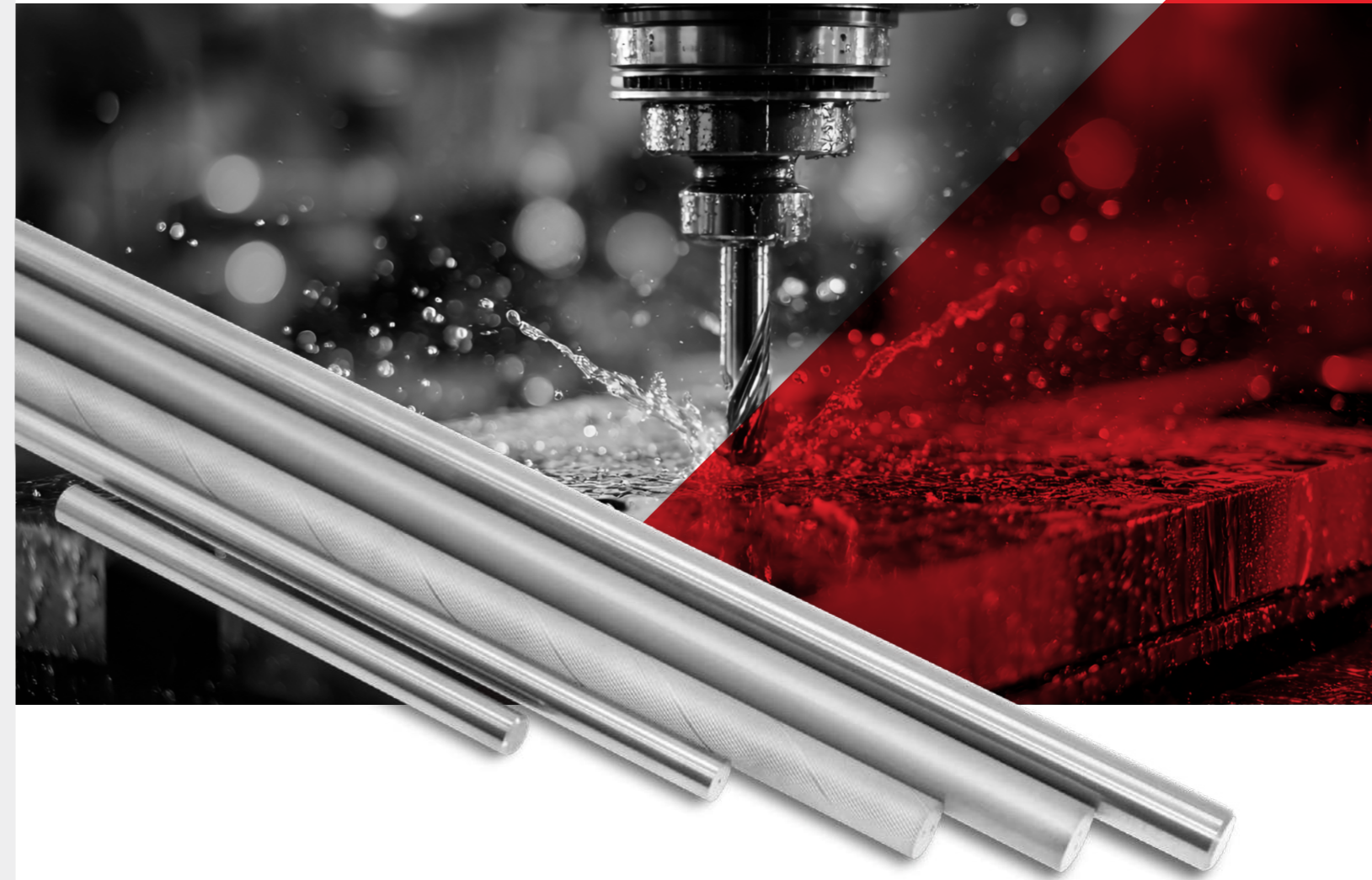


www.cycarbide.com



CY CARBIDE MFG. CO., LTD.

Add: 215316, No. 67, Yucheng Road (N.), Kunshan, Jiangsu, China

Tel: +86-400 863 2919

Fax: +86-512-86162380

Email: info.metalworking@cycarbide.com

Metalworking Applications



where your **innovation**
BEGINS

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| 2 Helical Coolant Holes 40 Degree, 330L, Unground (UG) | 33 |
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| | |
|--|----|
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 **20⁺** Since Foundation

 **800⁺** Employees

 **4** Plants

 **2500** Annual Capacity

 **100⁺** Grades
100,000⁺ Specs

 **50⁺** Countries/Regions

About Us

CY CARBIDE MFG. CO., LTD., established in 2003, is a professional manufacturer and exporter of high performance tungsten carbide products, RTP powders and CERMET materials. CYC delivers globally a high performance standard and special products offering, that meet the most challenging demands from industry sectors including metalworking, mining, construction, oil & gas, die & mold, and woodworking.

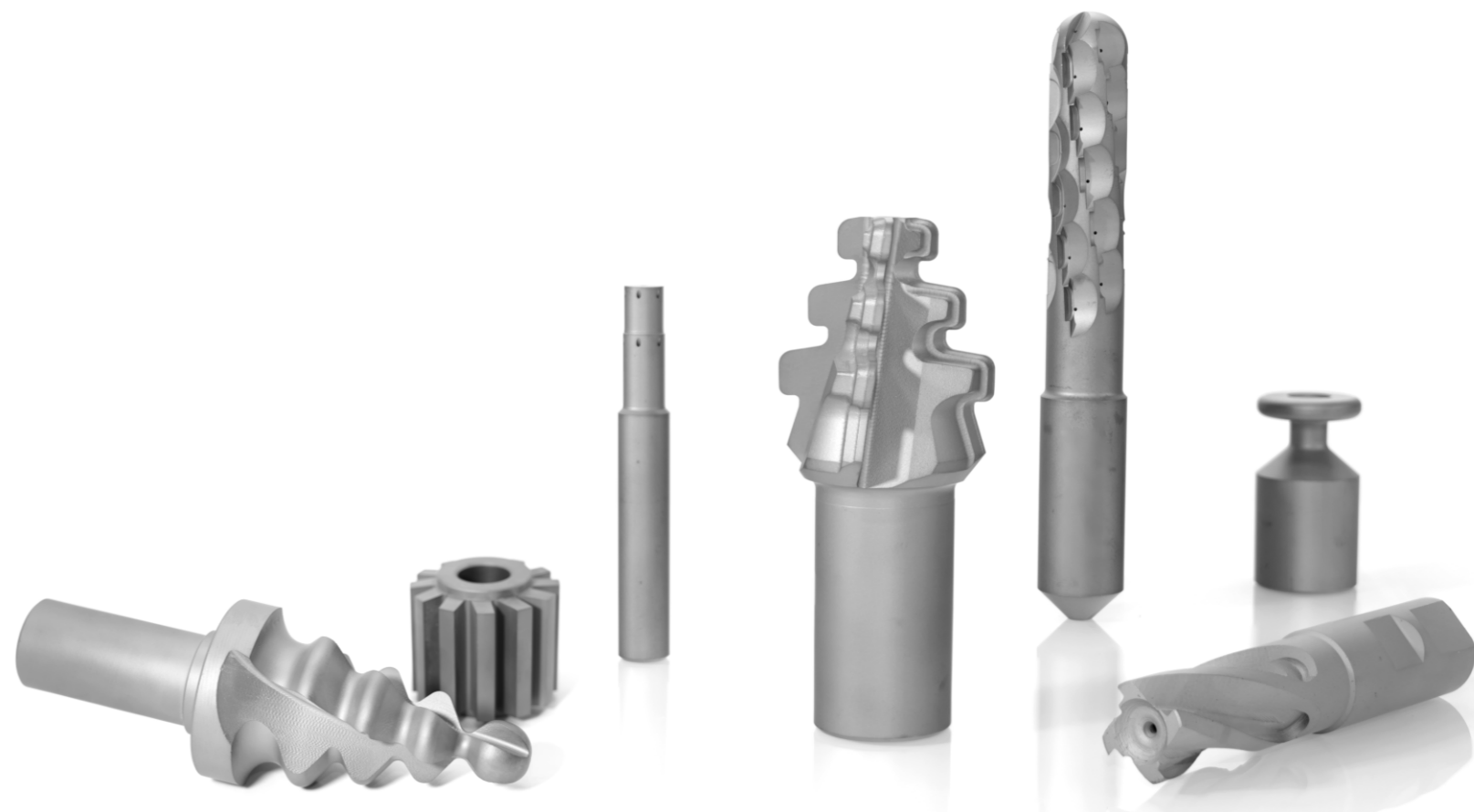
CYC boasts a strong manufacturing capability with 4 production facilities in China, two of which producing carbide rods and preforms, are located in Kunshan, a city 50km away from Shanghai, while the other two specialize in powder & rods production in Jiangxi and inserts production in Changshu. We also have state-of-the-art laboratories and R&D facilities, along with 800+ skilled employees, including an excellent on-site engineering team comprised of experts in material, tooling and technology.

CYC high performance products are guaranteed by a strong process management system, resulting in consistent quality for every product group. Strict control of our raw material supply chains and 100% traceability for every product batch throughout the entire manufacturing process. A philosophy of continuous improvements within every process is a core principle in our ways of working. CYC is an ISO 9001:2015(TUV), ISO 14001:2015, ISO 50001:2018 and ISO 45001:2018 certified business.

CYC adheres to responsible and sustainable business practices, including conflict-free raw material sourcing, proactive health management for our employees, and continuous concern about the environmental impacts of our business. 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.

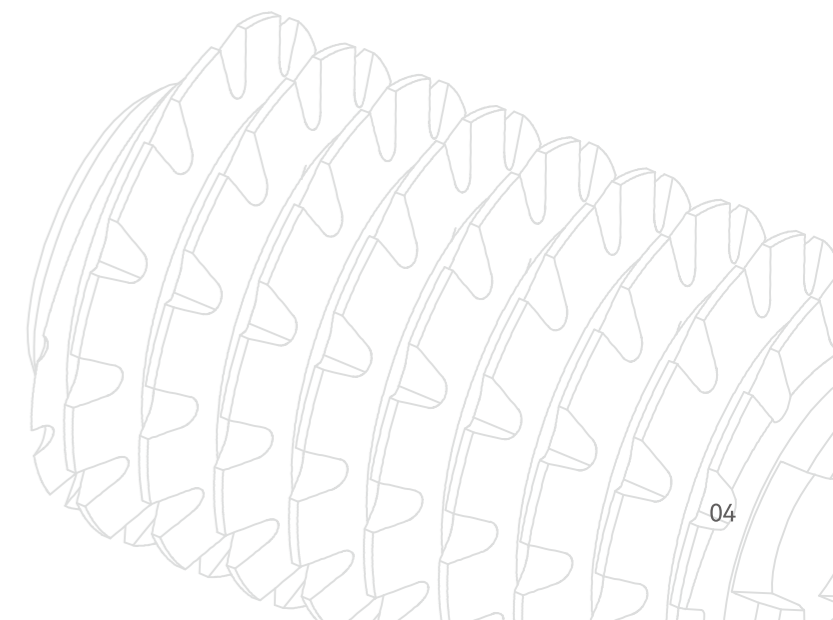


All-in-one **Solution**



All-in-One Solution Provider

CYC delivers more **efficient, comprehensive, flexible and eco-friendly solutions** for all your metal cutting demands.



R&D Center



Team

With over 20 years of R&D and manufacturing experience, CYC has built a dedicated team consisting of global experts in technical and commercial areas who always stand behind our customers.



Facility

The full range of advanced R&D facilities, seperated prototyping line and cutting test center, provide a solid foundation for new product development.



Collaboration

Maintains close and in-depth collaboration with the leading universities, institutions and industry experts.

Laboratory Analysis Center

▶ JEOL SEM
Japan

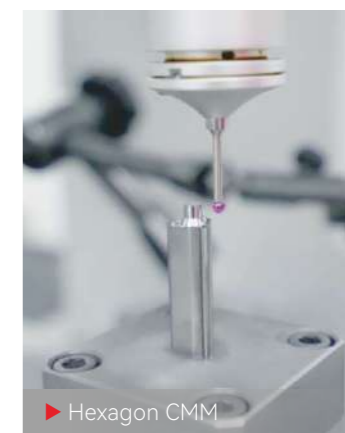


The internal laboratory's testing scope covers from incoming raw materials (WC, Co, etc.), RTP to carbide blanks and finished parts.

Testing items including but not limited to:

- Chemical compositions
- Grain size distribution
- Metallographic micro structure
- Magnetic saturation & coercive force
- Physical & mechanical properties

With the well-equipped facilities and professional methodologies, the lab provides reliable data support and effective quality control for R&D and massive production.



▶ Hexagon CMM



▶ Innovatest Vickers Hardness Tester



▶ Magnetic Saturation Tester

Manufacturing Process

01 Grade Design
Material's Selection

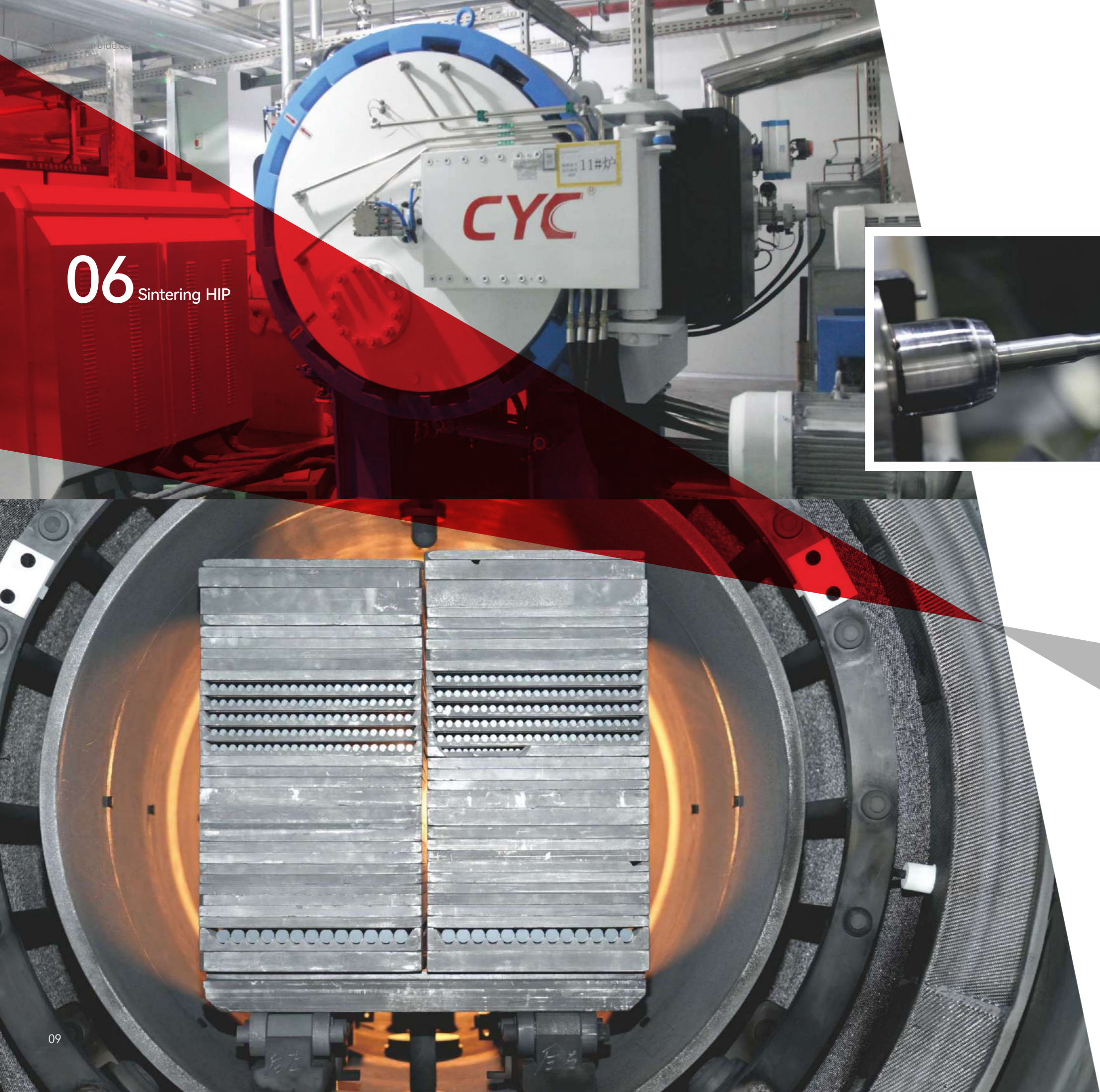
02 RTP
Ball Milling

03 RTP
Spray Drying

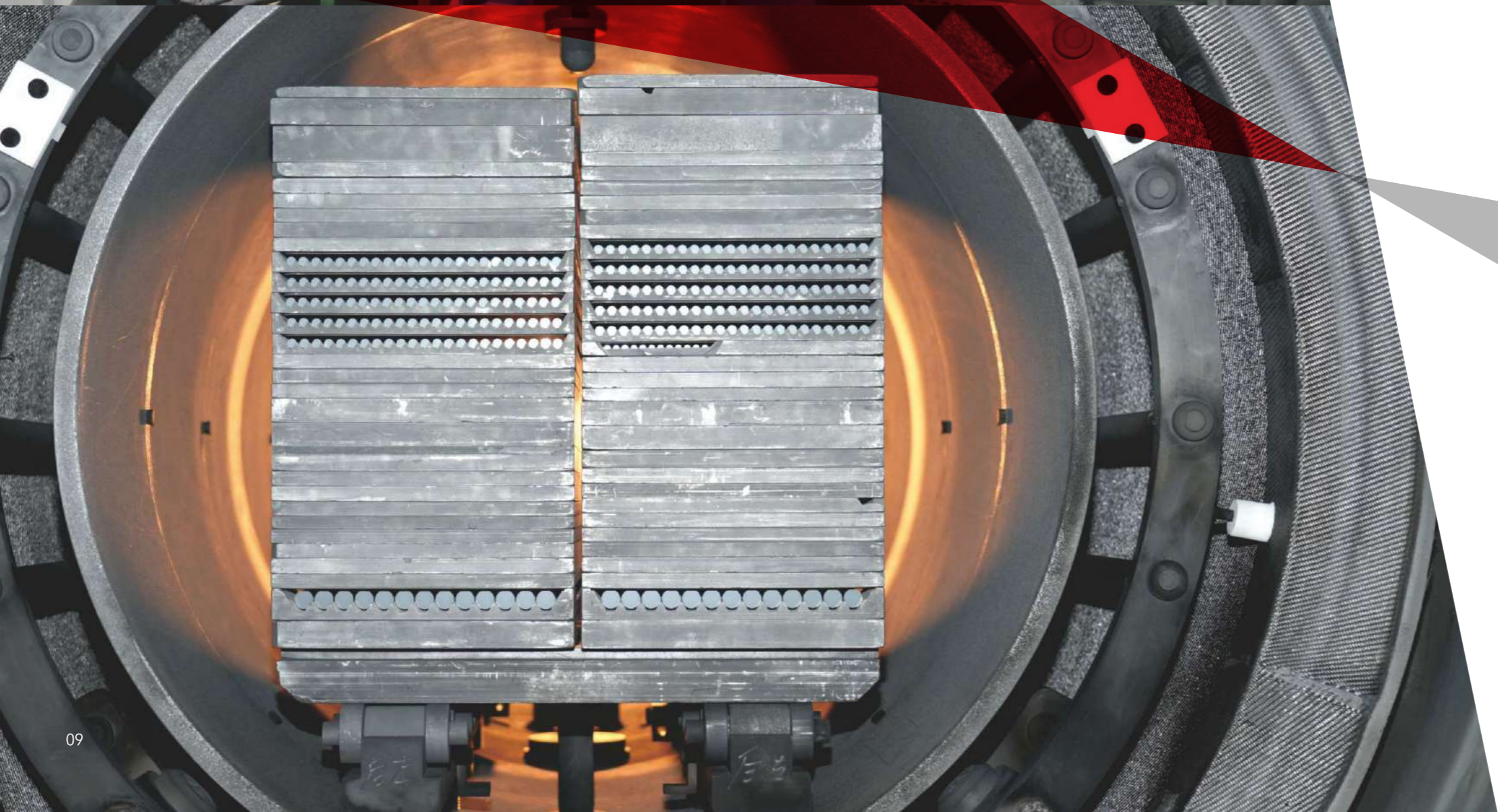
04 Extrusion / Pressing

05 CIP / Preforming

06 Sintering HIP



07 Hard Machining

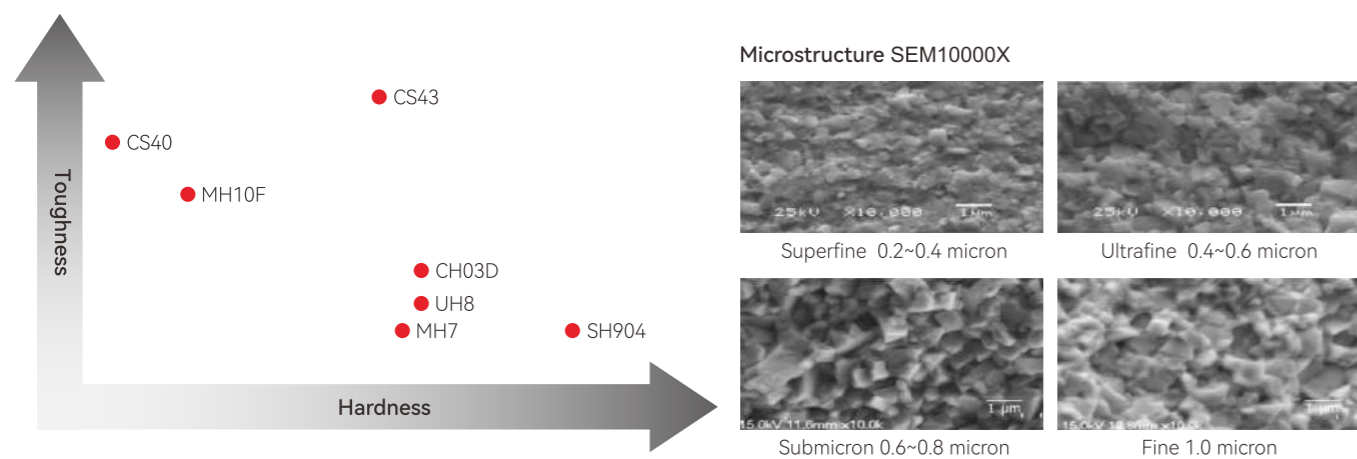


08 Inspection

Grade Chart Of Carbide Rods

| Grades | Binder % | Hardness HRA | Hardness HV10 | T.R.S ≥N/mm ² | Density g/cm ³ | K _{IC} MPa·m ^{1/2} | Grain Size | ISO Code | Application |
|--------|----------|--------------|---------------|--------------------------|---------------------------|--------------------------------------|------------|----------|--|
| MH10F | 10 | 91.8 | 1600 | 3800 | 14.45 | 11.0 | Submicron | K30 | An excellent universal grade to cover most of the cutting applications for materials of ISO P,M,K,N. |
| CS43 | 12 | 92.5 | 1720 | 4500 | 14.20 | 11.0 | Ultrafine | K40 | High toughness, high wear resistance, Suitable for ISO P,M,S,H finishing. |
| CS40 | 12 | 91.5 | 1560 | 4000 | 14.15 | 13.0 | Submicron | K40 | Suitable for roughing and machining under extreme conditions/environments. |
| SH904 | 9 | 94.0 | 2040 | 4000 | 14.45 | 8.5 | Superfine | K30 | Made of superfine grain size 0.3~0.4 μm, high wear resistance and impact strength for meeting the most critical cutting challenges in composite materials including CFRP, graphite and hardened steels >60HRC. |
| UH8 | 8 | 93.2 | 1860 | 3300 | 14.60 | 9.0 | Ultrafine | K20 | Ultrafine carbide grade with high hardness suitable for machining hardened materials (50-60HRC) and high performance machining of non-ferrous metals such as aluminum. |
| MH7 | 6 | 93.1 | 1850 | 3600 | 14.85 | 8.5 | Submicron | K10 | A grade with high wear resistance for machining aluminum alloys, graphite, composite materials and suitable for diamond coating. |
| CH03D | 3 | 93.2 | 1860 | 1800 | 15.25 | 9.5 | Fine | K05 | High performance grade for diamond coated tools, which is used for machining graphite, composite materials, CFRP. |

• Above data are typical parameters.



