

CY CARBIDE MFG. CO., LTD.

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24REV1

Drawing Application



ABOUT CYC



ISO9001:2015

CY CARBIDE MFG.CO.LTD., established in 2003, is a professional manufacturer and exporter of high performance tungsten carbide products and CERMET inserts materials. CYC delivers globally high performance standard and non-standard products, which meet the most challenging demands from various applications including metalworking, mining, construction, oil & gas, die & mold, and woodworking.

CYC production sites are located in Kunshan, 50 km away from Shanghai, Changshu and Jiangxi, raw material production factory, consisting of production, laboratories and R&D facilities. There are over 40,000 square meters production areas. We have 800+ skilled staff, including tooling and grade design engineers.

CYC is an ISO 9001:2015(TUV) certified company. High standard and strict requirement is our core value for quality. Consistent quality of products are guaranteed by a complete quality management system, strict control of raw material supply chain and 100% traceability in the entire production process.

CYC adheres to responsible and sustainable business practices, including conflict free raw materials sourcing, proactive health management to our employees, and concern about environment and energy sustainable development. Our open and transparent business philosophy allows our customers, employees, and external suppliers, to have confidence in our business, ways of working and our products.

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MANUFACTURING PROCESS

Following strictly quality control throughout processing of RTP, forming, sintering, machining and delivering to make sure our commitments of uniformity and traceability to our clients.

01 Powder Mixing



02 RTP Ball Milling



03 Forming



04 Isostatic Press



05 Preforming



06 HIP Sintering



07 Stress Relief



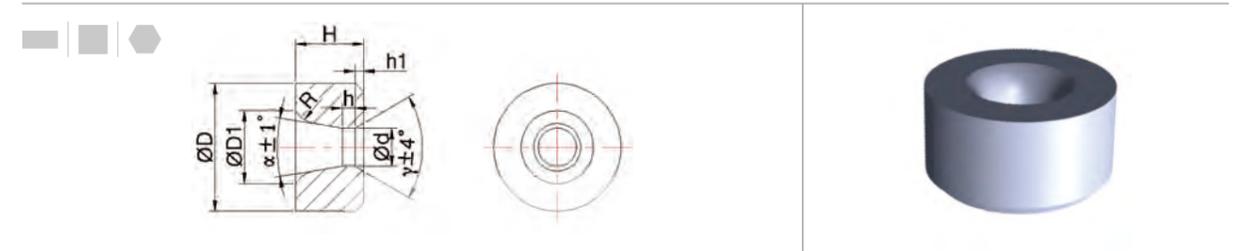
08 Inspection



GRADE CHART

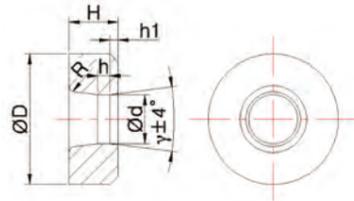
Grade	Grainsize	Hardness	Density	T.R.S	Application
	um	HRA	g/cm ³	N/mm ²	
MH6	Submicron	93.6	14.95	≥2800	Steel cord, wet drawing, sawing wire
MH8	Submicron	92.4	14.65	≥3000	High wear resistant parts in drawing & extrusion, spinner dies
MH10F	Submicron	91.8	14.45	≥3800	Cutting wire, carbon steel, welding wire & non-ferrous wire, mandrel&plugs
SK70C	Coarse	83	13.5	≥2200	New grade for roller of rebars, hot forging dies, hot working parts
SK75C	Coarse	83.8	13.45	≥2500	New grade for roller of rebars, hot forging dies, hot working parts
CK10	Medium	91.3	14.9	≥2100	Small-dia wire, wet and dry drawing, small mandrel
CG10	Medium	90.6	14.85	≥2800	Special profile bars, small size tubes, extrusion dies
CG35	Medium	89.3	14.55	≥3400	Middles size tubes & bars
CG50	Medium	88.2	14.2	≥3500	Widely used for bar & tube dies, large size range was included
CG65	Medium	87	13.95	≥3600	Suitable for large size tube&bars, anti-crack
CT70	Coarse	85	13.6	≥2700	Wire cutting, cold forging die
CT80	Coarse	84	13.45	≥2600	Wire cutting, frange die, cold forging die

