworking - Compression moulds

Rolling mill rolls - Parts for mining, drilling (O&G), and percussion - Cutting tools - Cores for drawing shapes (Stamping, Extrusion) - Compression moulds

Wear plates (Tips, Inserts) for brazing (O&G) - Cutting tools - Cores for drawing shapes (Stamping, Spinning) - Parts for mining, drilling, Striking tools - Compression moulds - Rolling mill rolls

Cutting tools - Cores for drawing shapes (Stamping, Spinning) - Inserts for woodworking - Parts for mining, drilling, tunneling and percussion - Striking and shrinking dies - Compression moulds

Agricultural brazing inserts (ploughshares, ...) - Parts for mining, drilling, tunneling and percussion

Cutting tools - Cores for drawing shapes (Stamping, Spinning) - Inserts for woodworking - Parts for mining, drilling (O&G), and percussion - Striking and shrinking dies - Compression moulds

Cold-heading tools, Striking, shrinking and compression dies

Striking, shrinking and compression dies - Hot extrusion

Cutting tools (High cutting speed, no impact, small chips)

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Inserts for milling cutters - Die cores (wire drawing, drawing, shearing) - Hot extrusion - **Cutting tools** (High cutting speed, no impact, small chips)

Cutting tools (Low cutting speed, large chip section)

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