Application Recommendation

D: diamond coating needed

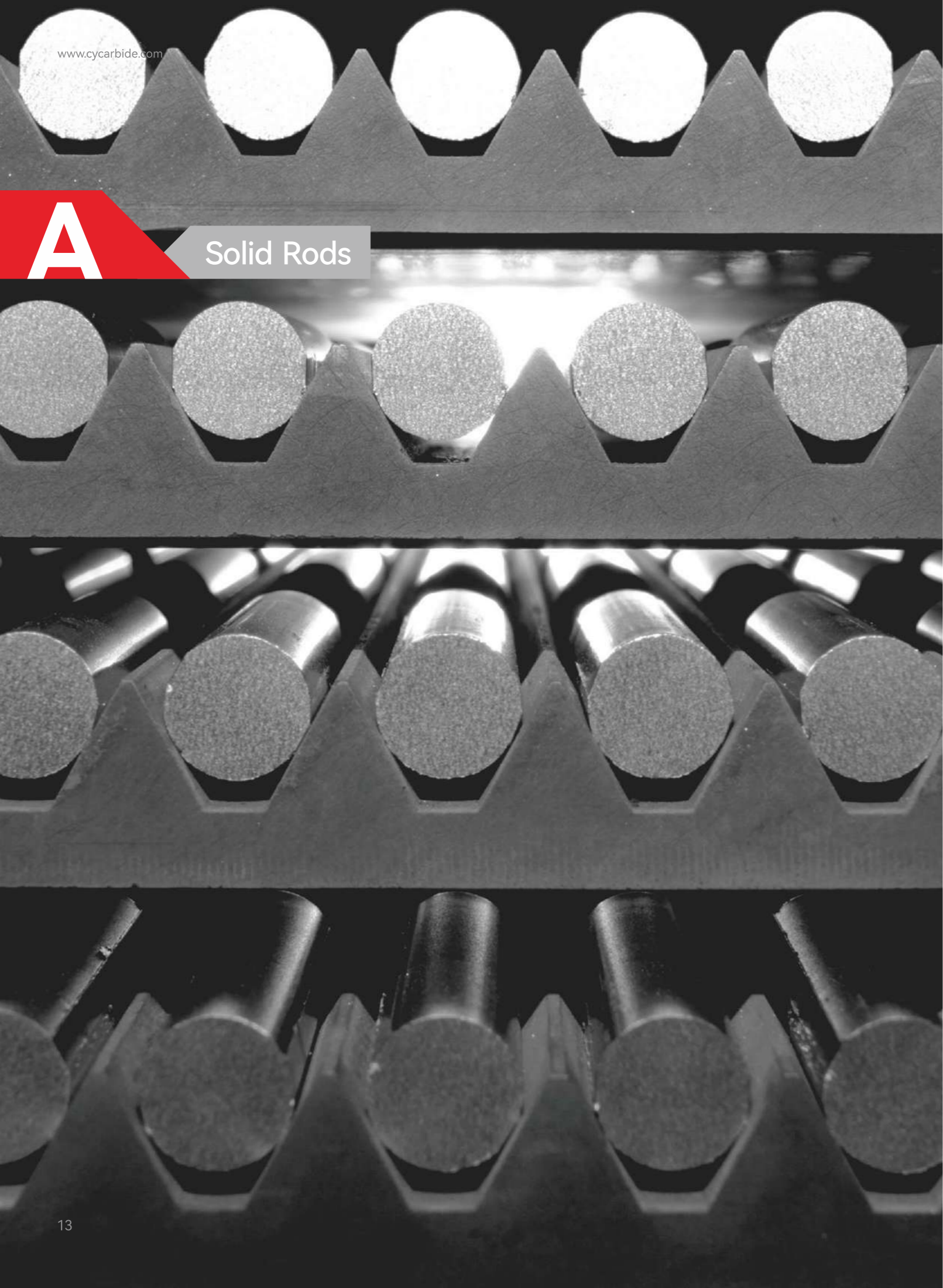
| Cutting Style | MH10F | CS43 | CS40 ⚡ | SH904 | UH8 | MH7 | CH03D |
|---------------|-----------|------|--------|-------|-----|----------------|----------------|
| Drilling | ✓ | ✓ | | | | | |
| Milling | Roughing | ✓ | ✓ | | | | |
| | Finishing | ✓ | ✓ | ✓ | ✓ | √ _D | √ _D |
| Reaming | | | | | ✓ | √ _D | |
| Hobbing | ✓ | ✓ | | | ✓ | | |

| ISO Workpiece Material | Typical Materials | MH10F | CS43 | CS40 ⚡ | SH904 | UH8 | MH7 | CH03D |
|------------------------|---------------------------|-------|------|--------|-------|-----|----------------|----------------|
| P | Carbon Steel | ★ | ★ | ★ | | | | |
| | Alloy Steel (HRC < 45) | ★ | ★ | ★ | | | | |
| M | Stainless Steel | ★ | ★ | ★ | | | | |
| K | Cast Iron | ★ | | | | ☆ | ★ | |
| S | Titanium Alloy | ☆ | ★ | ★ | | | | |
| | Nickel Base Alloy | ☆ | ☆ | ★ | | | | |
| H | Tempered Steel (HRC50-58) | | ★ | | ☆ | ★ | | |
| | Hardened Steel (HRC > 58) | | | | ★ | ☆ | | |
| N | Aluminum Alloys | ★ | | | | ★ | ☆ | |
| Others | Graphite | | | | ★ | ★ | √ _D | √ _D |
| | Composite Material | | | | ★ | ★ | √ _D | √ _D |
| | Diamond Coating | | | | | | √ _D | √ _D |

★ First Choice ☆ Second Choice
 CS40 ⚡ Recommended grade for roughing and machining under extreme conditions/environments.



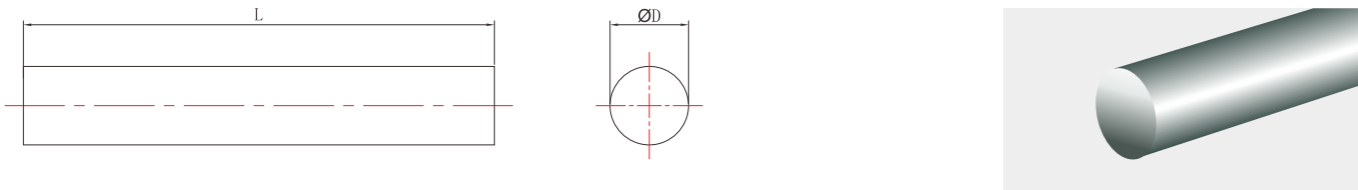
Solid Rods



Engineered Solutions for Demanding Applications



RSM Ground Rods 330L (PG)



Type: RSM Metric Sizes: ØD 1~16mm h6 tolerance

Unit: mm

| Item No. | ØD | Tol.h6 | L | Tol. |
|-----------------|------|----------|-----|------|
| RSM-0100-3300PG | 1.0 | 0/-0.006 | 330 | 0/+5 |
| RSM-0150-3300PG | 1.5 | 0/-0.006 | 330 | 0/+5 |
| RSM-0200-3300PG | 2.0 | 0/-0.006 | 330 | 0/+5 |
| RSM-0300-3300PG | 3.0 | 0/-0.006 | 330 | 0/+5 |
| RSM-0400-3300PG | 4.0 | 0/-0.008 | 330 | 0/+5 |
| RSM-0500-3300PG | 5.0 | 0/-0.008 | 330 | 0/+5 |
| RSM-0600-3300PG | 6.0 | 0/-0.008 | 330 | 0/+5 |
| RSM-0700-3300PG | 7.0 | 0/-0.009 | 330 | 0/+5 |
| RSM-0800-3300PG | 8.0 | 0/-0.009 | 330 | 0/+5 |
| RSM-0900-3300PG | 9.0 | 0/-0.009 | 330 | 0/+5 |
| RSM-1000-3300PG | 10.0 | 0/-0.009 | 330 | 0/+5 |
| RSM-1100-3300PG | 11.0 | 0/-0.011 | 330 | 0/+5 |
| RSM-1200-3300PG | 12.0 | 0/-0.011 | 330 | 0/+5 |
| RSM-1300-3300PG | 13.0 | 0/-0.011 | 330 | 0/+5 |
| RSM-1400-3300PG | 14.0 | 0/-0.011 | 330 | 0/+5 |
| RSM-1500-3300PG | 15.0 | 0/-0.011 | 330 | 0/+5 |
| RSM-1600-3300PG | 16.0 | 0/-0.011 | 330 | 0/+5 |

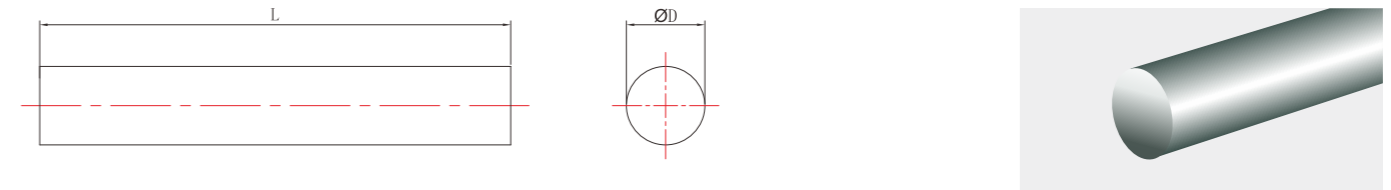
• h5 available based on request.

| MH10F | UH8 | MH7 | SH904 | CS40 | CS43 |
|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

● Please contact with us for more specifications.

■ In Stock Popular sizes in stock Check inventory

RSM Ground Rods 330L (PG)



Type: RSM Metric Sizes: ØD 17~40mm h6 tolerance

Unit: mm

| Item No. | ØD | Tol.h6 | L | Tol. |
|-----------------|----|----------|-----|------|
| RSM-1700-3300PG | 17 | 0/-0.011 | 330 | 0/+5 |
| RSM-1800-3300PG | 18 | 0/-0.011 | 330 | 0/+5 |
| RSM-1900-3300PG | 19 | 0/-0.013 | 330 | 0/+5 |
| RSM-2000-3300PG | 20 | 0/-0.013 | 330 | 0/+5 |
| RSM-2100-3300PG | 21 | 0/-0.013 | 330 | 0/+5 |
| RSM-2200-3300PG | 22 | 0/-0.013 | 330 | 0/+5 |
| RSM-2300-3300PG | 23 | 0/-0.013 | 330 | 0/+5 |
| RSM-2400-3300PG | 24 | 0/-0.013 | 330 | 0/+5 |
| RSM-2500-3300PG | 25 | 0/-0.013 | 330 | 0/+5 |
| RSM-2600-3300PG | 26 | 0/-0.013 | 330 | 0/+5 |
| RSM-2700-3300PG | 27 | 0/-0.013 | 330 | 0/+5 |
| RSM-2800-3300PG | 28 | 0/-0.013 | 330 | 0/+5 |
| RSM-2900-3300PG | 29 | 0/-0.013 | 330 | 0/+5 |
| RSM-3000-3300PG | 30 | 0/-0.013 | 330 | 0/+5 |
| RSM-3200-3300PG | 32 | 0/-0.016 | 330 | 0/+5 |
| RSM-3400-3300PG | 34 | 0/-0.016 | 330 | 0/+5 |
| RSM-3600-3300PG | 36 | 0/-0.016 | 330 | 0/+5 |
| RSM-3800-3300PG | 38 | 0/-0.016 | 330 | 0/+5 |
| RSM-4000-3300PG | 40 | 0/-0.016 | 330 | 0/+5 |

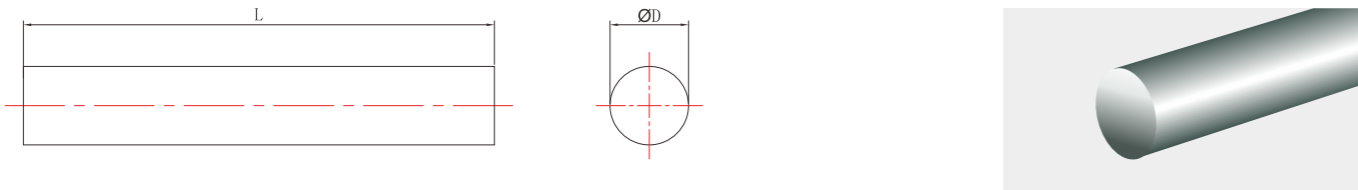
• h5 available based on request.

| MH10F | UH8 | MH7 | SH904 | CS40 | CS43 |
|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

● Please contact with us for more specifications.

■ In Stock Popular sizes in stock Check inventory

RSM Unground Rods 330L (UG)



Type: RSM Metric Sizes: ØD 1~16mm

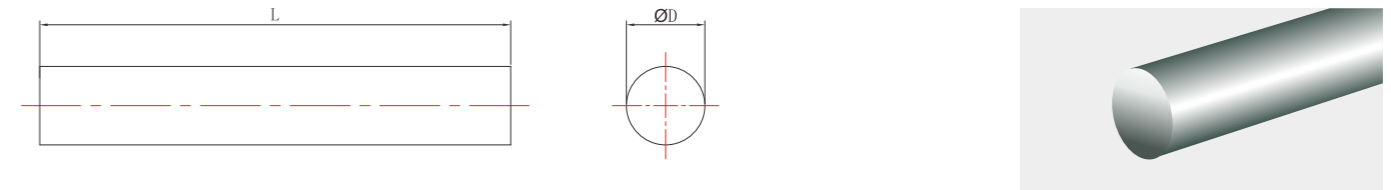
Unit: mm

| Item No. | ØD | Tol. | L | Tol. |
|-----------------|------|------------|-----|------|
| RSM-0120-3300UG | 1.2 | +0.05/+0.3 | 330 | 0/+5 |
| RSM-0170-3300UG | 1.7 | +0.05/+0.3 | 330 | 0/+5 |
| RSM-0220-3300UG | 2.2 | +0.05/+0.3 | 330 | 0/+5 |
| RSM-0320-3300UG | 3.2 | +0.05/+0.3 | 330 | 0/+5 |
| RSM-0420-3300UG | 4.2 | +0.05/+0.3 | 330 | 0/+5 |
| RSM-0520-3300UG | 5.2 | +0.05/+0.3 | 330 | 0/+5 |
| RSM-0620-3300UG | 6.2 | +0.05/+0.3 | 330 | 0/+5 |
| RSM-0720-3300UG | 7.2 | +0.05/+0.3 | 330 | 0/+5 |
| RSM-0820-3300UG | 8.2 | +0.05/+0.3 | 330 | 0/+5 |
| RSM-0920-3300UG | 9.2 | +0.05/+0.3 | 330 | 0/+5 |
| RSM-1020-3300UG | 10.2 | +0.05/+0.3 | 330 | 0/+5 |
| RSM-1120-3300UG | 11.2 | +0.05/+0.3 | 330 | 0/+5 |
| RSM-1220-3300UG | 12.2 | +0.05/+0.3 | 330 | 0/+5 |
| RSM-1320-3300UG | 13.2 | +0.05/+0.3 | 330 | 0/+5 |
| RSM-1420-3300UG | 14.2 | +0.05/+0.3 | 330 | 0/+5 |
| RSM-1520-3300UG | 15.2 | +0.05/+0.3 | 330 | 0/+5 |
| RSM-1620-3300UG | 16.2 | +0.05/+0.3 | 330 | 0/+5 |

| | | | | | |
|-------|-----|-----|-------|------|------|
| MH10F | UH8 | MH7 | SH904 | CS40 | CS43 |
| ■ | □ | □ | □ | □ | ■ |

● Please contact with us for more specifications.
 ■ In Stock □ Popular sizes in stock □ Check inventory

RSM Unground Rods 330L (UG)



Type: RSM Metric Sizes: ØD 17~40mm

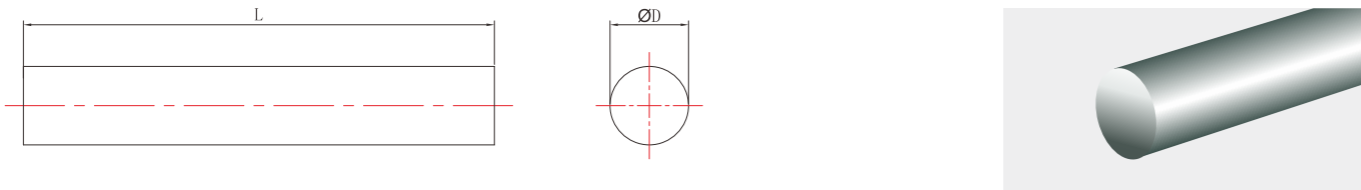
Unit: mm

| Item No. | ØD | Tol. | L | Tol. |
|-----------------|------|------------|-----|------|
| RSM-1720-3300UG | 17.2 | +0.05/+0.4 | 330 | 0/+5 |
| RSM-1820-3300UG | 18.2 | +0.05/+0.4 | 330 | 0/+5 |
| RSM-1920-3300UG | 19.2 | +0.05/+0.4 | 330 | 0/+5 |
| RSM-2020-3300UG | 20.2 | +0.05/+0.4 | 330 | 0/+5 |
| RSM-2120-3300UG | 21.2 | +0.05/+0.5 | 330 | 0/+5 |
| RSM-2220-3300UG | 22.2 | +0.05/+0.5 | 330 | 0/+5 |
| RSM-2320-3300UG | 23.2 | +0.05/+0.5 | 330 | 0/+5 |
| RSM-2420-3300UG | 24.2 | +0.05/+0.5 | 330 | 0/+5 |
| RSM-2520-3300UG | 25.2 | +0.05/+0.5 | 330 | 0/+5 |
| RSM-2620-3300UG | 26.2 | +0.05/+0.5 | 330 | 0/+5 |
| RSM-2720-3300UG | 27.2 | +0.05/+0.5 | 330 | 0/+5 |
| RSM-2820-3300UG | 28.2 | +0.05/+0.5 | 330 | 0/+5 |
| RSM-2920-3300UG | 29.2 | +0.05/+0.5 | 330 | 0/+5 |
| RSM-3020-3300UG | 30.2 | +0.05/+0.5 | 330 | 0/+5 |
| RSM-3220-3300UG | 32.2 | +0.05/+0.6 | 330 | 0/+5 |
| RSM-3420-3300UG | 34.2 | +0.05/+0.6 | 330 | 0/+5 |
| RSM-3620-3300UG | 36.2 | +0.05/+0.6 | 330 | 0/+5 |
| RSM-3820-3300UG | 38.2 | +0.05/+0.6 | 330 | 0/+5 |
| RSM-4020-3300UG | 40.2 | +0.05/+0.7 | 330 | 0/+5 |

| | | | | | |
|-------|-----|-----|-------|------|------|
| MH10F | UH8 | MH7 | SH904 | CS40 | CS43 |
| ■ | □ | □ | □ | □ | ■ |

● Please contact with us for more specifications.
 ■ In Stock □ Popular sizes in stock □ Check inventory

RSI Ground Rods Inch 13"L (DG)



Type: RSI Inch Sizes: ØD 1/8" ~1-1/4" h6 tolerance

Unit: inch

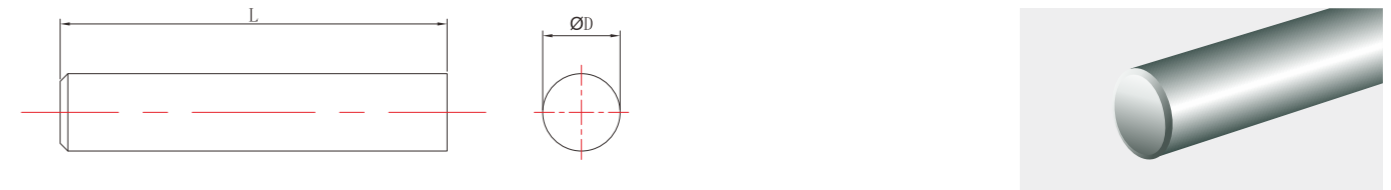
| Item No. | ØD | Tol.h6 | L | Tol. | |
|------------------|----------|--------|------------|------|---------|
| RSI-01250-1300DG | 0.12500 | 1/8 | 0/-0.00031 | 13 | 0/+0.25 |
| RSI-01406-1300DG | 0.140625 | 9/64 | 0/-0.00031 | 13 | 0/+0.25 |
| RSI-01563-1300DG | 0.15625 | 5/32 | 0/-0.00031 | 13 | 0/+0.25 |
| RSI-01719-1300DG | 0.171875 | 11/64 | 0/-0.00031 | 13 | 0/+0.25 |
| RSI-01875-1300DG | 0.18750 | 3/16 | 0/-0.00031 | 13 | 0/+0.25 |
| RSI-02031-1300DG | 0.203125 | 13/64 | 0/-0.00031 | 13 | 0/+0.25 |
| RSI-02188-1300DG | 0.21875 | 7/32 | 0/-0.00031 | 13 | 0/+0.25 |
| RSI-02500-1300DG | 0.25000 | 1/4 | 0/-0.00035 | 13 | 0/+0.25 |
| RSI-03125-1300DG | 0.31250 | 5/16 | 0/-0.00035 | 13 | 0/+0.25 |
| RSI-03750-1300DG | 0.37500 | 3/8 | 0/-0.00035 | 13 | 0/+0.25 |
| RSI-04375-1300DG | 0.43750 | 7/16 | 0/-0.00043 | 13 | 0/+0.25 |
| RSI-04688-1300DG | 0.46875 | 15/32 | 0/-0.00043 | 13 | 0/+0.25 |
| RSI-05000-1300DG | 0.50000 | 1/2 | 0/-0.00043 | 13 | 0/+0.25 |
| RSI-05625-1300DG | 0.56250 | 9/16 | 0/-0.00043 | 13 | 0/+0.25 |
| RSI-06250-1300DG | 0.62500 | 5/8 | 0/-0.00043 | 13 | 0/+0.25 |
| RSI-07500-1300DG | 0.75000 | 3/4 | 0/-0.00051 | 13 | 0/+0.25 |
| RSI-08750-1300DG | 0.87500 | 7/8 | 0/-0.00051 | 13 | 0/+0.25 |
| RSI-10000-1300DG | 1.00000 | 1 | 0/-0.00051 | 13 | 0/+0.25 |
| RSI-11250-1300DG | 1.12500 | 1 1/8 | 0/-0.00051 | 13 | 0/+0.25 |
| RSI-12500-1300DG | 1.25000 | 1 1/4 | 0/-0.00063 | 13 | 0/+0.25 |

| | | | | | |
|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| MH10F | UH8 | MH7 | SH904 | CS40 | CS43 |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

● Please contact with us for more specifications.