WIRE & BAR DRAWING DIE NIBS

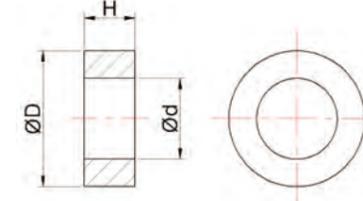


Type	D	H	d	h	α°
CW010008	10	8	0.8, 1.0, 1.2, 1.2, 1.3	1.0	12°
CW012008	12	8	0.8, 1.0, 1.2, 1.2, 1.3, 1.4, 1.5, 1.6	1.0, 1.2, 1.5	14°
CW013010	13	10	1.0, 1.2, 1.3, 1.5	1.0, 1.2, 1.5	14°
CW015010	15	10	1.0, 1.2, 1.3, 1.5, 1.6, 1.7, 1.8, 1.9, 2.0, 2.1, 2.1, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 3.0, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8	1.5, 1.6, 1.8	14°
CW015013	15	13	1.0, 1.2, 1.5, 1.9, 2.0, 2.5	1.8	14°
CW017015	17	15	1.0, 1.2, 1.5, 1.8, 1.9, 2.0, 2.5, 2.8, 3.0, 3.5, 4.0, 4.5, 5.0	1.8	14°
CW019017	19	17	1.0, 1.3, 1.5, 1.7, 2.5, 2.7, 2.9, 3.0, 4.0, 5.0	1.8	14°
CW022018	22	18	1.7, 2.0, 2.5, 2.7, 3.0, 3.5, 3.7, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5	2.6	14°
CW025018	25	18	3.0, 3.2, 3.4, 3.6, 3.8, 4.0, 4.2, 4.5, 4.8, 5.1, 5.4, 5.5, 5.8, 6.0, 6.3, 6.5, 6.8, 7.0, 7.3, 7.7	2.8, 3.0, 3.1, 3.2	16°
CW025020	25	20	5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0, 10.5, 11.0	3.1, 3.2	16°
CW030022	30	22	4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 7.7, 8.0, 8.4, 9.0, 9.4, 9.5, 10.0, 10.5, 11.0	3.3, 3.5, 3.6, 3.7, 4.5	16°
CW030024	30	24	5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 10.0, 10.5, 11.0, 11.5, 12.0, 13.0	3.3, 3.4, 3.5, 3.6, 3.7, 4.5	16°
CW035025	35	25	6.7, 7.0, 7.5, 7.7, 8.2, 8.7, 9.3, 9.8, 10.0, 10.5, 11.0, 11.5, 12.0, 12.5, 13.0, 13.5	2.5, 2.8, 3.0, 3.2, 3.6, 4.5	16°