In Stock Check inventory

RSFM Ground Rods, Cut to Length, with Chamfer (h5)



Type: RSFM Metric Sizes: ØD 3~10mm h5 tolerance

Unit: mm

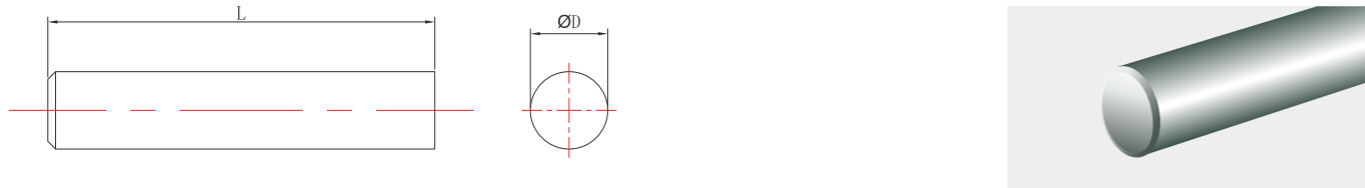
| Item No. | ØD | Tol.h5 | L | Tol. | c |
|------------------|----|----------|-----|--------|-----|
| RSFM-0300-0390h5 | 3 | 0/-0.004 | 39 | 0/+0.5 | 0.3 |
| RSFM-0300-0400h5 | 3 | 0/-0.004 | 40 | 0/+0.5 | 0.3 |
| RSFM-0300-0500h5 | 3 | 0/-0.004 | 50 | 0/+0.5 | 0.3 |
| RSFM-0400-0500h5 | 4 | 0/-0.005 | 50 | 0/+0.5 | 0.4 |
| RSFM-0400-0510h5 | 4 | 0/-0.005 | 51 | 0/+0.5 | 0.4 |
| RSFM-0400-0750h5 | 4 | 0/-0.005 | 75 | 0/+0.8 | 0.4 |
| RSFM-0500-0510h5 | 5 | 0/-0.005 | 51 | 0/+0.5 | 0.4 |
| RSFM-0500-0550h5 | 5 | 0/-0.005 | 55 | 0/+0.6 | 0.4 |
| RSFM-0600-0500h5 | 6 | 0/-0.005 | 50 | 0/+0.5 | 0.6 |
| RSFM-0600-0510h5 | 6 | 0/-0.005 | 51 | 0/+0.5 | 0.6 |
| RSFM-0600-0550h5 | 6 | 0/-0.005 | 55 | 0/+0.6 | 0.6 |
| RSFM-0600-0570h5 | 6 | 0/-0.005 | 57 | 0/+0.6 | 0.6 |
| RSFM-0600-0580h5 | 6 | 0/-0.005 | 58 | 0/+0.6 | 0.6 |
| RSFM-0600-0600h5 | 6 | 0/-0.005 | 60 | 0/+0.6 | 0.6 |
| RSFM-0600-0630h5 | 6 | 0/-0.005 | 63 | 0/+0.6 | 0.6 |
| RSFM-0600-0700h5 | 6 | 0/-0.005 | 70 | 0/+0.7 | 0.6 |
| RSFM-0600-0750h5 | 6 | 0/-0.005 | 75 | 0/+0.8 | 0.6 |
| RSFM-0600-0800h5 | 6 | 0/-0.005 | 80 | 0/+0.8 | 0.6 |
| RSFM-0600-1000h5 | 6 | 0/-0.005 | 100 | 0/+1.0 | 0.6 |
| RSFM-0600-0640h5 | 6 | 0/-0.005 | 64 | 0/+0.6 | 0.6 |
| RSFM-0800-0590h5 | 8 | 0/-0.006 | 59 | 0/+0.6 | 0.6 |
| RSFM-0800-0630h5 | 8 | 0/-0.006 | 63 | 0/+0.6 | 0.6 |
| RSFM-0800-0640h5 | 8 | 0/-0.006 | 64 | 0/+0.6 | 0.6 |
| RSFM-0800-0750h5 | 8 | 0/-0.006 | 75 | 0/+0.8 | 0.6 |
| RSFM-0800-0800h5 | 8 | 0/-0.006 | 80 | 0/+0.8 | 0.6 |
| RSFM-0800-0900h5 | 8 | 0/-0.006 | 90 | 0/+0.9 | 0.6 |
| RSFM-0800-1000h5 | 8 | 0/-0.006 | 100 | 0/+1.0 | 0.6 |
| RSFM-1000-0670h5 | 10 | 0/-0.006 | 67 | 0/+0.7 | 0.6 |
| RSFM-1000-0700h5 | 10 | 0/-0.006 | 70 | 0/+0.7 | 0.6 |

| | | | | | | |
|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| MH10F | UH8 | CH03D | MH7 | SH904 | CS40 | CS43 |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

● Please contact with us for more specifications.

In Stock Popular sizes in stock Check inventory

RSFM Ground Rods, Cut to Length, with Chamfer (h5)



Type: RSFM Metric Sizes: ØD 10~25mm h5 tolerance

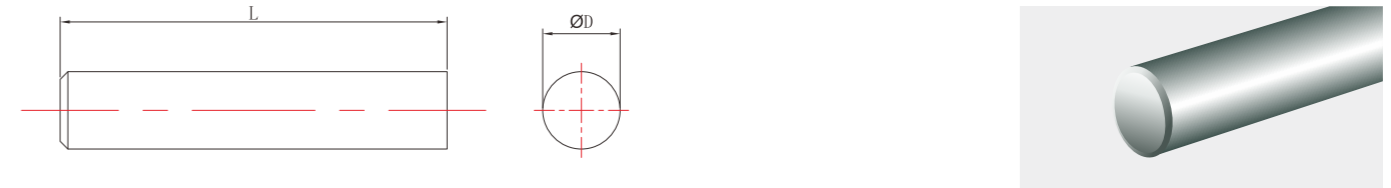
Unit: mm

| Item No. | ØD | Tol.h5 | L | Tol. | c |
|------------------|----|----------|-----|--------|-----|
| RSFM-1000-0720h5 | 10 | 0/-0.006 | 72 | 0/+0.7 | 0.6 |
| RSFM-1000-0730h5 | 10 | 0/-0.006 | 73 | 0/+0.7 | 0.6 |
| RSFM-1000-0750h5 | 10 | 0/-0.006 | 75 | 0/+0.8 | 0.6 |
| RSFM-1000-0900h5 | 10 | 0/-0.006 | 90 | 0/+0.9 | 0.6 |
| RSFM-1000-1000h5 | 10 | 0/-0.006 | 100 | 0/+1.0 | 0.6 |
| RSFM-1200-0740h5 | 12 | 0/-0.008 | 74 | 0/+0.7 | 0.8 |
| RSFM-1200-0750h5 | 12 | 0/-0.008 | 75 | 0/+0.8 | 0.8 |
| RSFM-1200-0830h5 | 12 | 0/-0.008 | 83 | 0/+0.8 | 0.8 |
| RSFM-1200-0840h5 | 12 | 0/-0.008 | 84 | 0/+0.8 | 0.8 |
| RSFM-1200-1000h5 | 12 | 0/-0.008 | 100 | 0/+1.0 | 0.8 |
| RSFM-1200-1200h5 | 12 | 0/-0.008 | 120 | 0/+1.2 | 0.8 |
| RSFM-1400-0760h5 | 14 | 0/-0.008 | 76 | 0/+0.8 | 0.8 |
| RSFM-1400-0830h5 | 14 | 0/-0.008 | 83 | 0/+0.8 | 0.8 |
| RSFM-1400-0840h5 | 14 | 0/-0.008 | 84 | 0/+0.8 | 0.8 |
| RSFM-1400-0890h5 | 14 | 0/-0.008 | 89 | 0/+0.9 | 0.8 |
| RSFM-1600-0830h5 | 16 | 0/-0.008 | 83 | 0/+0.8 | 0.8 |
| RSFM-1600-0920h5 | 16 | 0/-0.008 | 92 | 0/+0.9 | 0.8 |
| RSFM-1600-0930h5 | 16 | 0/-0.008 | 93 | 0/+0.9 | 0.8 |
| RSFM-1600-1000h5 | 16 | 0/-0.008 | 100 | 0/+1.0 | 0.8 |
| RSFM-1600-1300h5 | 16 | 0/-0.008 | 130 | 0/+1.3 | 0.8 |
| RSFM-1800-0850h5 | 18 | 0/-0.008 | 85 | 0/+0.9 | 1.0 |
| RSFM-1800-0930h5 | 18 | 0/-0.008 | 93 | 0/+0.9 | 1.0 |
| RSFM-2000-0930h5 | 20 | 0/-0.009 | 93 | 0/+0.9 | 1.0 |
| RSFM-2000-1000h5 | 20 | 0/-0.009 | 100 | 0/+1.0 | 1.0 |
| RSFM-2000-1050h5 | 20 | 0/-0.009 | 105 | 0/+1.0 | 1.0 |
| RSFM-2000-1250h5 | 20 | 0/-0.009 | 125 | 0/+1.3 | 1.0 |
| RSFM-2000-1500h5 | 20 | 0/-0.009 | 150 | 0/+1.5 | 1.0 |
| RSFM-2500-1030h5 | 25 | 0/-0.009 | 103 | 0/+1.0 | 1.5 |
| RSFM-2500-1500h5 | 25 | 0/-0.009 | 150 | 0/+1.5 | 1.5 |

| | | | | | | |
|-------|-----|-------|-----|-------|------|------|
| MH10F | UH8 | CH03D | MH7 | SH904 | CS40 | CS43 |
| ■ | □ | □ | □ | □ | □ | ■ |

● Please contact with us for more specifications.
 ■ In Stock □ Popular sizes in stock □ Check inventory

RSFI Ground Rods, Cut to Length, With Chamfer, Inch (DG)



Type: RSFI Metric Sizes: ØD 1/8"~5/16" h6 tolerance

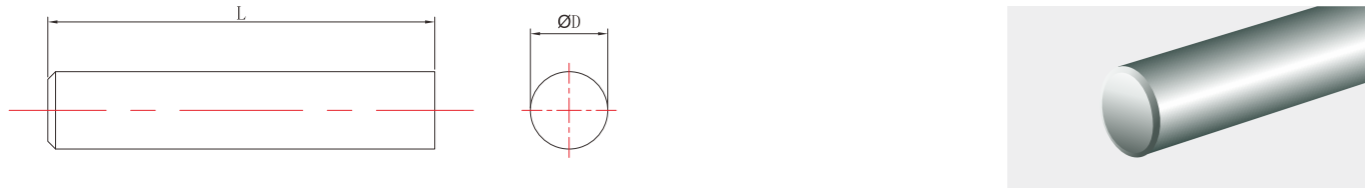
Unit: inch

| Item No. | ØD | Tol.h6 | L | Tol. | c | |
|-------------------|--------|--------|------------|-------|----------|-------|
| RSFI-01250-0150DG | 0.1250 | 1/8 | 0/-0.00031 | 1 1/2 | 0/+0.020 | 0.015 |
| RSFI-01250-0200DG | 0.1250 | 1/8 | 0/-0.00031 | 2 | 0/+0.020 | 0.015 |
| RSFI-01250-0225DG | 0.1250 | 1/8 | 0/-0.00031 | 2 1/4 | 0/+0.023 | 0.015 |
| RSFI-01250-0250DG | 0.1250 | 1/8 | 0/-0.00031 | 2 1/2 | 0/+0.025 | 0.015 |
| RSFI-01250-0300DG | 0.1250 | 1/8 | 0/-0.00031 | 3 | 0/+0.030 | 0.015 |
| RSFI-01250-0400DG | 0.1250 | 1/8 | 0/-0.00031 | 4 | 0/+0.040 | 0.015 |
| RSFI-01875-0150DG | 0.1875 | 3/16 | 0/-0.00031 | 1 1/2 | 0/+0.020 | 0.015 |
| RSFI-01875-0200DG | 0.1875 | 3/16 | 0/-0.00031 | 2 | 0/+0.020 | 0.015 |
| RSFI-01875-0250DG | 0.1875 | 3/16 | 0/-0.00031 | 2 1/2 | 0/+0.025 | 0.015 |
| RSFI-01875-0275DG | 0.1875 | 3/16 | 0/-0.00031 | 2 3/4 | 0/+0.028 | 0.015 |
| RSFI-01875-0300DG | 0.1875 | 3/16 | 0/-0.00031 | 3 | 0/+0.030 | 0.015 |
| RSFI-01875-0400DG | 0.1875 | 3/16 | 0/-0.00031 | 4 | 0/+0.040 | 0.015 |
| RSFI-02500-0150DG | 0.2500 | 1/4 | 0/-0.00035 | 1 1/2 | 0/+0.020 | 0.015 |
| RSFI-02500-0200DG | 0.2500 | 1/4 | 0/-0.00035 | 2 | 0/+0.020 | 0.015 |
| RSFI-02500-0250DG | 0.2500 | 1/4 | 0/-0.00035 | 2 1/2 | 0/+0.025 | 0.015 |
| RSFI-02500-0300DG | 0.2500 | 1/4 | 0/-0.00035 | 3 | 0/+0.030 | 0.015 |
| RSFI-02500-0325DG | 0.2500 | 1/4 | 0/-0.00035 | 3 1/4 | 0/+0.033 | 0.015 |
| RSFI-02500-0350DG | 0.2500 | 1/4 | 0/-0.00035 | 3 1/2 | 0/+0.035 | 0.015 |
| RSFI-02500-0400DG | 0.2500 | 1/4 | 0/-0.00035 | 4 | 0/+0.040 | 0.015 |
| RSFI-02500-0600DG | 0.2500 | 1/4 | 0/-0.00035 | 6 | 0/+0.060 | 0.015 |
| RSFI-03125-0250DG | 0.3125 | 5/16 | 0/-0.00035 | 2 1/2 | 0/+0.025 | 0.015 |
| RSFI-03125-0200DG | 0.3125 | 5/16 | 0/-0.00035 | 2 | 0/+0.020 | 0.015 |
| RSFI-03125-0300DG | 0.3125 | 5/16 | 0/-0.00035 | 3 | 0/+0.030 | 0.015 |

| | | | | | | |
|-------|-----|-------|-----|-------|------|------|
| MH10F | UH8 | CH03D | MH7 | SH904 | CS40 | CS43 |
| ■ | □ | □ | □ | □ | □ | □ |

● Please contact with us for more specifications.
 ■ In Stock □ Check inventory

RSFI Ground Rods, Cut to Length, With Chamfer, Inch (DG)



Type: RSFI Metric Sizes: ØD 5/16"~1/2" h6 tolerance

Unit: inch

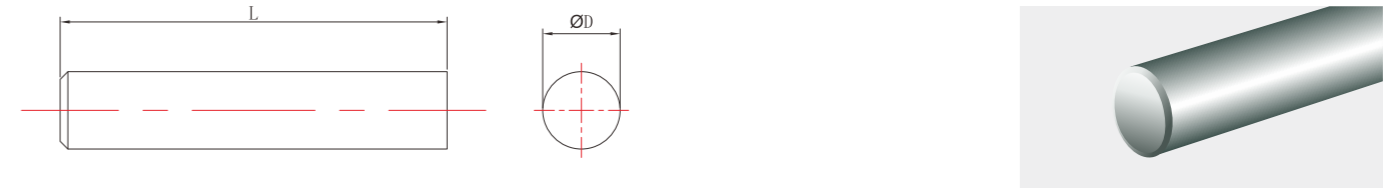
| Item No. | ØD | Tol.h6 | L | Tol. | c | |
|-------------------|--------|--------|------------|-------|----------|-------|
| RSFI-03125-0350DG | 0.3125 | 5/16 | 0/-0.00035 | 3 1/2 | 0/+0.035 | 0.015 |
| RSFI-03125-0400DG | 0.3125 | 5/16 | 0/-0.00035 | 4 | 0/+0.040 | 0.015 |
| RSFI-03125-0600DG | 0.3125 | 5/16 | 0/-0.00035 | 6 | 0/+0.060 | 0.015 |
| RSFI-03750-0200DG | 0.3750 | 3/8 | 0/-0.00035 | 2 | 0/+0.020 | 0.015 |
| RSFI-03750-0250DG | 0.3750 | 3/8 | 0/-0.00035 | 2 1/2 | 0/+0.025 | 0.015 |
| RSFI-03750-0300DG | 0.3750 | 3/8 | 0/-0.00035 | 3 | 0/+0.030 | 0.015 |
| RSFI-03750-0350DG | 0.3750 | 3/8 | 0/-0.00035 | 3 1/2 | 0/+0.035 | 0.015 |
| RSFI-03750-0400DG | 0.3750 | 3/8 | 0/-0.00035 | 4 | 0/+0.040 | 0.015 |
| RSFI-03750-0450DG | 0.3750 | 3/8 | 0/-0.00035 | 4 1/2 | 0/+0.045 | 0.015 |
| RSFI-03750-0500DG | 0.3750 | 3/8 | 0/-0.00035 | 5 | 0/+0.050 | 0.015 |
| RSFI-03750-0600DG | 0.3750 | 3/8 | 0/-0.00035 | 6 | 0/+0.060 | 0.015 |
| RSFI-04375-0250DG | 0.4375 | 7/16 | 0/-0.00043 | 2 1/2 | 0/+0.025 | 0.031 |
| RSFI-04375-0275DG | 0.4375 | 7/16 | 0/-0.00043 | 2 3/4 | 0/+0.028 | 0.031 |
| RSFI-04375-0300DG | 0.4375 | 7/16 | 0/-0.00043 | 3 | 0/+0.030 | 0.031 |
| RSFI-04375-0400DG | 0.4375 | 7/16 | 0/-0.00043 | 4 | 0/+0.040 | 0.031 |
| RSFI-04375-0450DG | 0.4375 | 7/16 | 0/-0.00043 | 4 1/2 | 0/+0.045 | 0.031 |
| RSFI-04375-0600DG | 0.4375 | 7/16 | 0/-0.00043 | 6 | 0/+0.060 | 0.031 |
| RSFI-05000-0250DG | 0.5000 | 1/2 | 0/-0.00043 | 2 1/2 | 0/+0.025 | 0.031 |
| RSFI-05000-0300DG | 0.5000 | 1/2 | 0/-0.00043 | 3 | 0/+0.030 | 0.031 |
| RSFI-05000-0350DG | 0.5000 | 1/2 | 0/-0.00043 | 3 1/2 | 0/+0.035 | 0.031 |
| RSFI-05000-0400DG | 0.5000 | 1/2 | 0/-0.00043 | 4 | 0/+0.040 | 0.031 |
| RSFI-05000-0450DG | 0.5000 | 1/2 | 0/-0.00043 | 4 1/2 | 0/+0.045 | 0.031 |
| RSFI-05000-0500DG | 0.5000 | 1/2 | 0/-0.00043 | 5 | 0/+0.050 | 0.031 |

| | | | | | | |
|-------|-----|-------|-----|-------|------|------|
| MH10F | UH8 | CH03D | MH7 | SH904 | CS40 | CS43 |
| ■ | □ | □ | □ | □ | □ | □ |

● Please contact with us for more specifications.

■ In Stock □ Check inventory

RSFI Ground Rods, Cut to Length, With Chamfer, Inch (DG)



Type: RSFI Metric Sizes: ØD 1/2"~1-1/4" h6 tolerance

Unit: inch

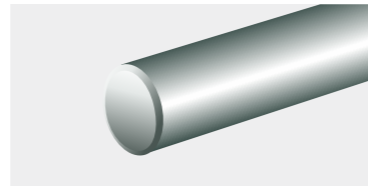
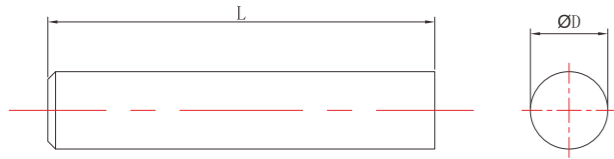
| Item No. | ØD | Tol.h6 | L | Tol. | c | |
|-------------------|--------|--------|------------|-------|----------|-------|
| RSFI-05000-0600DG | 0.5000 | 1/2 | 0/-0.00043 | 6 | 0/+0.060 | 0.031 |
| RSFI-05625-0350DG | 0.5625 | 9/16 | 0/-0.00043 | 3 1/2 | 0/+0.035 | 0.031 |
| RSFI-05625-0400DG | 0.5625 | 9/16 | 0/-0.00043 | 4 | 0/+0.040 | 0.031 |
| RSFI-05625-0600DG | 0.5625 | 9/16 | 0/-0.00043 | 6 | 0/+0.060 | 0.031 |
| RSFI-06250-0300DG | 0.6250 | 5/8 | 0/-0.00043 | 3 | 0/+0.030 | 0.031 |
| RSFI-06250-0350DG | 0.6250 | 5/8 | 0/-0.00043 | 3 1/2 | 0/+0.035 | 0.031 |
| RSFI-06250-0400DG | 0.6250 | 5/8 | 0/-0.00043 | 4 | 0/+0.040 | 0.031 |
| RSFI-06250-0500DG | 0.6250 | 5/8 | 0/-0.00043 | 5 | 0/+0.050 | 0.031 |
| RSFI-06250-0600DG | 0.6250 | 5/8 | 0/-0.00043 | 6 | 0/+0.060 | 0.031 |
| RSFI-07500-0300DG | 0.7500 | 3/4 | 0/-0.00051 | 3 | 0/+0.030 | 0.031 |
| RSFI-07500-0400DG | 0.7500 | 3/4 | 0/-0.00051 | 4 | 0/+0.040 | 0.031 |
| RSFI-07500-0500DG | 0.7500 | 3/4 | 0/-0.00051 | 5 | 0/+0.050 | 0.031 |
| RSFI-07500-0600DG | 0.7500 | 3/4 | 0/-0.00051 | 6 | 0/+0.060 | 0.031 |
| RSFI-08750-0400DG | 0.8750 | 7/8 | 0/-0.00051 | 4 | 0/+0.040 | 0.031 |
| RSFI-10000-0300DG | 1.0000 | 1 | 0/-0.00051 | 3 | 0/+0.030 | 0.031 |
| RSFI-10000-0400DG | 1.0000 | 1 | 0/-0.00051 | 4 | 0/+0.040 | 0.031 |
| RSFI-10000-0450DG | 1.0000 | 1 | 0/-0.00051 | 4 1/2 | 0/+0.045 | 0.031 |
| RSFI-10000-0500DG | 1.0000 | 1 | 0/-0.00051 | 5 | 0/+0.050 | 0.031 |
| RSFI-10000-0600DG | 1.0000 | 1 | 0/-0.00051 | 6 | 0/+0.060 | 0.031 |
| RSFI-12500-0450DG | 1.2500 | 1 1/4 | 0/-0.00063 | 4 1/2 | 0/+0.045 | 0.031 |
| RSFI-12500-0600DG | 1.2500 | 1 1/4 | 0/-0.00063 | 6 | 0/+0.060 | 0.031 |

| | | | | | | |
|-------|-----|-------|-----|-------|------|------|
| MH10F | UH8 | CH03D | MH7 | SH904 | CS40 | CS43 |
| ■ | □ | □ | □ | □ | □ | □ |

● Please contact with us for more specifications.

■ In Stock □ Check inventory

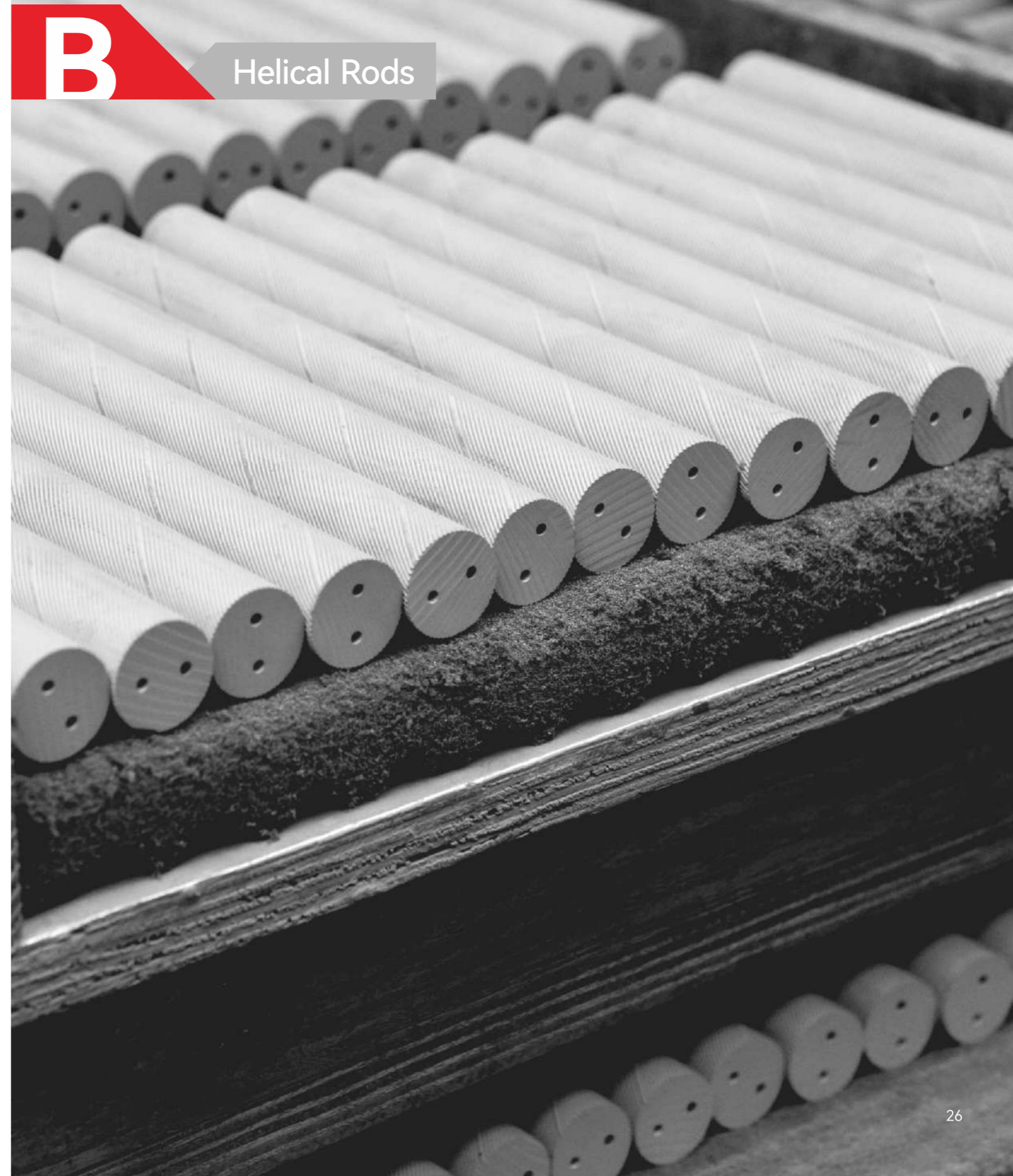
Solid Drill Blanks (h5) 3XD 5XD



Type: RSFM Metric Sizes: ØD 6~20mm h5 tolerance

Unit: mm

| Item No. | ØD | Tol.h5 | L | Tol. | c |
|------------------|----|----------|-----|--------|-----|
| RSFM-0600-0620h5 | 6 | 0/-0.005 | 62 | 0/+0.6 | 0.6 |
| RSFM-0600-0660h5 | 6 | 0/-0.005 | 66 | 0/+0.7 | 0.6 |
| RSFM-0600-0820h5 | 6 | 0/-0.005 | 82 | 0/+0.8 | 0.6 |
| RSFM-0800-0790h5 | 8 | 0/-0.006 | 79 | 0/+0.8 | 0.6 |
| RSFM-0800-0910h5 | 8 | 0/-0.006 | 91 | 0/+1.0 | 0.6 |
| RSFM-1000-0890h5 | 10 | 0/-0.006 | 89 | 0/+0.9 | 0.6 |
| RSFM-1000-1030h5 | 10 | 0/-0.006 | 103 | 0/+1.0 | 0.6 |
| RSFM-1200-1020h5 | 12 | 0/-0.008 | 102 | 0/+1.0 | 0.8 |
| RSFM-1200-1180h5 | 12 | 0/-0.008 | 118 | 0/+2.0 | 0.8 |
| RSFM-1400-1070h5 | 14 | 0/-0.008 | 107 | 0/+1.1 | 0.8 |
| RSFM-1400-1240h5 | 14 | 0/-0.008 | 124 | 0/+1.2 | 0.8 |
| RSFM-1600-1150h5 | 16 | 0/-0.008 | 115 | 0/+1.2 | 0.8 |
| RSFM-1600-1330h5 | 16 | 0/-0.008 | 133 | 0/+1.3 | 0.8 |
| RSFM-1800-1230h5 | 18 | 0/-0.008 | 123 | 0/+1.2 | 1.0 |
| RSFM-1800-1430h5 | 18 | 0/-0.008 | 143 | 0/+1.5 | 1.0 |
| RSFM-2000-1310h5 | 20 | 0/-0.009 | 131 | 0/+1.3 | 1.0 |
| RSFM-2000-1530h5 | 20 | 0/-0.009 | 153 | 0/+1.5 | 1.0 |



| | | | | | | |
|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| MH10F | UH8 | CH03D | MH7 | SH904 | CS40 | CS43 |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

● Please contact with us for more specifications.

■ In Stock □ Check inventory

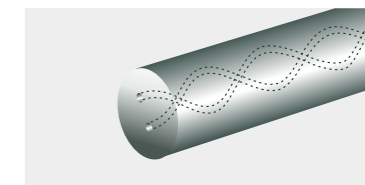
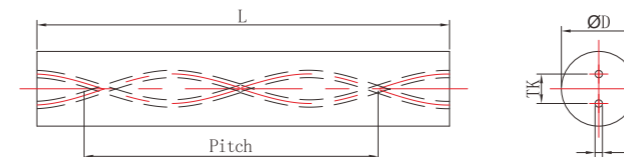
Rods with Helical Coolant Holes

CYC offers a full range of carbide rods with helical coolant holes that are used for making carbide drills with internal coolant supply.

Thanks to the expertise in extrusion forming process and strict control of Pitch classification, CYC drill blanks can also meet the demand of drills for deep hole drilling.

In addition to OAL 330MM, OAL 415MM rods are also available for giving flexibility on your material utilization.

2 Helical Coolant Holes 30 Degree, 330L, Ground (PG)



Type: R2H30 Metric Sizes: ØD 3~32mm h6 tolerance

Unit: mm

| Item No. | ØD | Tol.h6 | L | Tol. | TK | Tol. | d | Tol. | Pitch |
|-------------------|----|----------|-----|------|-------|------|------|-------|--------|
| R2H30-0300-3300PG | 3 | 0/-0.006 | 330 | 0/+5 | 1.60 | ±0.1 | 0.40 | ±0.10 | 16.32 |
| R2H30-0400-3300PG | 4 | 0/-0.008 | 330 | 0/+5 | 2.10 | ±0.1 | 0.60 | ±0.10 | 21.77 |
| R2H30-0500-3300PG | 5 | 0/-0.008 | 330 | 0/+5 | 2.10 | ±0.2 | 0.70 | ±0.10 | 27.21 |
| R2H30-0600-3300PG | 6 | 0/-0.008 | 330 | 0/+5 | 2.40 | ±0.2 | 0.70 | ±0.10 | 32.65 |
| R2H30-0700-3300PG | 7 | 0/-0.009 | 330 | 0/+5 | 3.50 | ±0.2 | 1.00 | ±0.15 | 38.09 |
| R2H30-0800-3300PG | 8 | 0/-0.009 | 330 | 0/+5 | 3.80 | ±0.2 | 1.00 | ±0.15 | 43.53 |
| R2H30-0900-3300PG | 9 | 0/-0.009 | 330 | 0/+5 | 4.50 | ±0.3 | 1.40 | ±0.15 | 48.97 |
| R2H30-1000-3300PG | 10 | 0/-0.009 | 330 | 0/+5 | 4.50 | ±0.3 | 1.40 | ±0.15 | 54.41 |
| R2H30-1100-3300PG | 11 | 0/-0.011 | 330 | 0/+5 | 4.90 | ±0.4 | 1.40 | ±0.15 | 59.86 |
| R2H30-1200-3300PG | 12 | 0/-0.011 | 330 | 0/+5 | 5.85 | ±0.4 | 1.40 | ±0.15 | 65.30 |
| R2H30-1300-3300PG | 13 | 0/-0.011 | 330 | 0/+5 | 6.10 | ±0.4 | 1.75 | ±0.20 | 70.74 |
| R2H30-1400-3300PG | 14 | 0/-0.011 | 330 | 0/+5 | 6.70 | ±0.4 | 1.75 | ±0.20 | 76.18 |
| R2H30-1500-3300PG | 15 | 0/-0.011 | 330 | 0/+5 | 7.30 | ±0.4 | 1.75 | ±0.20 | 81.62 |
| R2H30-1600-3300PG | 16 | 0/-0.011 | 330 | 0/+5 | 7.90 | ±0.4 | 1.75 | ±0.20 | 87.06 |
| R2H30-1700-3300PG | 17 | 0/-0.011 | 330 | 0/+5 | 8.50 | ±0.4 | 1.75 | ±0.20 | 92.50 |
| R2H30-1800-3300PG | 18 | 0/-0.011 | 330 | 0/+5 | 9.15 | ±0.4 | 2.00 | ±0.25 | 97.95 |
| R2H30-2000-3300PG | 20 | 0/-0.013 | 330 | 0/+5 | 9.90 | ±0.5 | 2.00 | ±0.25 | 108.83 |
| R2H30-2200-3300PG | 22 | 0/-0.013 | 330 | 0/+5 | 11.10 | ±0.5 | 2.00 | ±0.25 | 119.71 |
| R2H30-2500-3300PG | 25 | 0/-0.013 | 330 | 0/+5 | 12.80 | ±0.5 | 2.00 | ±0.25 | 136.03 |
| R2H30-2600-3300PG | 26 | 0/-0.013 | 330 | 0/+5 | 13.30 | ±0.5 | 2.00 | ±0.25 | 141.48 |
| R2H30-2800-3300PG | 28 | 0/-0.013 | 330 | 0/+5 | 14.20 | ±0.5 | 2.50 | ±0.25 | 152.36 |
| R2H30-3200-3300PG | 32 | 0/-0.013 | 330 | 0/+5 | 16.00 | ±0.5 | 2.50 | ±0.25 | 174.12 |

| | |
|-------------------------------------|--------------------------|
| MH10F | CS43 |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> |

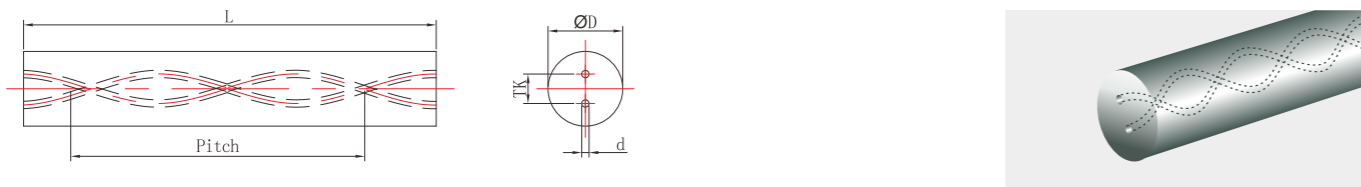
Kind Reminder

- If special helix rods are required, please contact CYC sales for availability.
- Please specify when your drills are longer than 12XD.

In Stock Check inventory



2 Helical Coolant Holes 30 Degree, 330L, Ground (PG)

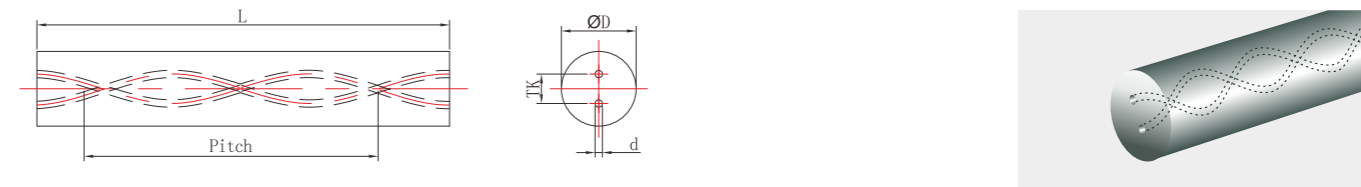


Type: RHE30 Metric Sizes: ØD 6~20mm h6 tolerance

Unit: mm

| Item No. | ØD | Tol.h6 | L | Tol. | TK | Tol. | d | Tol. | Pitch |
|-------------------|----|----------|-----|------|------|------|-----|-------|--------|
| RHE30-0600-3300PG | 6 | 0/-0.008 | 330 | 0/+5 | 2.7 | ±0.2 | 0.8 | ±0.10 | 32.65 |
| RHE30-0800-3300PG | 8 | 0/-0.009 | 330 | 0/+5 | 3.4 | ±0.2 | 1.0 | ±0.15 | 43.53 |
| RHE30-1000-3300PG | 10 | 0/-0.009 | 330 | 0/+5 | 4.8 | ±0.3 | 1.3 | ±0.15 | 54.41 |
| RHE30-1200-3300PG | 12 | 0/-0.011 | 330 | 0/+5 | 6.3 | ±0.4 | 1.7 | ±0.20 | 65.30 |
| RHE30-1400-3300PG | 14 | 0/-0.011 | 330 | 0/+5 | 6.7 | ±0.4 | 1.8 | ±0.20 | 76.18 |
| RHE30-1600-3300PG | 16 | 0/-0.011 | 330 | 0/+5 | 8.0 | ±0.4 | 2.0 | ±0.20 | 87.06 |
| RHE30-1800-3300PG | 18 | 0/-0.011 | 330 | 0/+5 | 9.0 | ±0.4 | 2.3 | ±0.20 | 97.95 |
| RHE30-2000-3300PG | 20 | 0/-0.013 | 330 | 0/+5 | 10.0 | ±0.5 | 2.5 | ±0.25 | 108.83 |

2 Helical Coolant Holes 30 Degree, 330L, Unground (UG)



Type: R2H30 Metric Sizes: ØD 3~32mm

Unit: mm

| Item No. | ØD | Tol. | L | Tol. | TK | Tol. | d | Tol. | Pitch |
|-------------------|------|-----------|-----|------|-------|------|------|-------|--------|
| R2H30-0330-3300UG | 3.3 | +0.3/+0.7 | 330 | 0/+5 | 1.60 | ±0.1 | 0.40 | ±0.10 | 16.32 |
| R2H30-0430-3300UG | 4.3 | +0.3/+0.7 | 330 | 0/+5 | 2.10 | ±0.1 | 0.60 | ±0.10 | 21.77 |
| R2H30-0530-3300UG | 5.3 | +0.3/+0.7 | 330 | 0/+5 | 2.10 | ±0.2 | 0.70 | ±0.10 | 27.21 |
| R2H30-0630-3300UG | 6.3 | +0.3/+0.7 | 330 | 0/+5 | 2.40 | ±0.2 | 0.70 | ±0.10 | 32.65 |
| R2H30-0730-3300UG | 7.3 | +0.3/+0.7 | 330 | 0/+5 | 3.50 | ±0.2 | 1.00 | ±0.15 | 38.09 |
| R2H30-0830-3300UG | 8.3 | +0.3/+0.7 | 330 | 0/+5 | 3.80 | ±0.2 | 1.00 | ±0.15 | 43.53 |
| R2H30-0930-3300UG | 9.3 | +0.3/+0.7 | 330 | 0/+5 | 4.50 | ±0.3 | 1.40 | ±0.15 | 48.97 |
| R2H30-1030-3300UG | 10.3 | +0.3/+0.7 | 330 | 0/+5 | 4.50 | ±0.3 | 1.40 | ±0.15 | 54.41 |
| R2H30-1130-3300UG | 11.3 | +0.4/+0.9 | 330 | 0/+5 | 4.90 | ±0.4 | 1.40 | ±0.15 | 59.86 |
| R2H30-1230-3300UG | 12.3 | +0.4/+0.9 | 330 | 0/+5 | 5.85 | ±0.4 | 1.40 | ±0.15 | 65.30 |
| R2H30-1330-3300UG | 13.3 | +0.4/+0.9 | 330 | 0/+5 | 6.10 | ±0.4 | 1.75 | ±0.20 | 70.74 |
| R2H30-1430-3300UG | 14.3 | +0.4/+0.9 | 330 | 0/+5 | 6.70 | ±0.4 | 1.75 | ±0.20 | 76.18 |
| R2H30-1530-3300UG | 15.3 | +0.4/+0.9 | 330 | 0/+5 | 7.30 | ±0.4 | 1.75 | ±0.20 | 81.62 |
| R2H30-1630-3300UG | 16.3 | +0.4/+0.9 | 330 | 0/+5 | 7.90 | ±0.4 | 1.75 | ±0.20 | 87.06 |
| R2H30-1730-3300UG | 17.3 | +0.4/+1.0 | 330 | 0/+5 | 8.50 | ±0.4 | 1.75 | ±0.20 | 92.50 |
| R2H30-1830-3300UG | 18.3 | +0.4/+1.0 | 330 | 0/+5 | 9.15 | ±0.4 | 2.00 | ±0.25 | 97.95 |
| R2H30-2030-3300UG | 20.3 | +0.4/+1.0 | 330 | 0/+5 | 9.90 | ±0.5 | 2.00 | ±0.25 | 108.83 |
| R2H30-2230-3300UG | 22.3 | +0.4/+1.0 | 330 | 0/+5 | 11.10 | ±0.5 | 2.00 | ±0.25 | 119.71 |
| R2H30-2530-3300UG | 25.3 | +0.4/+1.0 | 330 | 0/+5 | 12.80 | ±0.5 | 2.00 | ±0.25 | 136.03 |
| R2H30-2630-3300UG | 26.3 | +0.4/+1.0 | 330 | 0/+5 | 13.30 | ±0.5 | 2.00 | ±0.25 | 141.48 |
| R2H30-2830-3300UG | 28.3 | +0.4/+1.0 | 330 | 0/+5 | 14.20 | ±0.5 | 2.50 | ±0.25 | 152.36 |
| R2H30-3230-3300UG | 32.3 | +0.4/+1.0 | 330 | 0/+5 | 16.00 | ±0.5 | 2.50 | ±0.25 | 174.12 |

MH10F



Kind Reminder

- If special helix rods are required, please contact CYC sales for availability.
- Please specify when your drills are longer than 12XD.

In Stock Check inventory

MH10F



CS43

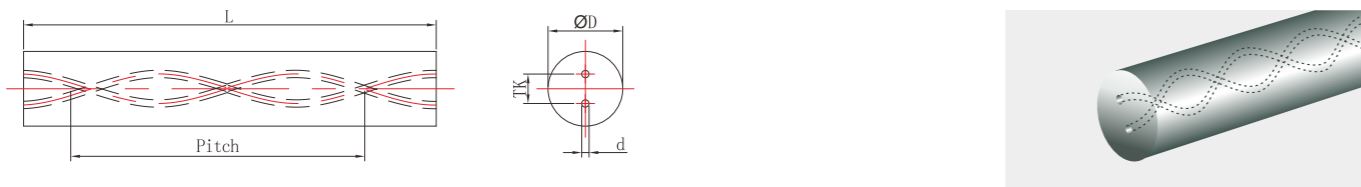


Kind Reminder

- If special helix rods are required, please contact CYC sales for availability.
- Please specify when your drills are longer than 12XD.