TUBE DRAWING DIE NIBS



TUNGSTEN CARBIDE ROLLERS



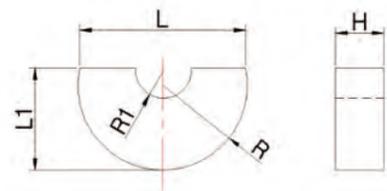
Type	D	H	d	h	α°
CT028024	28	24	8.0, 8.2	8	9°
CT030030	30	30	5.0, 5.5, 6.0, 6.6, 7.0, 7.5, 8.0, 8.5, 9.5, 10.0, 11.0, 12.0, 12.5, 13.0, 14.0	10	6°, 9°, 12°
CT035020	35	20	12.0, 12.5, 13.0, 13.5, 14.5	5.2	12°, 16°, 24°
CT035022	35	22	11.5, 12.0, 12.5, 13.0, 13.5, 14.0, 14.5, 15.0, 15.5	5.85	12°, 16°, 24°
CT035024	35	24	9.2, 9.5, 10.5, 11.0, 11.5, 12.5, 13.5, 14.5, 15.5, 16.5, 17.5	8	12°, 16°
CT040022	40	22	13.0, 14.0, 15.0, 15.5, 16.5, 17.5, 18.5	6	16°, 24°, 30°
CT045024	45	24	15.0, 15.5, 16.0, 16.5, 17.5, 18.5, 19.5, 20.5, 21.5, 22.5	8	16°, 24°, 30°
CT045040	45	40	13.0, 14.0, 14.5, 15.0, 15.5, 16.0, 16.5, 17.5, 18.5, 20.5, 21.5, 22.5, 23.5, 24.5	12	16°, 24°
CT050025	50	25	21.5, 22.5, 23.5, 24.5, 25.5, 26.5, 27.7	8	16°, 24°, 30°
CT050030	50	30	21.5, 22.0, 23.0, 24.0, 25.0, 26.0, 27.0, 28.0, 29.0	10	24°, 30°
CT055030	55	30	24.0, 25.0, 25.5, 26.0, 26.5, 27.5, 28.5, 29.5	10	24°, 30°
CT060030	60	30	24.0, 25.0, 26.5, 27.0, 27.5, 28.0, 28.5, 29.5, 30.0, 30.5, 31.5, 32.5, 33.0, 33.6	10	24°, 30°
CT060050	60	50	29.0, 30.0, 32.0, 33.0, 34.0, 35.0, 36.0	12	24°, 30°
CT065030	65	30	25.0, 26.0, 27.0, 28.0, 29.0, 31.0, 32.0, 33.0, 34.0	10	24°, 30°
CT070030	70	30	29.5, 32.0, 34.0, 35.0, 36.0, 36.5	10	18°, 24°, 30°
CT070050	70	50	37.5, 39.0, 40.5, 42.0	12	16°
CT075040	75	40	45.5, 50.0	10	24°, 30°
CT080030	80	30	44.0, 44.5, 50.0	10	18°, 24°, 30°
CT090030	90	30	56.0, 57.0, 58.0, 59.0, 60.5, 65.5	10	24°, 30°
CT095033	95	30	57.0, 60.5, 66.5, 70.0	10	24°, 30°
CT100035	100	35	59.0, 60.5, 67.0, 70.0, 71.0	10	24°, 30°
CT105035	105	35	61.0, 62.5, 63.0, 75.0, 79.0	10	24°, 30°
CT110045	110	45	64.0, 66.0, 67.0, 71.5, 73.6, 80.0, 85.0	12	24°, 30°
CT120050	120	50	71.0, 80.0, 88.0, 90.5	12	24°, 30°

SK70C/SK75C

Focusing on the steel industry, we design the new grades with special binder and micro elements to support longer lifetime, and make sure the stable quality performance under hot working environment with low coefficient of thermal expansion.



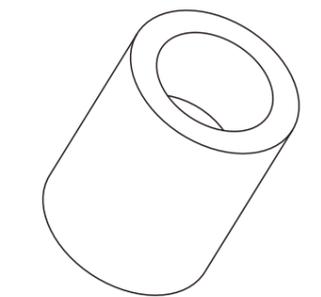
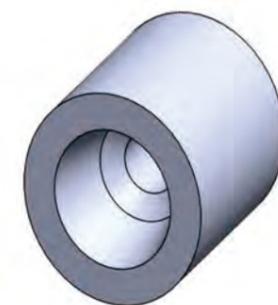
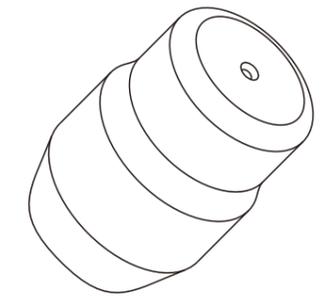
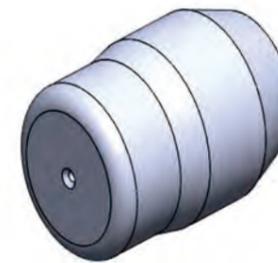
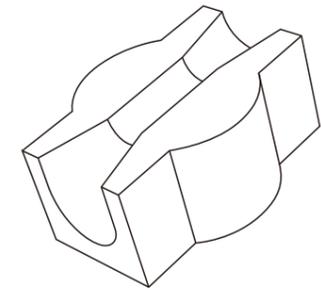
PUNCH HEADS AND CUTTERS



Coarse grainsize grade will have a good performance under the high speed shearing and cutting working for the steel wire, our dedicated experts team will support the solutions and innovations of tungsten carbide tailored to match market demands of the wire cutting work.



OTHER DRAWING PARTS



CYC Advantages:

- * Free options for hole and product profile
- * Surface are applicable from rough to finish ground
- * Diameter up to 350mm
- * Dedicated R&D team support sustainable material upgrading to satisfy the market demands

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