In Stock Check inventory

2 Helical Coolant Holes 30 Degree, 330L, Unground (UG)

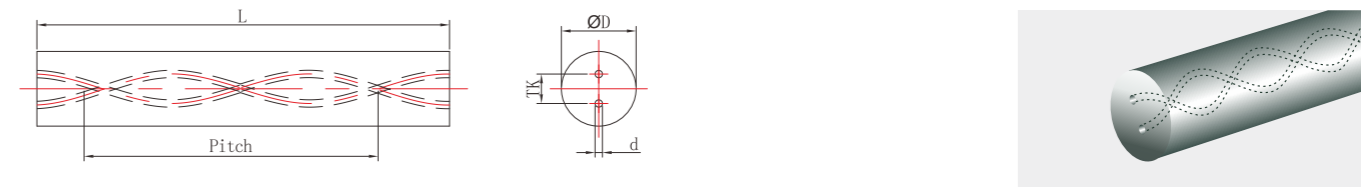


Type: RHE30 Metric Sizes: ØD 6~20mm

Unit: mm

| Item No. | ØD | Tol.h6 | L | Tol. | TK | Tol. | d | Tol. | Pitch |
|-------------------|----|-----------|-----|------|------|------|-----|-------|--------|
| RHE30-0630-3300UG | 6 | +0.3/-0.7 | 330 | 0/+5 | 2.7 | ±0.2 | 0.8 | ±0.10 | 32.65 |
| RHE30-0830-3300UG | 8 | +0.3/+0.7 | 330 | 0/+5 | 3.4 | ±0.2 | 1.0 | ±0.15 | 43.53 |
| RHE30-1030-3300UG | 10 | +0.3/+0.7 | 330 | 0/+5 | 4.8 | ±0.3 | 1.3 | ±0.15 | 54.41 |
| RHE30-1230-3300UG | 12 | +0.4/+0.9 | 330 | 0/+5 | 6.3 | ±0.4 | 1.7 | ±0.20 | 65.30 |
| RHE30-1430-3300UG | 14 | +0.4/+0.9 | 330 | 0/+5 | 6.7 | ±0.4 | 1.8 | ±0.20 | 76.18 |
| RHE30-1630-3300UG | 16 | +0.4/+0.9 | 330 | 0/+5 | 8.0 | ±0.4 | 2.0 | ±0.20 | 87.06 |
| RHE30-1830-3300UG | 18 | +0.4/+1.0 | 330 | 0/+5 | 9.0 | ±0.4 | 2.3 | ±0.20 | 97.95 |
| RHE30-2030-3300UG | 20 | +0.4/+1.0 | 330 | 0/+5 | 10.0 | ±0.5 | 2.5 | ±0.25 | 108.83 |

2 Helical Coolant Holes 40 Degree, 330L, Ground (PG)



Type: R2H40 Metric Sizes: ØD 6~25mm h6 tolerance

Unit: mm

| Item No. | ØD | Tol.h6 | L | Tol. | TK | Tol. | d | Tol. | Pitch |
|-------------------|----|----------|-----|------|-----|-------|------|-------|-------|
| R2H40-0600-3300PG | 6 | 0/-0.008 | 330 | 0/+5 | 2.0 | ±0.15 | 0.50 | ±0.10 | 22.46 |
| R2H40-0800-3300PG | 8 | 0/-0.009 | 330 | 0/+5 | 2.4 | ±0.30 | 0.65 | ±0.15 | 29.95 |
| R2H40-1000-3300PG | 10 | 0/-0.009 | 330 | 0/+5 | 3.1 | ±0.40 | 0.80 | ±0.15 | 37.44 |
| R2H40-1200-3300PG | 12 | 0/-0.011 | 330 | 0/+5 | 3.8 | ±0.40 | 0.90 | ±0.15 | 44.93 |
| R2H40-1400-3300PG | 14 | 0/-0.011 | 330 | 0/+5 | 4.3 | ±0.40 | 1.00 | ±0.20 | 52.42 |
| R2H40-1600-3300PG | 16 | 0/-0.011 | 330 | 0/+5 | 5.1 | ±0.40 | 1.20 | ±0.20 | 59.90 |
| R2H40-1800-3300PG | 18 | 0/-0.011 | 330 | 0/+5 | 5.9 | ±0.40 | 1.40 | ±0.25 | 67.39 |
| R2H40-2000-3300PG | 20 | 0/-0.013 | 330 | 0/+5 | 6.6 | ±0.50 | 1.50 | ±0.25 | 74.88 |
| R2H40-2200-3300PG | 22 | 0/-0.013 | 330 | 0/+5 | 7.2 | ±0.50 | 1.70 | ±0.25 | 82.35 |
| R2H40-2500-3300PG | 25 | 0/-0.013 | 330 | 0/+5 | 7.6 | ±0.50 | 1.75 | ±0.25 | 93.58 |

MH10F



Kind Reminder

- If special helix rods are required, please contact CYC sales for availability.
- Please specify when your drills are longer than 12XD.

In Stock Check inventory

MH10F

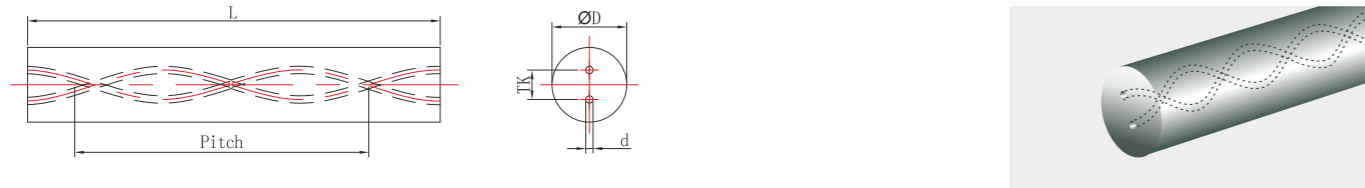


Kind Reminder

- If special helix rods are required, please contact CYC sales for availability.
- Please specify when your drills are longer than 12XD.

In Stock Check inventory

2 Helical Coolant Holes 40 Degree, 330L, Unround (UG)

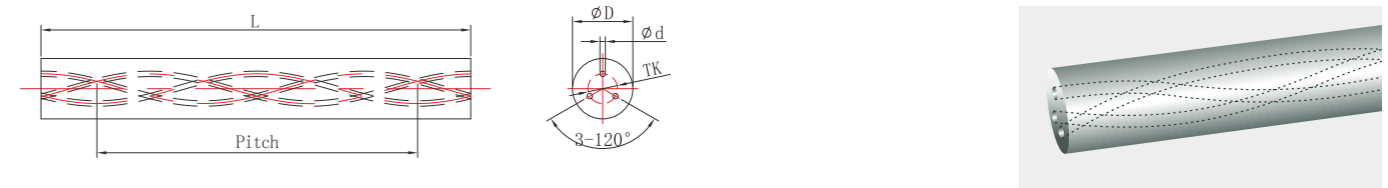


Type: R2H40 Metric Sizes: ØD 6~25mm

Unit: mm

| Item No. | ØD | Tol. | L | Tol. | TK | Tol. | d | Tol. | Pitch |
|-------------------|------|-----------|-----|------|-----|-------|------|-------|-------|
| R2H40-0630-3300UG | 6.3 | +0.3/+0.7 | 330 | 0/+5 | 2.0 | ±0.15 | 0.50 | ±0.10 | 22.46 |
| R2H40-0830-3300UG | 8.3 | +0.3/+0.7 | 330 | 0/+5 | 2.4 | ±0.30 | 0.65 | ±0.15 | 29.95 |
| R2H40-1030-3300UG | 10.3 | +0.3/+0.7 | 330 | 0/+5 | 3.1 | ±0.40 | 0.80 | ±0.15 | 37.44 |
| R2H40-1230-3300UG | 12.3 | +0.4/+0.9 | 330 | 0/+5 | 3.8 | ±0.40 | 0.90 | ±0.15 | 44.93 |
| R2H40-1430-3300UG | 14.3 | +0.4/+0.9 | 330 | 0/+5 | 4.3 | ±0.40 | 1.00 | ±0.20 | 52.42 |
| R2H40-1630-3300UG | 16.3 | +0.4/+0.9 | 330 | 0/+5 | 5.1 | ±0.40 | 1.20 | ±0.20 | 59.90 |
| R2H40-1830-3300UG | 18.3 | +0.4/+1.0 | 330 | 0/+5 | 5.9 | ±0.40 | 1.40 | ±0.25 | 67.39 |
| R2H40-2030-3300UG | 20.3 | +0.4/+1.0 | 330 | 0/+5 | 6.6 | ±0.50 | 1.50 | ±0.25 | 74.88 |
| R2H40-2230-3300UG | 22.3 | +0.4/+1.0 | 330 | 0/+5 | 7.2 | ±0.50 | 1.70 | ±0.25 | 82.35 |
| R2H40-2530-3300UG | 25.3 | +0.4/+1.0 | 330 | 0/+5 | 7.6 | ±0.50 | 1.75 | ±0.25 | 93.58 |

3 Helical Coolant Holes 30 Degree, 330L, Ground (PG)



Type: R3H30 Metric Sizes: ØD 6~20mm h6 tolerance

Unit: mm

| Item No. | ØD | Tol.h6 | L | Tol. | TK | Tol. | d | Tol. | Pitch |
|-------------------|----|----------|-----|------|------|-------|------|-------|--------|
| R3H30-0600-3300PG | 6 | 0/-0.008 | 330 | 0/+5 | 2.75 | ±0.20 | 0.50 | ±0.15 | 32.65 |
| R3H30-0800-3300PG | 8 | 0/-0.009 | 330 | 0/+5 | 3.85 | ±0.20 | 0.70 | ±0.15 | 43.53 |
| R3H30-1000-3300PG | 10 | 0/-0.009 | 330 | 0/+5 | 4.95 | ±0.30 | 0.85 | ±0.20 | 54.41 |
| R3H30-1200-3300PG | 12 | 0/-0.011 | 330 | 0/+5 | 6.05 | ±0.40 | 1.10 | ±0.20 | 65.30 |
| R3H30-1400-3300PG | 14 | 0/-0.011 | 330 | 0/+5 | 7.05 | ±0.40 | 1.40 | ±0.20 | 76.18 |
| R3H30-1600-3300PG | 16 | 0/-0.011 | 330 | 0/+5 | 8.05 | ±0.40 | 1.60 | ±0.20 | 87.06 |
| R3H30-1800-3300PG | 18 | 0/-0.011 | 330 | 0/+5 | 9.25 | ±0.50 | 1.70 | ±0.25 | 97.95 |
| R3H30-2000-3300PG | 20 | 0/-0.013 | 330 | 0/+5 | 9.85 | ±0.50 | 1.90 | ±0.25 | 108.83 |

MH10F



Kind Reminder

- If special helix rods are required, please contact CYC sales for availability.
- Please specify when your drills are longer than 12XD.

In Stock Check inventory

MH10F

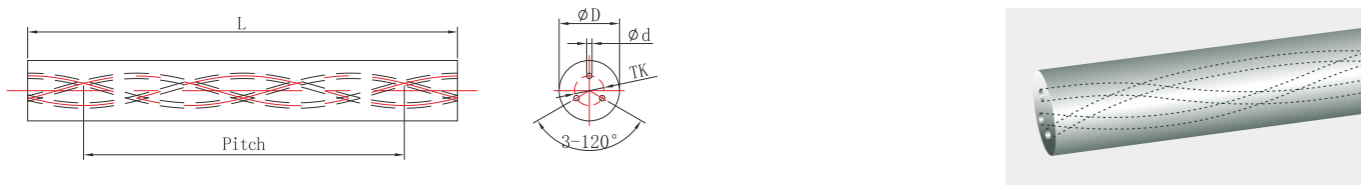


Kind Reminder

- If special helix rods are required, please contact CYC sales for availability.
- Please specify when your drills are longer than 12XD.

In Stock Check inventory

3 Helical Coolant Holes 30 Degree, 330L, Unground (UG)



Type: R3H30 Metric Sizes: ØD 6~20mm

Unit: mm

| Item No. | ØD | Tol. | L | Tol. | TK | Tol. | d | Tol. | Pitch |
|-------------------|------|-----------|-----|------|------|-------|------|-------|--------|
| R3H30-0630-3300UG | 6.3 | +0.3/+0.7 | 330 | 0/+5 | 2.75 | ±0.20 | 0.50 | ±0.15 | 32.65 |
| R3H30-0830-3300UG | 8.3 | +0.3/+0.7 | 330 | 0/+5 | 3.85 | ±0.20 | 0.70 | ±0.15 | 43.53 |
| R3H30-1030-3300UG | 10.3 | +0.3/+0.7 | 330 | 0/+5 | 4.95 | ±0.30 | 0.85 | ±0.20 | 54.41 |
| R3H30-1230-3300UG | 12.3 | +0.4/+0.9 | 330 | 0/+5 | 6.05 | ±0.40 | 1.10 | ±0.20 | 65.30 |
| R3H30-1430-3300UG | 14.3 | +0.4/+0.9 | 330 | 0/+5 | 7.05 | ±0.40 | 1.40 | ±0.20 | 76.18 |
| R3H30-1630-3300UG | 16.3 | +0.4/+0.9 | 330 | 0/+5 | 8.05 | ±0.40 | 1.60 | ±0.20 | 87.06 |
| R3H30-1830-3300UG | 18.3 | +0.4/+1.0 | 330 | 0/+5 | 9.25 | ±0.50 | 1.70 | ±0.25 | 97.95 |
| R3H30-2030-3300UG | 20.3 | +0.4/+1.0 | 330 | 0/+5 | 9.85 | ±0.50 | 1.90 | ±0.25 | 108.83 |

MH10F



Kind Reminder

- If special helix rods are required, please contact CYC sales for availability.
- Please specify when your drills are longer than 12XD.

In Stock Check inventory

Precision Ground Drill Blanks

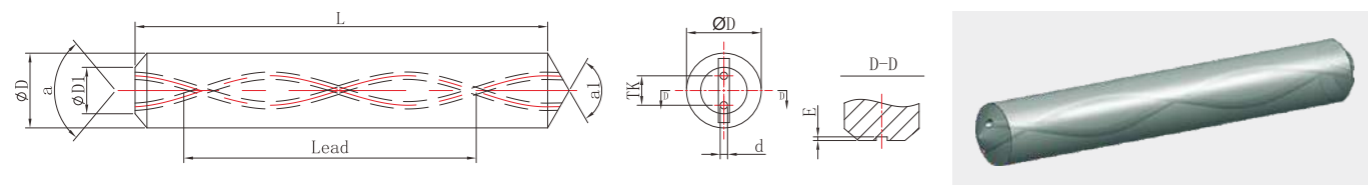
Precision ground drill blanks are available with chamfer, point and connection slot.

Save your process time and increase your throughput.

Advanced grinding centers allow us to offer multiple post-process such as step and taper grinding to meet the demand of high precision cutting tools.



Precision Ground Rod, 3xDiameter Drill, 2 Helical Holes, With Point, Chamfer and Connection Slot

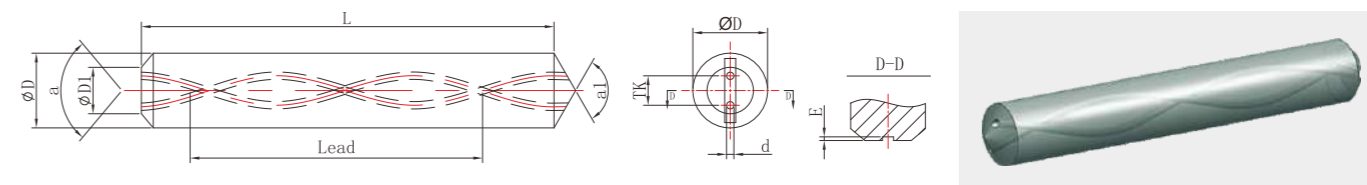


Type: R2H03D3(30°) Metric Sizes: ØD 6~20mm h6 tolerance

Unit: mm

| Item No. | ØD | Tol.h6 | L | Tol. | TK | Tol. | d | Tol. | Pitch |
|---------------------|----|----------|-----|--------|------|-------|------|--------|-------|
| R2H03D3-0600-0670PG | 6 | 0/-0.008 | 67 | 0/+1.0 | 2.40 | ±0.20 | 0.70 | ±0.050 | 32.7 |
| R2H03D3-0800-0800PG | 8 | 0/-0.009 | 80 | 0/+1.0 | 3.80 | ±0.20 | 1.00 | ±0.050 | 43.5 |
| R2H03D3-1000-0900PG | 10 | 0/-0.009 | 90 | 0/+1.0 | 4.50 | ±0.20 | 1.40 | ±0.050 | 54.4 |
| R2H03D3-1200-1030PG | 12 | 0/-0.011 | 103 | 0/+1.0 | 5.85 | ±0.20 | 1.40 | ±0.075 | 65.0 |
| R2H03D3-1400-1080PG | 14 | 0/-0.011 | 108 | 0/+1.0 | 6.70 | ±0.26 | 1.75 | ±0.075 | 76.2 |
| R2H03D3-1600-1160PG | 16 | 0/-0.011 | 116 | 0/+1.0 | 7.90 | ±0.40 | 1.75 | ±0.075 | 87.1 |
| R2H03D3-1800-1240PG | 18 | 0/-0.011 | 124 | 0/+1.0 | 9.15 | ±0.40 | 2.00 | ±0.075 | 98.0 |
| R2H03D3-2000-1320PG | 20 | 0/-0.013 | 132 | 0/+1.0 | 9.90 | ±0.50 | 2.00 | ±0.075 | 108.8 |

Precision Ground Rod, 5xDiameter Drill, 2 Helical Holes, With Point, Chamfer and Connection Slot



Type: R2H05D3(30°) Metric Sizes: ØD 6~20mm h6 tolerance

Unit: mm

| Item No. | ØD | Tol.h6 | L | Tol. | TK | Tol. | d | Tol. | Pitch |
|---------------------|----|----------|-----|--------|------|-------|------|--------|-------|
| R2H05D3-0600-0830PG | 6 | 0/-0.008 | 83 | 0/+1.0 | 2.40 | ±0.20 | 0.70 | ±0.050 | 32.7 |
| R2H05D3-0800-0920PG | 8 | 0/-0.009 | 92 | 0/+1.0 | 3.80 | ±0.20 | 1.00 | ±0.050 | 43.5 |
| R2H05D3-1000-1040PG | 10 | 0/-0.009 | 104 | 0/+1.0 | 4.50 | ±0.20 | 1.40 | ±0.050 | 54.4 |
| R2H05D3-1200-1190PG | 12 | 0/-0.011 | 119 | 0/+1.0 | 5.85 | ±0.20 | 1.40 | ±0.075 | 65.0 |
| R2H05D3-1400-1250PG | 14 | 0/-0.011 | 125 | 0/+1.0 | 6.70 | ±0.26 | 1.75 | ±0.075 | 76.2 |
| R2H05D3-1600-1340PG | 16 | 0/-0.011 | 134 | 0/+1.0 | 7.90 | ±0.40 | 1.75 | ±0.075 | 87.1 |
| R2H05D3-1800-1440PG | 18 | 0/-0.011 | 144 | 0/+1.0 | 9.15 | ±0.40 | 2.00 | ±0.075 | 98.0 |
| R2H05D3-2000-1540PG | 20 | 0/-0.013 | 154 | 0/+1.0 | 9.90 | ±0.50 | 2.00 | ±0.075 | 108.8 |



Kind Reminder

• If special helix rods are required, please contact CYC sales for availability.

■ In Stock □ Check inventory

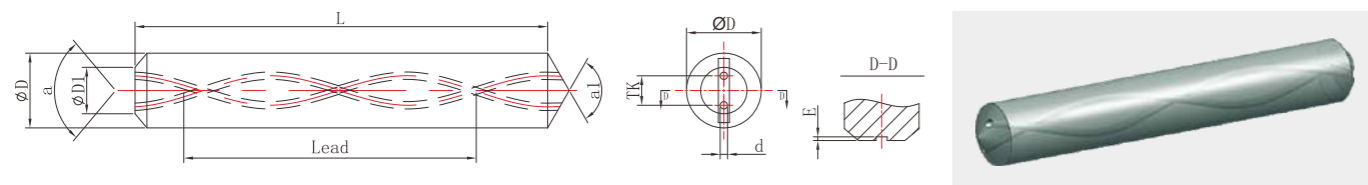


Kind Reminder

• If special helix rods are required, please contact CYC sales for availability.

■ In Stock □ Check inventory

Precision Ground Rod, 8xDiameter Drill, 2 Helical Holes, With Point, Chamfer and Connection Slot

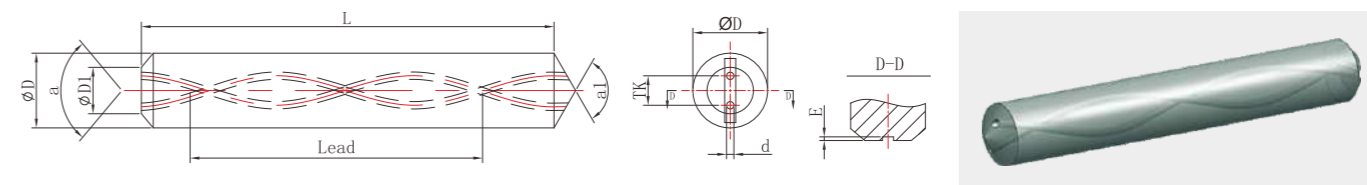


Type: R2H08D3(30°) Metric Sizes: ØD 6~20mm h6 tolerance

Unit: mm

| Item No. | ØD | Tol.h6 | L | Tol. | TK | Tol. | d | Tol. | Pitch |
|---------------------|----|----------|-------|--------|------|-------|------|--------|-------|
| R2H08D3-0600-0960PG | 6 | 0/-0.008 | 96.0 | 0/+1.5 | 2.40 | ±0.20 | 0.70 | ±0.050 | 32.7 |
| R2H08D3-0800-1075PG | 8 | 0/-0.009 | 107.5 | 0/+1.5 | 3.80 | ±0.20 | 1.00 | ±0.050 | 43.5 |
| R2H08D3-0800-1150PG | 8 | 0/-0.009 | 115.0 | 0/+1.5 | 3.80 | ±0.20 | 1.00 | ±0.050 | 43.5 |
| R2H08D3-1000-1430PG | 10 | 0/-0.009 | 143.0 | 0/+1.5 | 4.50 | ±0.20 | 1.40 | ±0.050 | 54.4 |
| R2H08D3-1200-1630PG | 12 | 0/-0.011 | 163.0 | 0/+1.5 | 5.85 | ±0.20 | 1.40 | ±0.075 | 65.0 |
| R2H08D3-1400-1845PG | 14 | 0/-0.011 | 184.5 | 0/+1.5 | 6.70 | ±0.26 | 1.75 | ±0.075 | 76.2 |
| R2H08D3-1600-2040PG | 16 | 0/-0.011 | 204.0 | 0/+1.5 | 7.90 | ±0.40 | 1.75 | ±0.075 | 87.1 |
| R2H08D3-1800-2230PG | 18 | 0/-0.011 | 223.0 | 0/+1.5 | 9.15 | ±0.40 | 2.00 | ±0.075 | 98.0 |
| R2H08D3-2000-2440PG | 20 | 0/-0.013 | 244.0 | 0/+1.5 | 9.90 | ±0.50 | 2.00 | ±0.075 | 108.8 |

Precision Ground Rod, 12xDiameter Drill, 2 Helical Holes, With Point, Chamfer and Connection Slot



Type: R2H12D3(30°) Metric Sizes: ØD 6~20mm h6 tolerance

Unit: mm

| Item No. | ØD | Tol.h6 | L | Tol. | TK | Tol. | d | Tol. | Pitch |
|---------------------|----|----------|-------|--------|------|-------|------|--------|-------|
| R2H12D3-0600-1225PG | 6 | 0/-0.008 | 122.5 | 0/+1.5 | 2.40 | ±0.20 | 0.70 | ±0.050 | 32.7 |
| R2H12D3-0800-1470PG | 8 | 0/-0.009 | 147.0 | 0/+1.5 | 3.80 | ±0.20 | 1.00 | ±0.050 | 43.5 |
| R2H12D3-1000-1830PG | 10 | 0/-0.009 | 183.0 | 0/+1.5 | 4.50 | ±0.20 | 1.40 | ±0.050 | 54.4 |
| R2H12D3-1200-2050PG | 12 | 0/-0.011 | 205.0 | 0/+1.5 | 5.85 | ±0.20 | 1.40 | ±0.075 | 65.0 |
| R2H12D3-1400-2310PG | 14 | 0/-0.011 | 231.0 | 0/+1.5 | 6.70 | ±0.26 | 1.75 | ±0.075 | 76.2 |
| R2H12D3-1600-2610PG | 16 | 0/-0.011 | 261.0 | 0/+1.5 | 7.90 | ±0.40 | 1.75 | ±0.075 | 87.1 |
| R2H12D3-1800-2860PG | 18 | 0/-0.011 | 286.0 | 0/+1.5 | 9.15 | ±0.40 | 2.00 | ±0.075 | 98.0 |
| R2H12D3-2000-3110PG | 20 | 0/-0.013 | 311.0 | 0/+1.5 | 9.90 | ±0.50 | 2.00 | ±0.075 | 108.8 |



Kind Reminder

• If special helix rods are required, please contact CYC sales for availability.

In Stock Check inventory

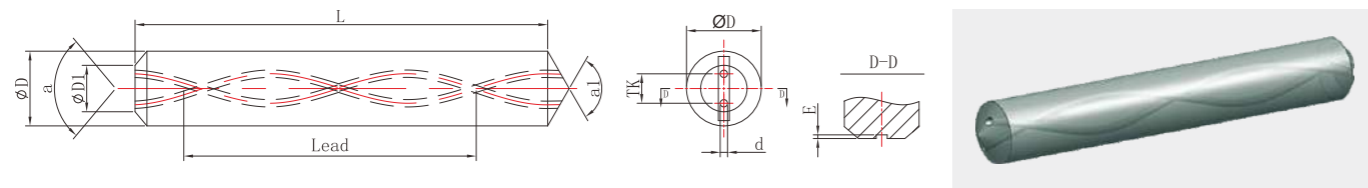


Kind Reminder

• If special helix rods are required, please contact CYC sales for availability.

In Stock Check inventory

Precision Ground Rod, 16xDiameter Drill, 2 Helical Holes, With Point, Chamfer and Connection Slot

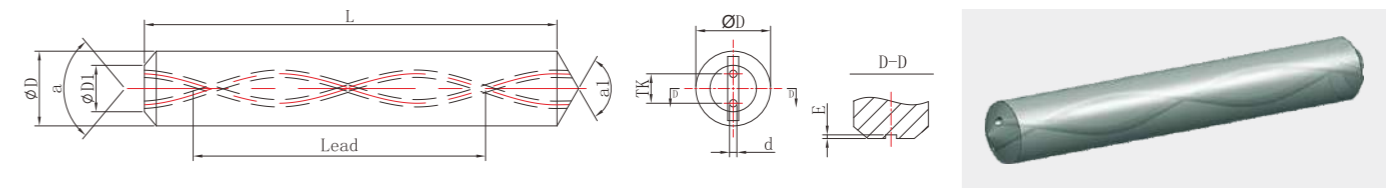


Type: R2H16D3(30°) Metric Sizes: ØD 6~16mm h6 tolerance

Unit: mm

| Item No. | ØD | Tol.h6 | L | Tol. | TK | Tol. | d | Tol. | Pitch |
|---------------------|----|----------|-----|--------|------|-------|------|--------|-------|
| R2H16D3-0600-1400PG | 6 | 0/-0.008 | 140 | 0/+1.5 | 2.40 | ±0.20 | 0.70 | ±0.050 | 32.7 |
| R2H16D3-0800-1750PG | 8 | 0/-0.009 | 175 | 0/+1.5 | 3.80 | ±0.20 | 1.00 | ±0.050 | 43.5 |
| R2H16D3-1000-2060PG | 10 | 0/-0.009 | 206 | 0/+1.5 | 4.50 | ±0.20 | 1.40 | ±0.050 | 54.4 |
| R2H16D3-1200-2470PG | 12 | 0/-0.011 | 247 | 0/+1.5 | 5.85 | ±0.20 | 1.40 | ±0.075 | 65.0 |
| R2H16D3-1400-3010PG | 14 | 0/-0.011 | 301 | 0/+1.5 | 6.70 | ±0.26 | 1.75 | ±0.075 | 76.2 |
| R2H16D3-1600-3400PG | 16 | 0/-0.011 | 340 | 0/+1.5 | 7.90 | ±0.40 | 1.75 | ±0.075 | 87.1 |

Precision Ground Rod, 20xDiameter Drill, 2 Helical Holes, With Point, Chamfer and Connection Slot



Type: R2H20D3(30°) Metric Sizes: ØD 6~16mm h6 tolerance

Unit: mm

| Item No. | ØD | Tol.h6 | L | Tol. | TK | Tol. | d | Tol. | Pitch |
|---------------------|----|----------|-----|--------|------|-------|------|--------|-------|
| R2H20D3-0600-1580PG | 6 | 0/-0.008 | 158 | 0/+1.5 | 2.40 | ±0.20 | 0.70 | ±0.050 | 32.7 |
| R2H20D3-0800-2000PG | 8 | 0/-0.009 | 200 | 0/+1.5 | 3.80 | ±0.20 | 1.00 | ±0.050 | 43.5 |
| R2H20D3-1000-2400PG | 10 | 0/-0.009 | 240 | 0/+1.5 | 4.50 | ±0.20 | 1.40 | ±0.050 | 54.4 |
| R2H20D3-1200-2890PG | 12 | 0/-0.011 | 289 | 0/+1.5 | 5.85 | ±0.20 | 1.40 | ±0.075 | 65.0 |
| R2H20D3-1400-3570PG | 14 | 0/-0.011 | 357 | 0/+1.5 | 6.70 | ±0.26 | 1.75 | ±0.075 | 76.2 |
| R2H20D3-1600-4040PG | 16 | 0/-0.011 | 404 | 0/+1.5 | 7.90 | ±0.40 | 1.75 | ±0.075 | 87.1 |

MH10F



Kind Reminder

• If special helix rods are required, please contact CYC sales for availability.

In Stock Check inventory

MH10F



Kind Reminder

• If special helix rods are required, please contact CYC sales for availability.

In Stock Check inventory



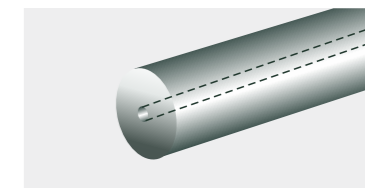
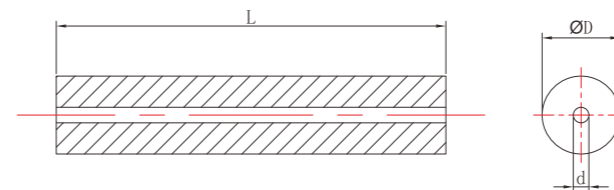
Rods with Straight Coolant Holes

Rods with straight coolant holes are made to meet the demand of drilling, reaming and threading tools with internal coolant supply.

Rods with 1 straight hole and 2 straight holes that are made in grade MH10F are listed on page 46-51 of our CYC Standard offering catalogue. For designs with more than 2 straight holes, please contact CYC sales for availability.



1 Center Straight Hole, 330L, Ground (PG)



Type: R1SH Metric Sizes: ØD 4~25mm h6 tolerance

Unit: mm

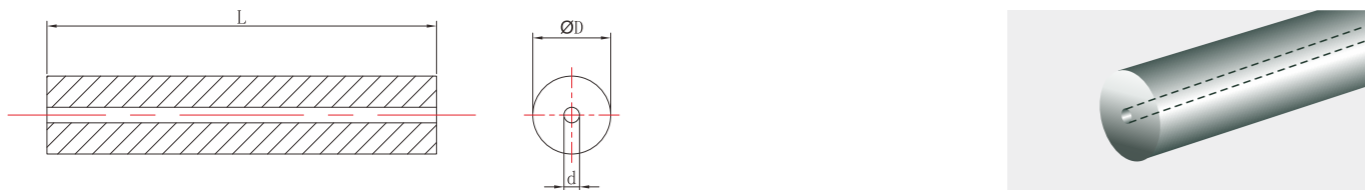
| Item No. | ØD | Tol.h6 | L | Tol. | d | Tol. |
|------------------|----|----------|-----|------|-----|-------|
| R1SH-0400-3300PG | 4 | 0/-0.008 | 330 | 0/+5 | 0.6 | ±0.15 |
| R1SH-0600-3300PG | 6 | 0/-0.008 | 330 | 0/+5 | 1.0 | ±0.15 |
| R1SH-0800-3300PG | 8 | 0/-0.009 | 330 | 0/+5 | 1.3 | ±0.15 |
| R1SH-1000-3300PG | 10 | 0/-0.009 | 330 | 0/+5 | 2.0 | ±0.20 |
| R1SH-1200-3300PG | 12 | 0/-0.011 | 330 | 0/+5 | 2.0 | ±0.20 |
| R1SH-1400-3300PG | 14 | 0/-0.011 | 330 | 0/+5 | 2.0 | ±0.20 |
| R1SH-1600-3300PG | 16 | 0/-0.011 | 330 | 0/+5 | 2.0 | ±0.20 |
| R1SH-1800-3300PG | 18 | 0/-0.011 | 330 | 0/+5 | 3.0 | ±0.20 |
| R1SH-2000-3300PG | 20 | 0/-0.013 | 330 | 0/+5 | 3.0 | ±0.20 |
| R1SH-2200-3300PG | 22 | 0/-0.013 | 330 | 0/+5 | 3.0 | ±0.20 |
| R1SH-2400-3300PG | 24 | 0/-0.013 | 330 | 0/+5 | 4.0 | ±0.30 |
| R1SH-2500-3300PG | 25 | 0/-0.013 | 330 | 0/+5 | 4.0 | ±0.30 |

| | |
|-------------------------------------|--------------------------|
| MH10F | MH7 |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> |

● Please contact with us for more specifications.

■ In Stock □ Check inventory

1 Center Straight Hole, 330L, Unground (UG)



Type: R1SH Metric Sizes: ØD 4~25mm

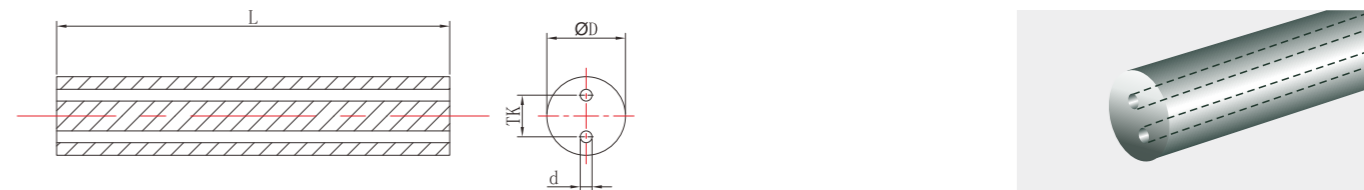
Unit: mm

| Item No. | ØD | Tol. | L | Tol. | d | Tol. |
|------------------|------|--------|-----|------|-----|-------|
| R1SH-0430-3300UG | 4.3 | 0/+0.3 | 330 | 0/+5 | 0.6 | ±0.15 |
| R1SH-0630-3300UG | 6.3 | 0/+0.3 | 330 | 0/+5 | 1.0 | ±0.15 |
| R1SH-0830-3300UG | 8.3 | 0/+0.3 | 330 | 0/+5 | 1.3 | ±0.15 |
| R1SH-1030-3300UG | 10.3 | 0/+0.3 | 330 | 0/+5 | 2.0 | ±0.20 |
| R1SH-1230-3300UG | 12.3 | 0/+0.4 | 330 | 0/+5 | 2.0 | ±0.20 |
| R1SH-1430-3300UG | 14.3 | 0/+0.4 | 330 | 0/+5 | 2.0 | ±0.20 |
| R1SH-1630-3300UG | 16.3 | 0/+0.4 | 330 | 0/+5 | 2.0 | ±0.20 |
| R1SH-1830-3300UG | 18.3 | 0/+0.5 | 330 | 0/+5 | 3.0 | ±0.20 |
| R1SH-2030-3300UG | 20.3 | 0/+0.5 | 330 | 0/+5 | 3.0 | ±0.20 |
| R1SH-2230-3300UG | 22.3 | 0/+0.5 | 330 | 0/+5 | 3.0 | ±0.20 |
| R1SH-2430-3300UG | 24.3 | 0/+0.5 | 330 | 0/+5 | 4.0 | ±0.30 |
| R1SH-2530-3300UG | 25.3 | 0/+0.5 | 330 | 0/+5 | 4.0 | ±0.30 |



● Please contact with us for more specifications.
 ■ In Stock □ Check inventory

2 Straight Holes, Reduced BC, 330L, Ground, (PG)



Type: R2SHR Metric Sizes: ØD 6~20mm h6 tolerance

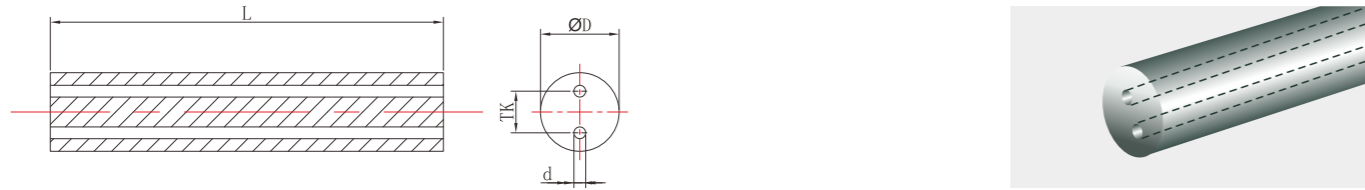
Unit: mm

| Item No. | ØD | Tol.h6 | L | Tol. | TK | Tol. | d | Tol. |
|-------------------|----|----------|-----|------|-----|--------|-----|-------|
| R2SHR-0600-3300PG | 6 | 0/-0.008 | 330 | 0/+5 | 1.5 | 0/-0.2 | 0.8 | ±0.15 |
| R2SHR-0700-3300PG | 7 | 0/-0.009 | 330 | 0/+5 | 1.5 | 0/-0.2 | 0.8 | ±0.15 |
| R2SHR-0800-3300PG | 8 | 0/-0.009 | 330 | 0/+5 | 2.6 | 0/-0.3 | 1.0 | ±0.15 |
| R2SHR-0900-3300PG | 9 | 0/-0.009 | 330 | 0/+5 | 2.6 | 0/-0.3 | 1.0 | ±0.15 |
| R2SHR-1000-3300PG | 10 | 0/-0.009 | 330 | 0/+5 | 2.6 | 0/-0.3 | 1.0 | ±0.15 |
| R2SHR-1100-3300PG | 11 | 0/-0.011 | 330 | 0/+5 | 3.5 | 0/-0.3 | 1.2 | ±0.15 |
| R2SHR-1200-3300PG | 12 | 0/-0.011 | 330 | 0/+5 | 3.5 | 0/-0.3 | 1.2 | ±0.15 |
| R2SHR-1300-3300PG | 13 | 0/-0.011 | 330 | 0/+5 | 3.5 | 0/-0.3 | 1.2 | ±0.15 |
| R2SHR-1400-3300PG | 14 | 0/-0.011 | 330 | 0/+5 | 5.0 | 0/-0.3 | 1.5 | ±0.15 |
| R2SHR-1500-3300PG | 15 | 0/-0.011 | 330 | 0/+5 | 5.0 | 0/-0.3 | 1.5 | ±0.15 |
| R2SHR-1600-3300PG | 16 | 0/-0.011 | 330 | 0/+5 | 5.0 | 0/-0.3 | 1.5 | ±0.20 |
| R2SHR-1700-3300PG | 17 | 0/-0.011 | 330 | 0/+5 | 6.2 | 0/-0.3 | 2.0 | ±0.20 |
| R2SHR-1800-3300PG | 18 | 0/-0.011 | 330 | 0/+5 | 6.2 | 0/-0.3 | 2.0 | ±0.20 |
| R2SHR-1900-3300PG | 19 | 0/-0.013 | 330 | 0/+5 | 6.2 | 0/-0.3 | 2.0 | ±0.20 |
| R2SHR-2000-3300PG | 20 | 0/-0.013 | 330 | 0/+5 | 6.2 | 0/-0.4 | 2.0 | ±0.30 |



● Please contact with us for more specifications.
 ■ In Stock □ Check inventory

2 Straight Holes, Reduced BC, 330L, Unground (UG)



Type: R2SHR Metric Sizes: ØD 6~20mm

Unit: mm

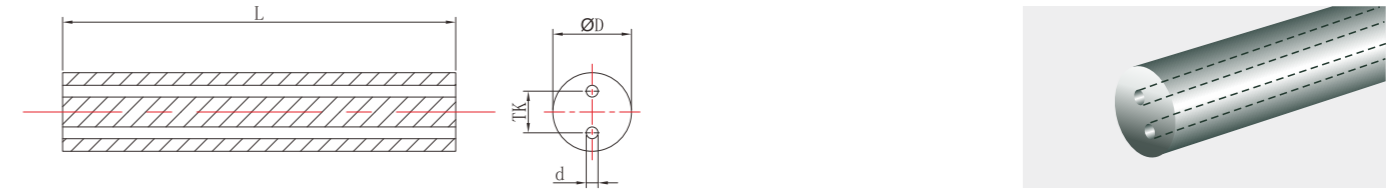
| Item No. | ØD | Tol. | L | Tol. | TK | Tol. | d | Tol. |
|-------------------|------|--------|-----|------|-----|--------|-----|-------|
| R2SHR-0630-3300UG | 6.3 | 0/+0.3 | 330 | 0/+5 | 1.5 | 0/-0.2 | 0.8 | ±0.15 |
| R2SHR-0730-3300UG | 7.3 | 0/+0.3 | 330 | 0/+5 | 1.5 | 0/-0.2 | 0.8 | ±0.15 |
| R2SHR-0830-3300UG | 8.3 | 0/+0.3 | 330 | 0/+5 | 2.6 | 0/-0.3 | 1.0 | ±0.15 |
| R2SHR-0930-3300UG | 9.3 | 0/+0.3 | 330 | 0/+5 | 2.6 | 0/-0.3 | 1.0 | ±0.15 |
| R2SHR-1030-3300UG | 10.3 | 0/+0.3 | 330 | 0/+5 | 2.6 | 0/-0.3 | 1.0 | ±0.15 |
| R2SHR-1130-3300UG | 11.3 | 0/+0.4 | 330 | 0/+5 | 3.5 | 0/-0.3 | 1.2 | ±0.15 |
| R2SHR-1230-3300UG | 12.3 | 0/+0.4 | 330 | 0/+5 | 3.5 | 0/-0.3 | 1.2 | ±0.15 |
| R2SHR-1330-3300UG | 13.3 | 0/+0.4 | 330 | 0/+5 | 3.5 | 0/-0.3 | 1.2 | ±0.15 |
| R2SHR-1430-3300UG | 14.3 | 0/+0.4 | 330 | 0/+5 | 5.0 | 0/-0.3 | 1.5 | ±0.15 |
| R2SHR-1530-3300UG | 15.3 | 0/+0.4 | 330 | 0/+5 | 5.0 | 0/-0.3 | 1.5 | ±0.15 |
| R2SHR-1630-3300UG | 16.3 | 0/+0.4 | 330 | 0/+5 | 5.0 | 0/-0.3 | 1.5 | ±0.20 |
| R2SHR-1730-3300UG | 17.3 | 0/+0.5 | 330 | 0/+5 | 6.2 | 0/-0.3 | 2.0 | ±0.20 |
| R2SHR-1830-3300UG | 18.3 | 0/+0.5 | 330 | 0/+5 | 6.2 | 0/-0.3 | 2.0 | ±0.20 |
| R2SHR-1930-3300UG | 19.3 | 0/+0.5 | 330 | 0/+5 | 6.2 | 0/-0.3 | 2.0 | ±0.20 |
| R2SHR-2030-3300UG | 20.3 | 0/+0.5 | 330 | 0/+5 | 6.2 | 0/-0.4 | 2.0 | ±0.30 |



● Please contact with us for more specifications.

■ In Stock □ Check inventory

2 Straight Holes, Standard BC, 330L, Ground (PG)



Type: R2SHS Metric Sizes: ØD 6~20mm h6 tolerance

Unit: mm

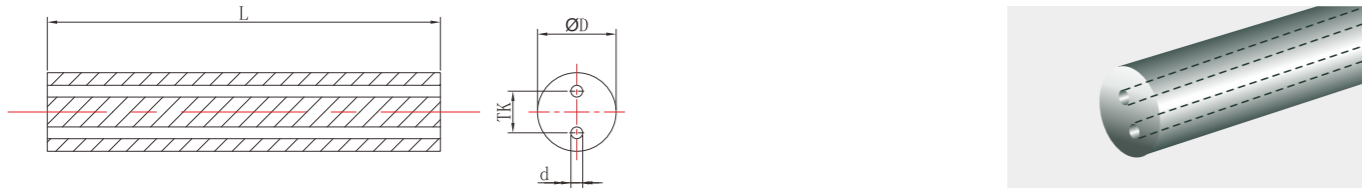
| Item No. | ØD | Tol.h6 | L | Tol. | TK | Tol. | d | Tol. |
|-------------------|----|----------|-----|------|------|--------|------|-------|
| R2SHS-0600-3300PG | 6 | 0/-0.008 | 330 | 0/+5 | 3.0 | 0/-0.2 | 1.00 | ±0.15 |
| R2SHS-0700-3300PG | 7 | 0/-0.009 | 330 | 0/+5 | 3.5 | 0/-0.2 | 1.00 | ±0.15 |
| R2SHS-0800-3300PG | 8 | 0/-0.009 | 330 | 0/+5 | 4.0 | 0/-0.3 | 1.00 | ±0.15 |
| R2SHS-0900-3300PG | 9 | 0/-0.009 | 330 | 0/+5 | 4.0 | 0/-0.3 | 1.40 | ±0.15 |
| R2SHS-1000-3300PG | 10 | 0/-0.009 | 330 | 0/+5 | 5.0 | 0/-0.3 | 1.40 | ±0.15 |
| R2SHS-1100-3300PG | 11 | 0/-0.011 | 330 | 0/+5 | 5.0 | 0/-0.3 | 1.40 | ±0.15 |
| R2SHS-1200-3300PG | 12 | 0/-0.011 | 330 | 0/+5 | 6.0 | 0/-0.3 | 1.75 | ±0.15 |
| R2SHS-1300-3300PG | 13 | 0/-0.011 | 330 | 0/+5 | 6.0 | 0/-0.3 | 1.75 | ±0.15 |
| R2SHS-1400-3300PG | 14 | 0/-0.011 | 330 | 0/+5 | 7.0 | 0/-0.3 | 1.75 | ±0.15 |
| R2SHS-1500-3300PG | 15 | 0/-0.011 | 330 | 0/+5 | 7.0 | 0/-0.3 | 2.00 | ±0.20 |
| R2SHS-1600-3300PG | 16 | 0/-0.011 | 330 | 0/+5 | 8.0 | 0/-0.3 | 2.00 | ±0.20 |
| R2SHS-1700-3300PG | 17 | 0/-0.011 | 330 | 0/+5 | 8.0 | 0/-0.3 | 2.00 | ±0.20 |
| R2SHS-1800-3300PG | 18 | 0/-0.011 | 330 | 0/+5 | 9.0 | 0/-0.3 | 2.00 | ±0.20 |
| R2SHS-1900-3300PG | 19 | 0/-0.013 | 330 | 0/+5 | 9.0 | 0/-0.3 | 2.00 | ±0.20 |
| R2SHS-2000-3300PG | 20 | 0/-0.013 | 330 | 0/+5 | 10.0 | 0/-0.4 | 2.50 | ±0.30 |



● Please contact with us for more specifications.

■ In Stock □ Check inventory

2 Straight Holes, Standard BC, 330L, Unground (UG)



Type: R2SHS Metric Sizes: ØD 6~20mm

Unit: mm

| Item No. | ØD | Tol. | L | Tol. | TK | Tol. | d | Tol. |
|-------------------|------|--------|-----|------|------|--------|------|-------|
| R2SHS-0630-3300UG | 6.3 | 0/+0.3 | 330 | 0/+5 | 3.0 | 0/-0.2 | 1.00 | ±0.15 |
| R2SHS-0730-3300UG | 7.3 | 0/+0.3 | 330 | 0/+5 | 3.5 | 0/-0.2 | 1.00 | ±0.15 |
| R2SHS-0830-3300UG | 8.3 | 0/+0.3 | 330 | 0/+5 | 4.0 | 0/-0.3 | 1.00 | ±0.15 |
| R2SHS-0930-3300UG | 9.3 | 0/+0.3 | 330 | 0/+5 | 4.0 | 0/-0.3 | 1.40 | ±0.15 |
| R2SHS-1030-3300UG | 10.3 | 0/+0.3 | 330 | 0/+5 | 5.0 | 0/-0.3 | 1.40 | ±0.15 |
| R2SHS-1130-3300UG | 11.3 | 0/+0.4 | 330 | 0/+5 | 5.0 | 0/-0.3 | 1.40 | ±0.15 |
| R2SHS-1230-3300UG | 12.3 | 0/+0.4 | 330 | 0/+5 | 6.0 | 0/-0.3 | 1.75 | ±0.15 |
| R2SHS-1330-3300UG | 13.3 | 0/+0.4 | 330 | 0/+5 | 6.0 | 0/-0.3 | 1.75 | ±0.15 |
| R2SHS-1430-3300UG | 14.3 | 0/+0.4 | 330 | 0/+5 | 7.0 | 0/-0.3 | 1.75 | ±0.15 |
| R2SHS-1530-3300UG | 15.3 | 0/+0.4 | 330 | 0/+5 | 7.0 | 0/-0.3 | 2.00 | ±0.15 |
| R2SHS-1630-3300UG | 16.3 | 0/+0.4 | 330 | 0/+5 | 8.0 | 0/-0.3 | 2.00 | ±0.20 |
| R2SHS-1730-3300UG | 17.3 | 0/+0.5 | 330 | 0/+5 | 8.0 | 0/-0.3 | 2.00 | ±0.20 |
| R2SHS-1830-3300UG | 18.3 | 0/+0.5 | 330 | 0/+5 | 9.0 | 0/-0.3 | 2.00 | ±0.20 |
| R2SHS-1930-3300UG | 19.3 | 0/+0.5 | 330 | 0/+5 | 9.0 | 0/-0.3 | 2.00 | ±0.20 |
| R2SHS-2030-3300UG | 20.3 | 0/+0.5 | 330 | 0/+5 | 10.0 | 0/-0.4 | 2.50 | ±0.30 |

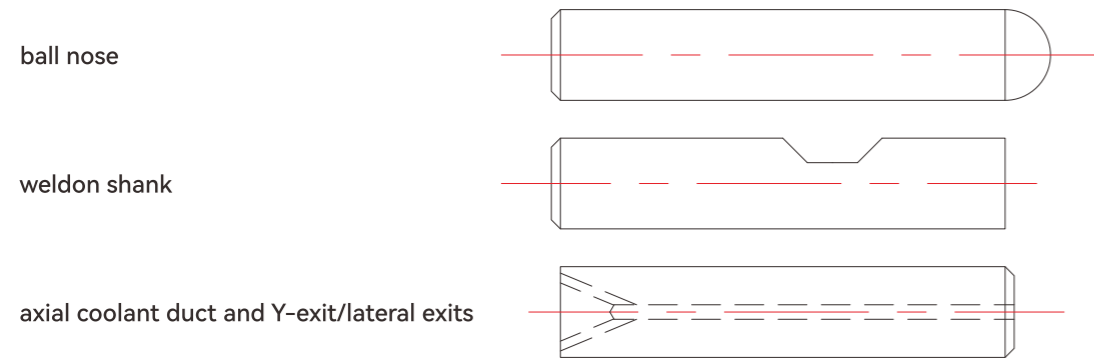


● Please contact with us for more specifications.

■ In Stock □ Check inventory



Special Milling Cutter Blanks (Metric)



Unit: mm

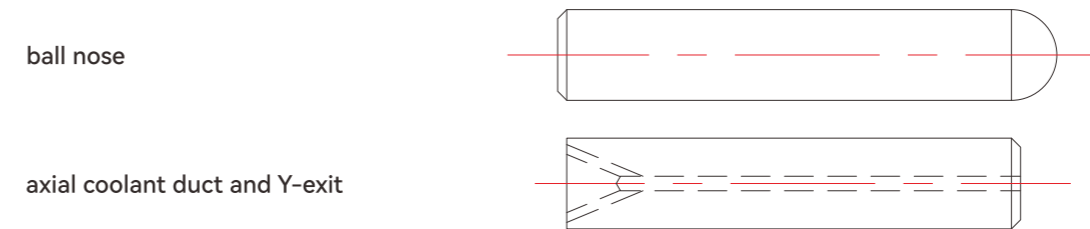
| D | Tol. | L | Tol. | CX45° Tol.±0.004 | Ball Nose | Weldon Shank | Axial Coolant Duct and Y-exit/Lateral Exits |
|------|-------|-----|---------------------------------|---------------------|-----------|--------------|--|
| 6.0 | h6/h5 | 51 | 0/+1% of length, minimum +0.5mm | 0.4 | | | ● |
| 6.0 | h6/h5 | 55 | | 0.4 | | | ● |
| 6.0 | h6/h5 | 58 | | 0.4 | ● | ● | ● |
| 8.0 | h6/h5 | 59 | | 0.6 | | | ● |
| 8.0 | h6/h5 | 64 | | 0.6 | ● | ● | ● |
| 10.0 | h6/h5 | 67 | | 0.6 | | | ● |
| 10.0 | h6/h5 | 73 | | 0.6 | ● | ● | ● |
| 12.0 | h6/h5 | 74 | | 0.8 | ● | ● | ● |
| 12.0 | h6/h5 | 84 | | 0.8 | ● | ● | ● |
| 14.0 | h6/h5 | 76 | | 0.8 | | | ● |
| 14.0 | h6/h5 | 84 | | 0.8 | ● | ● | ● |
| 16.0 | h6/h5 | 83 | | 0.8 | | | ● |
| 16.0 | h6/h5 | 93 | | 0.8 | ● | ● | ● |
| 18.0 | h6/h5 | 93 | | 1.0 | ● | ● | ● |
| 20.0 | h6/h5 | 93 | | 1.0 | | | ● |
| 20.0 | h6/h5 | 105 | | 1.0 | ● | ● | ● |
| 25.0 | h6/h5 | 123 | | 2.0 | | | ● |

MH10F



● Please contact with us for more specifications.
 ■ In Stock □ Check inventory

Special Milling Cutter Blanks (Inch)



Unit: inch

| D | Tol. | L | Tol. | CX45° Tol.±0.004 | Ball Nose | Axial Coolant Duct and Y-exit/Lateral Exits |
|------|-------|------|---------------------------------|---------------------|-----------|--|
| 1/4 | h6/h5 | 2.00 | 0/+1% of length, minimum +0.02" | 0.024 | ● | ● |
| 1/4 | h6/h5 | 2.50 | | 0.024 | ● | ● |
| 5/16 | h6/h5 | 2.00 | | 0.024 | ● | ● |
| 5/16 | h6/h5 | 2.50 | | 0.024 | ● | ● |
| 3/8 | h6/h5 | 2.50 | | 0.024 | ● | ● |
| 3/8 | h6/h5 | 3.00 | | 0.024 | ● | ● |
| 3/8 | h6/h5 | 4.00 | | 0.024 | ● | ● |
| 7/16 | h6/h5 | 2.75 | | 0.031 | ● | ● |
| 1/2 | h6/h5 | 3.00 | | 0.031 | ● | ● |
| 1/2 | h6/h5 | 4.00 | | 0.031 | ● | ● |
| 5/8 | h6/h5 | 3.50 | | 0.031 | ● | ● |
| 3/4 | h6/h5 | 4.00 | | 0.039 | ● | ● |
| 1 | h6/h5 | 4.00 | | 0.039 | ● | ● |

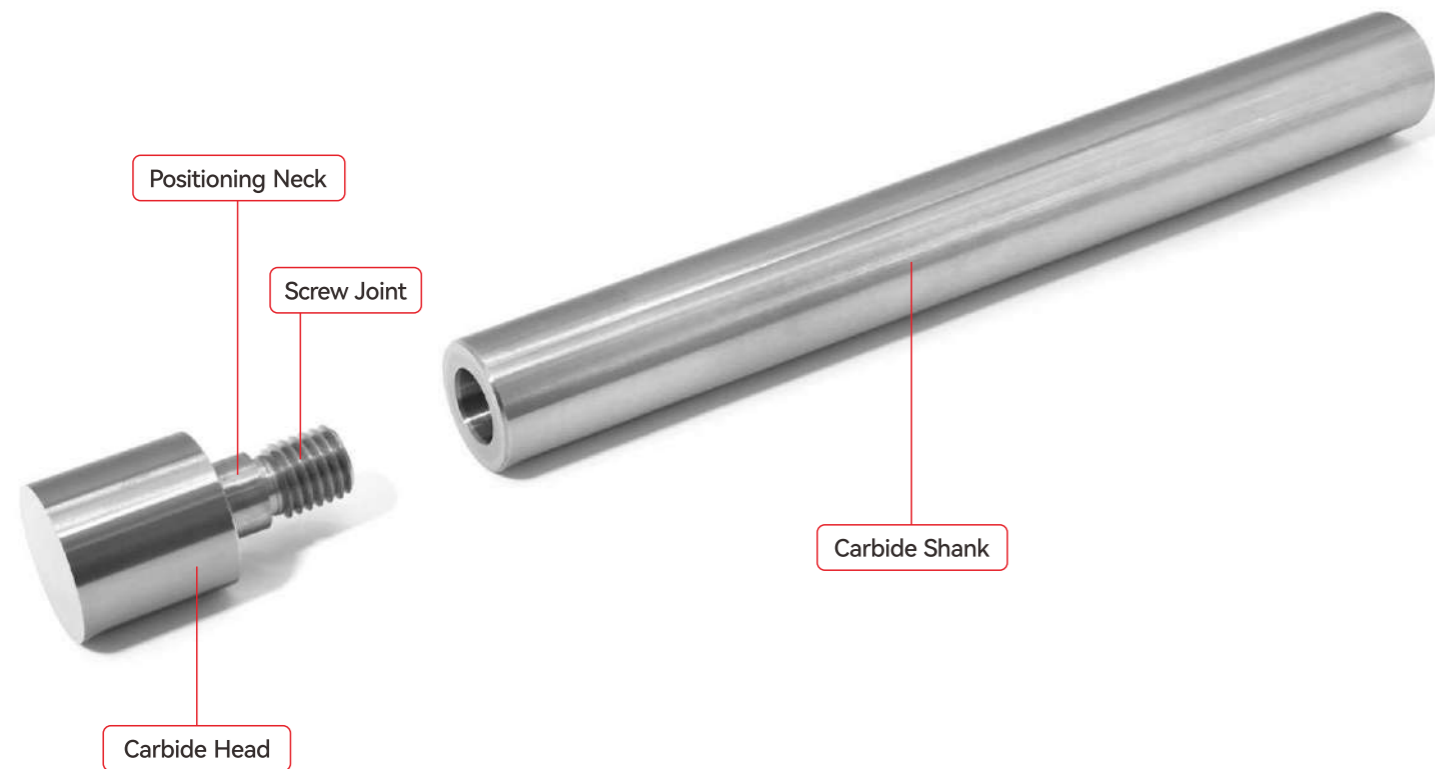
MH10F



● Please contact with us for more specifications.
 ■ In Stock □ Check inventory

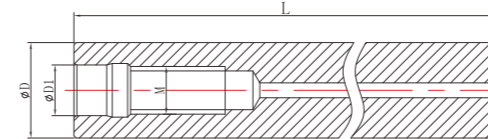
High Precision Modular Shanks and Heads

- ▶ **High Precision**
Integrated precision (Shank+head)<0.01mm.
- ▶ **Screw Connection**
ISO standard screw thread ensures the interchangeability.
- ▶ **Application Driving Grades**
Multiple carbide grades are available for head to meet the demanding applications.
- ▶ **Interchangeability and Efficiency**
One shank adapts to multiple heads that can be interchanged easily, saving time and improving efficiency and productivity.

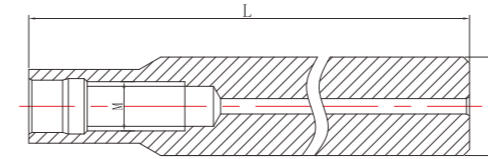


High Precision Carbide Modular Shanks

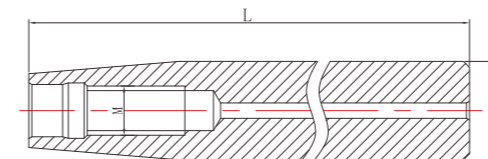
Type: CMS
Straight shank



Type: CMSA
Shank with straight neck



Type: CMSB
Shank with taper neck



Shanks(Metric)

Unit: mm

| Item No. | | ØD h6 | L | D1 h6 | M |
|----------------|----------------|-------|-----|-------|-----|
| HMS 10L100-M6 | CMS 10L100-M6 | 10 | 100 | 6.5 | M6 |
| HMS 10L150-M6 | CMS 10L150-M6 | 10 | 150 | 6.5 | M6 |
| HMS 12L100-M6 | CMS 12L100-M6 | 12 | 100 | 6.5 | M6 |
| HMS 12L150-M6 | CMS 12L150-M6 | 12 | 150 | 6.5 | M6 |
| HMS 16L100-M8 | CMS 16L100-M8 | 16 | 100 | 8.5 | M8 |
| HMS 16L150-M8 | CMS 16L150-M8 | 16 | 150 | 8.5 | M8 |
| HMS 16L200-M8 | CMS 16L200-M8 | 16 | 200 | 8.5 | M8 |
| HMS 16L250-M8 | CMS 16L250-M8 | 16 | 250 | 8.5 | M8 |
| HMS 20L100-M10 | CMS 20L100-M10 | 20 | 100 | 10.5 | M10 |
| HMS 20L150-M10 | CMS 20L150-M10 | 20 | 150 | 10.5 | M10 |
| HMS 20L200-M10 | CMS 20L200-M10 | 20 | 200 | 10.5 | M10 |
| HMS 20L250-M10 | CMS 20L250-M10 | 20 | 250 | 10.5 | M10 |
| HMS 20L300-M10 | CMS 20L300-M10 | 20 | 300 | 10.5 | M10 |
| HMS 25L150-M12 | CMS 25L150-M12 | 25 | 150 | 12.5 | M12 |
| HMS 25L200-M12 | CMS 25L200-M12 | 25 | 200 | 12.5 | M12 |
| HMS 25L250-M12 | CMS 25L250-M12 | 25 | 250 | 12.5 | M12 |
| HMS 25L300-M12 | CMS 25L300-M12 | 25 | 300 | 12.5 | M12 |
| HMS 32L150-M16 | CMS 32L150-M16 | 32 | 150 | 16.5 | M16 |
| HMS 32L200-M16 | CMS 32L200-M16 | 32 | 200 | 16.5 | M16 |
| HMS 32L250-M16 | CMS 32L250-M16 | 32 | 250 | 16.5 | M16 |
| HMS 32L300-M16 | CMS 32L300-M16 | 32 | 300 | 16.5 | M16 |
| HMS 32L400-M16 | CMS 32L400-M16 | 32 | 400 | 16.5 | M16 |

HMS : Heavy Alloy Modular Shanks

Features:

Screw-in, through coolant, excellent toughness, more fogiving with reduced fracture rates. anti-vibration

Applications:

Ideal for roughing and semi-finishing applications, and for use in lower speed machining. adopted to ISO modular heads.

CMS : Carbide Modular Shanks

Features:

Screw-in, through coolant, excellent rigidity, and anti-vibration.

Applications:

Ideal for semi-finishing and finishing applications, and high speed machining. adopted to ISO modular heads.

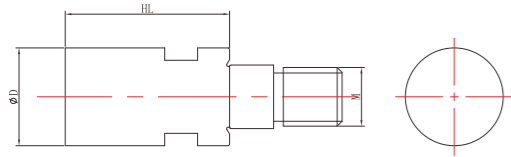
Shanks(Inch)

Unit: inch

| Item No. | | ØD h6 | L | M |
|---------------------|--|--------|--------|-----|
| CMS 03750L03937-M6 | | 0.3750 | 3.937 | M6 |
| CMS 03750L05906-M6 | | 0.3750 | 5.906 | M6 |
| CMS 05000L03937-M6 | | 0.5000 | 3.937 | M6 |
| CMS 05000L05906-M6 | | 0.5000 | 5.906 | M6 |
| CMS 06250L03937-M8 | | 0.6250 | 3.937 | M8 |
| CMS 06250L05906-M8 | | 0.6250 | 5.906 | M8 |
| CMS 06250L07874-M8 | | 0.6250 | 7.874 | M8 |
| CMS 06250L09843-M8 | | 0.6250 | 9.843 | M8 |
| CMS 07500L03937-M10 | | 0.7500 | 3.937 | M10 |
| CMS 07500L05906-M10 | | 0.7500 | 5.906 | M10 |
| CMS 07500L07874-M10 | | 0.7500 | 7.874 | M10 |
| CMS 07500L09843-M10 | | 0.7500 | 9.843 | M10 |
| CMS 07500L11811-M10 | | 0.7500 | 11.811 | M10 |
| CMS 10000L05906-M12 | | 1.0000 | 5.906 | M12 |
| CMS 10000L07874-M12 | | 1.0000 | 7.874 | M12 |
| CMS 10000L09843-M12 | | 1.0000 | 9.843 | M12 |
| CMS 10000L11811-M12 | | 1.0000 | 11.811 | M12 |
| CMS 12500L05906-M16 | | 1.2500 | 5.906 | M16 |
| CMS 12500L07874-M16 | | 1.2500 | 7.874 | M16 |
| CMS 12500L09843-M16 | | 1.2500 | 9.843 | M16 |
| CMS 12500L11811-M16 | | 1.2500 | 11.811 | M16 |
| CMS 12500L13780-M16 | | 1.2500 | 13.780 | M16 |
| CMS 12500L15748-M16 | | 1.2500 | 15.748 | M16 |



High Precision Carbide Modular Heads



Heads (Metric)

Unit: mm

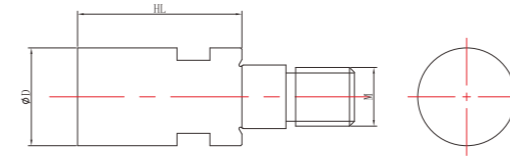
| Item No. | ØD h6 | HL+0.5/+0.2 | M | Recommended Torsion for Assembly |
|-----------------|-------|-------------|-----|----------------------------------|
| CEH 10L16-M6 | 10 | 16 | M6 | 8~9 N.m |
| CEH 10L20-M6 | 10 | 20 | M6 | |
| CEH 10L25-M6 | 10 | 25 | M6 | |
| CEH 10L35-M6 | 10 | 35 | M6 | |
| CEH 12L19-M6 | 12 | 19 | M6 | 8~9 N.m |
| CEH 12L24-M6 | 12 | 24 | M6 | |
| CEH 12L30-M6 | 12 | 30 | M6 | |
| CEH 12L42-M6 | 12 | 42 | M6 | |
| CEH 16L24-M8 | 16 | 24 | M8 | 10~11 N.m |
| CEH 16L32-M8 | 16 | 32 | M8 | |
| CEH 16L40-M8 | 16 | 40 | M8 | |
| CEH 20L20-M10 | 20 | 20 | M10 | 12~16N.m |
| CEH 20L30-M10 | 20 | 30 | M10 | |
| CEH 20L40-M10 | 20 | 40 | M10 | |
| CEH 20L50-M10 | 20 | 50 | M10 | |
| CEH 25L25-M12 | 25 | 25 | M12 | |
| CEH 25L37.5-M12 | 25 | 37.5 | M12 | 15~20 N.m |
| CEH 25L50-M12 | 25 | 50 | M12 | |
| CEH 32L32-M16 | 32 | 32 | M16 | 20~25 N.m |
| CEH 32L48-M16 | 32 | 48 | M16 | |
| CEH 32L64-M16 | 32 | 64 | M16 | |

MH10F



- Please contact with us for more specifications.
- Please ask for drawing confirmation or provide your customized drawing at time of inquiry.

High Precision Carbide Modular Heads



Heads (Inch)

Unit: inch

| Item No. | ØD h6 | HL+0.5/+0.2 | M |
|--------------------|--------|-------------|-----|
| CEH 03750L0591-M6 | 0.3750 | 0.591 | M6 |
| CEH 03750L0787-M6 | 0.3750 | 0.787 | M6 |
| CEH 03750L0984-M6 | 0.3750 | 0.984 | M6 |
| CEH 03750L1378-M6 | 0.3750 | 1.378 | M6 |
| CEH 05000L0709-M6 | 0.5000 | 0.709 | M6 |
| CEH 05000L0945-M6 | 0.5000 | 0.945 | M6 |
| CEH 05000L1181-M6 | 0.5000 | 1.181 | M6 |
| CEH 05000L1654-M6 | 0.5000 | 1.654 | M6 |
| CEH 06250L0945-M8 | 0.6250 | 0.945 | M8 |
| CEH 06250L1260-M8 | 0.6250 | 1.260 | M8 |
| CEH 06250L1575-M8 | 0.6250 | 1.575 | M8 |
| CEH 07500L0787-M10 | 0.7500 | 0.787 | M10 |
| CEH 07500L1181-M10 | 0.7500 | 1.181 | M10 |
| CEH 07500L1575-M10 | 0.7500 | 1.575 | M10 |
| CEH 07500L1969-M10 | 0.7500 | 1.969 | M10 |
| CEH 10000L0984-M12 | 1.0000 | 0.984 | M12 |
| CEH 10000L1476-M12 | 1.0000 | 1.476 | M12 |
| CEH 10000L1969-M12 | 1.0000 | 1.969 | M12 |
| CEH 12500L1260-M16 | 1.2500 | 1.260 | M16 |
| CEH 12500L1890-M16 | 1.2500 | 1.890 | M16 |
| CEH 12500L2520-M16 | 1.2500 | 2.520 | M16 |

MH10F



- Please contact with us for more specifications.
- Please ask for drawing confirmation or provide your customized drawing at time of inquiry.



Carbide Preforms

- ▶ 1-2 weeks leading time
- ▶ No MOQ limit
- ▶ Raw sintered or Semi-finished products both are available
- ▶ RFQ processed within 24 hours
- ▶ Custom solutions to meet your specific requirements

Please allow CYC to help you achieve cost savings by customizing your carbide.



| Grade | Binder % | Hardness HRA | Hardness HV10 | T.R.S $\geq N/mm^2$ | Density g/cm^3 | Grain Size | ISO Code |
|--|----------|--------------|---------------|---------------------|------------------|------------|----------|
| MH10F | 10 | 91.8 | 1600 | 3800 | 14.45 | Submicron | K30 |
| An excellent general purpose grade to cover most cutting applications. For materials of ISO P.M.K. N. Suitable for drilling, milling and reaming. | | | | | | | |
| UH12 | 12 | 92.2 | 1660 | 4000 | 14.15 | Ultrafine | K40 |
| Gives high impact strength while maintaining excellent wear resistance. A universal grade for cutting Stainless Steel, Titanium Alloys, Nickel base alloy and other difficult machine materials. Suitable for milling, drilling. | | | | | | | |
| EH12 | 12 | 90.7 | 1450 | 3500 | 14.20 | Submicron | K40 |
| Suitable for tool shank and PCD tool body. | | | | | | | |

• Above data are typical parameters.

Standard Tolerance for Preforms

Diameter

Unit: mm

| $\varnothing D$ | Basic allowance | Sintering Tol. |
|---------------------------------------|-----------------|----------------|
| $> \varnothing 5 - \varnothing 14$ | 0.8 | ± 0.2 |
| $> \varnothing 14.1 - \varnothing 25$ | 1.0 | ± 0.3 |
| $> \varnothing 25.1 - \varnothing 48$ | 1.2 | ± 0.4 |
| $> \varnothing 48.1$ | 1.5 | ± 0.5 |

Center and Exit Hole

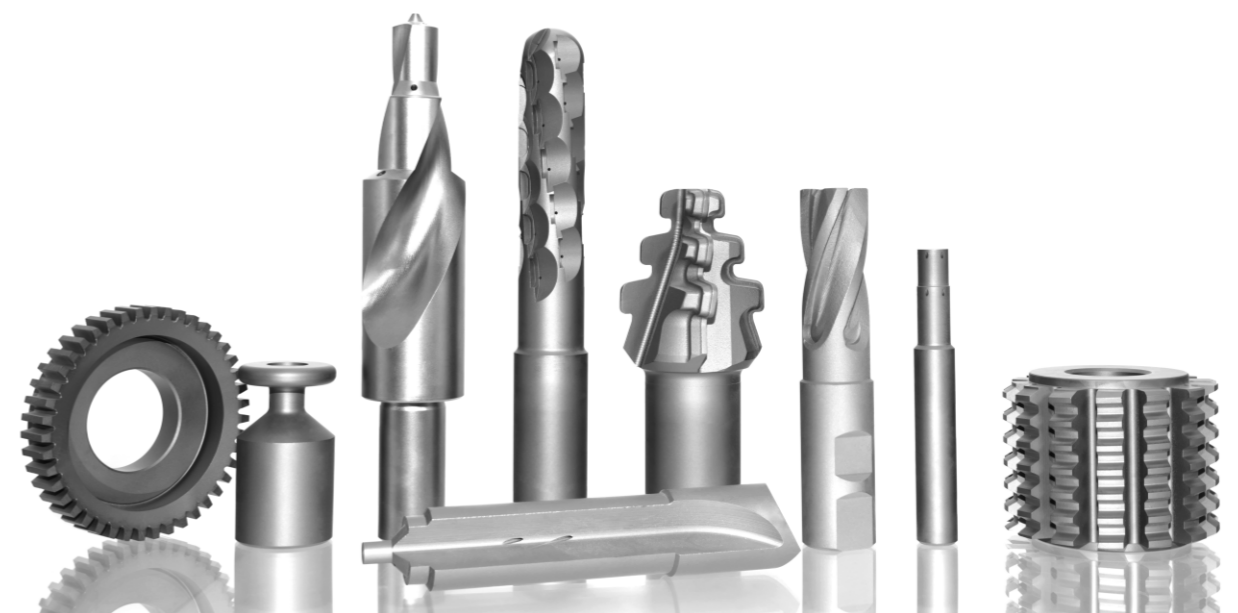
Unit: mm

| Hole dia | Tolerance |
|---------------------------------------|-----------|
| $> \varnothing 0.8 - \varnothing 1.5$ | ± 0.1 |
| $> \varnothing 1.6 - \varnothing 3.0$ | ± 0.2 |
| $> \varnothing 3.1 - \varnothing 8.0$ | ± 0.3 |

Length & Concentricity

Unit: mm

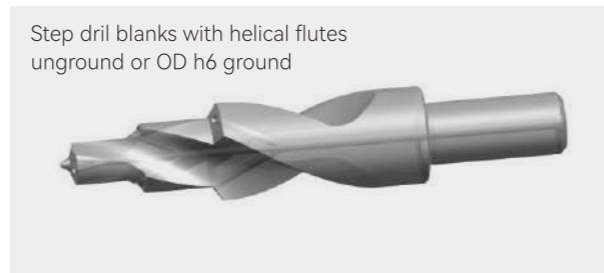
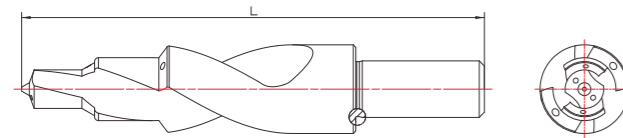
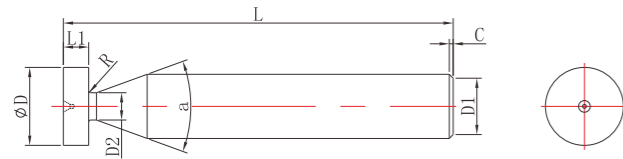
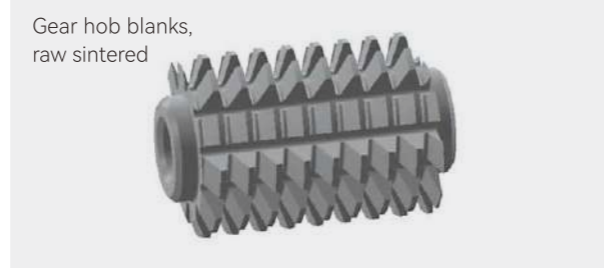
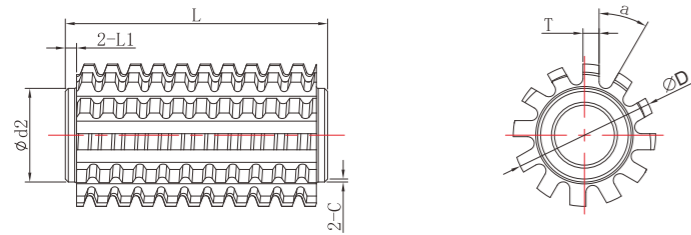
| Basic allowance | Sintering Tol. | Concentricity |
|---|----------------|---------------|
| $+(0.4+0.5\%L)$ | $\pm 0.5\%L$ | ≤ 0.3 |
| For example, if L=100mm, then it's basic allowance is $+0.4+0.5\%*100=0.9mm$ Sintering tolerance is $\pm 0.5\%*100=100.9\pm 0.5mm$. | | |



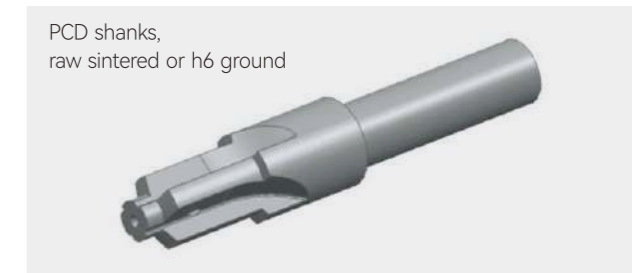
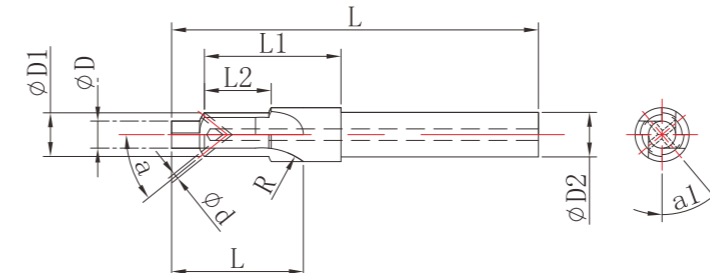
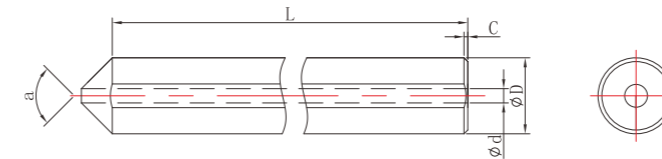
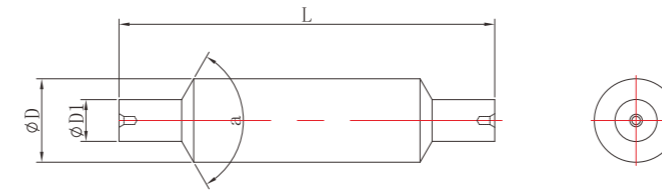
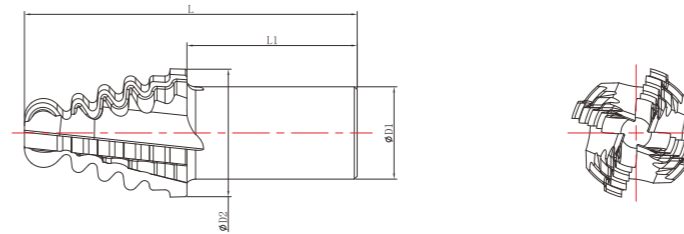
Preform Blanks for Cutting Tools

Our Competence

- ▶ MOQ starts at 1 piece
- ▶ As soon as 5 days
- ▶ Fully customized according to your drawings
- ▶ Provide OD precision grinding service



Preform Blanks for Cutting Tools



Other Metal Cutting Tool Blanks

Due to our comprehensive and variable forming solutions, we are able to produce the various type of rods by extrusion pressing, and also the direct pressing of blanks such as rotary bur blanks, disc cutters and etc.

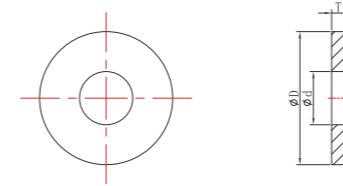
Special developed grades upon application, high precision press tools designed built in house, offer tighter tolerance control, which ensures higher performance of products delivered to you.



| Grade | Binder % | Hardness HRA | Hardness HV10 | T.R.S $\geq N/mm^2$ | Density g/cm^3 | Grain Size | ISO Code |
|-------|---|--------------|---------------|---------------------|------------------|------------|----------|
| CK10H | 6 | 91.3 | 1530 | 2500 | 14.90 | Medium | K10 |
| | Ideal grade for rotary bur blanks. | | | | | | |
| MH7 | 6 | 93.1 | 1850 | 3600 | 14.85 | Submicron | K10 |
| | Standard grade for carbide strips, for cutting non-ferrous metals like Cu,Al. | | | | | | |
| MH10F | 10 | 91.8 | 1600 | 3800 | 14.45 | Submicron | K30 |
| | Standard grade for carbide strips, disc cutters, for machining most kinds of steel. | | | | | | |

• Above data are typical parameters.

Disc Cutter Blanks



Unit: mm

| $\varnothing D$ | Tol. | d | Tol. | T ToL.+0.2~0.3 |
|-----------------|--------|------|--------|-------------------|
| 11.0 | 0/+0.5 | 4.0 | -0.3/0 | 0.6~2.5 |
| 17.2 | 0/+0.5 | 4.5 | -0.3/0 | 0.6~2.5 |
| 19.0 | 0/+0.5 | 7.3 | -0.3/0 | 0.6~2.5 |
| 19.0 | 0/+0.5 | 5.3 | -0.3/0 | 0.6~2.5 |
| 20.0 | 0/+0.5 | 7.3 | -0.3/0 | 0.6~3.5 |
| 21.5 | 0/+0.5 | 5.3 | -0.3/0 | 0.6~3.5 |
| 30.2 | 0/+0.5 | 5.5 | -0.3/0 | 0.6~3.5 |
| 31.2 | 0/+0.5 | 9.5 | -0.3/0 | 0.6~3.5 |
| 41.2 | 0/+0.5 | 7.3 | -0.3/0 | 0.6~4.2 |
| 41.2 | 0/+0.5 | 12.2 | -0.3/0 | 0.6~4.2 |
| 41.2 | 0/+0.5 | 14.8 | -0.4/0 | 0.6~4.2 |
| 46.0 | 0/+0.5 | 15.0 | -0.4/0 | 0.6~4.2 |
| 51.5 | 0/+0.5 | 11.5 | -0.4/0 | 0.7~4.5 |
| 51.5 | 0/+0.5 | 15.0 | -0.4/0 | 0.7~4.5 |
| 51.5 | 0/+0.5 | 20.8 | -0.4/0 | 0.7~4.5 |
| 51.5 | 0/+0.5 | 24.5 | -0.4/0 | 0.7~4.5 |
| 54.5 | 0/+0.5 | 15.0 | -0.4/0 | 0.7~4.5 |
| 61.5 | 0/+0.5 | 15.0 | -0.4/0 | 0.7~4.5 |
| 61.5 | 0/+0.5 | 21.4 | -0.4/0 | 0.7~4.5 |
| 61.5 | 0/+0.5 | 24.5 | -0.4/0 | 0.7~4.5 |

Unit: mm

| $\varnothing D$ | Tol. | d | Tol. | T ToL.+0.2~0.3 |
|-----------------|--------|------|--------|-------------------|
| 62.5 | 0/+0.8 | 16.0 | -0.4/0 | 0.7~4.5 |
| 62.5 | 0/+0.8 | 14.7 | -0.4/0 | 0.7~4.5 |
| 62.5 | 0/+0.8 | 15.8 | -0.4/0 | 0.7~4.5 |
| 64.5 | 0/+0.8 | 14.8 | -0.4/0 | 0.7~4.5 |
| 66.5 | 0/+0.8 | 14.5 | -0.4/0 | 0.7~4.5 |
| 66.5 | 0/+0.8 | 15.0 | -0.4/0 | 0.7~4.5 |
| 66.5 | 0/+0.8 | 21.0 | -0.4/0 | 0.7~4.5 |
| 71.5 | 0/+0.8 | 14.5 | -0.4/0 | 0.7~5.0 |
| 71.5 | 0/+0.8 | 15.3 | -0.4/0 | 0.7~5.0 |
| 71.5 | 0/+0.8 | 24.5 | -0.4/0 | 0.7~5.0 |
| 71.5 | 0/+0.8 | 20.5 | -0.4/0 | 0.7~5.0 |
| 75.5 | 0/+0.8 | 20.5 | -0.4/0 | 0.7~5.0 |
| 75.5 | 0/+0.8 | 15.0 | -0.4/0 | 0.7~5.0 |
| 75.5 | 0/+0.8 | 24.0 | -0.4/0 | 0.7~5.0 |
| 81.5 | 0/+0.8 | 20.5 | -0.4/0 | 0.7~5.0 |
| 81.5 | 0/+0.8 | 24.5 | -0.4/0 | 0.7~5.0 |
| 102.0 | 0/+1.0 | 20.5 | -0.4/0 | 0.7~5.0 |
| 102.0 | 0/+1.0 | 65.0 | -0.7/0 | 0.7~5.0 |
| 109.0 | 0/+1.0 | 60.0 | -0.7/0 | 0.7~5.0 |
| 152.0 | 0/+1.0 | 30.5 | -0.5/0 | 0.7~5.0 |



● Please contact with us for more specifications.

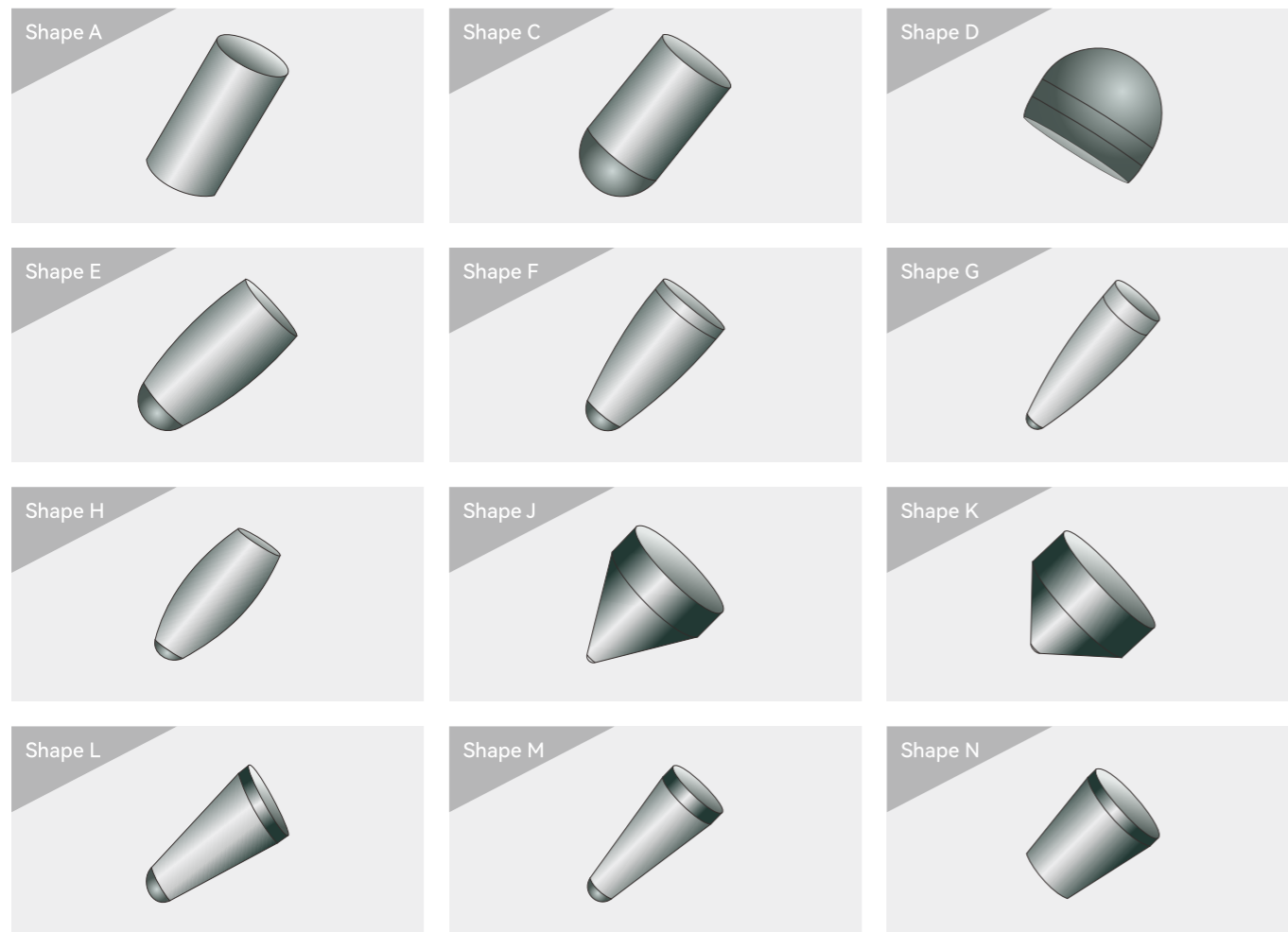
■ In Stock □ Check inventory

Rotary Bur Head Blanks

- ▶ Inch styles -BSA, BSC, BSD, BSE, BSF, BSG, BSH, BSM and BSL
- ▶ Metric styles -ZYA, WRD, KUD, TRE, RBF SPG and KSJ

Features: Good wear resistance and longer tool life, brazing fixture holes available.

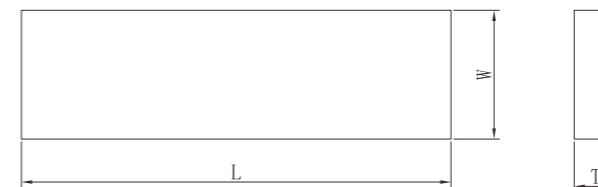
Applications: DIN and INCH standards of tungsten carbide rotary bur blanks for fabrication of finished rotary burs.



| | | |
|--------------------------|--------------------------|--------------------------|
| CK10H | CK15H | MH10F |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

● Please contact with us for more specifications.
 ■ In Stock □ Check inventory

Carbide Flat Bars/Strips



Unit: mm

| T | Tol. | W | Tol. | L | Tol. |
|----------|-----------|------|-----------|-----|-----------|
| 1.5-4.0 | +0.2/+0.5 | 4.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 1.5-5.0 | +0.2/+0.5 | 5.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 1.5-6.0 | +0.2/+0.5 | 6.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 1.5-7.0 | +0.2/+0.5 | 7.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 1.5-8.0 | +0.2/+0.5 | 8.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 1.5-10.0 | +0.2/+0.5 | 10.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 1.5-12.0 | +0.2/+0.5 | 12.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 2.0-8.0 | +0.2/+0.5 | 14.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 2.0-8.0 | +0.2/+0.5 | 15.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 2.0-8.0 | +0.2/+0.5 | 16.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 2.0-8.0 | +0.2/+0.5 | 18.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 2.0-8.0 | +0.2/+0.5 | 20.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 2.0-8.0 | +0.2/+0.5 | 22.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 2.0-8.0 | +0.2/+0.5 | 25.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 2.0-8.0 | +0.2/+0.5 | 26.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 2.0-8.0 | +0.2/+0.5 | 30.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 2.0-8.0 | +0.2/+0.5 | 32.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 2.0-8.0 | +0.2/+0.5 | 35.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 2.0-8.0 | +0.2/+0.5 | 40.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |
| 2.0-8.0 | +0.2/+0.5 | 45.0 | +0.2/+0.7 | 330 | +1.0/+6.0 |

| |
|-------------------------------------|
| MH10F |
| <input checked="" type="checkbox"/> |

● Please contact with us for more specifications.
 ■ In Stock □ Check inventory

