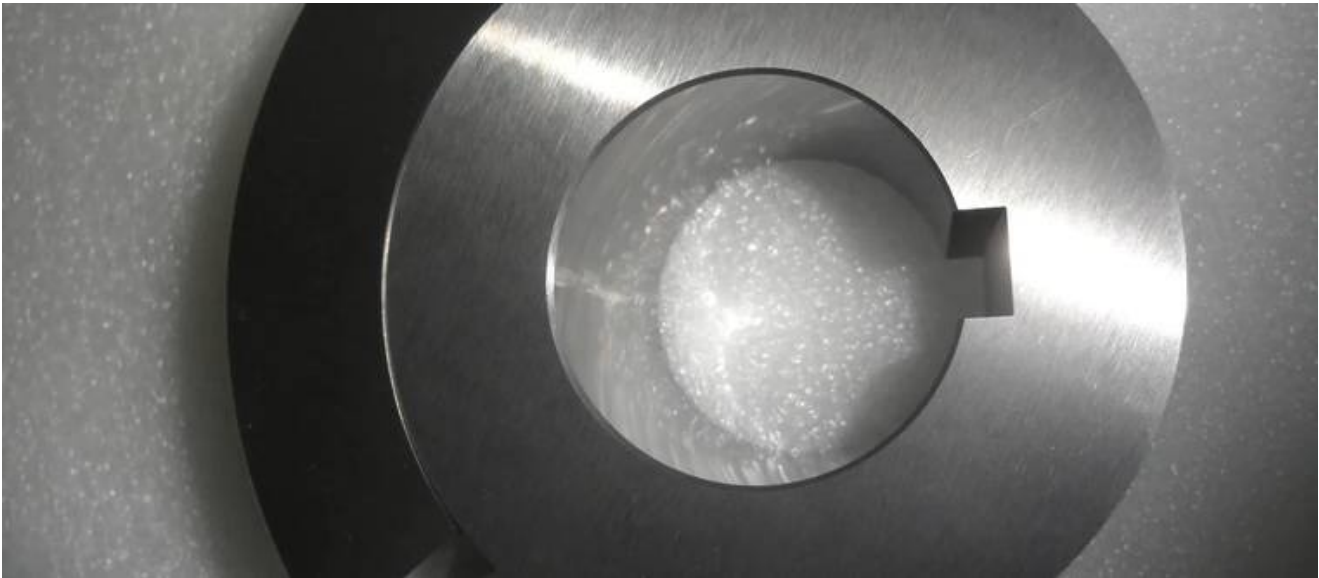




# Tungsten Carbide Product Catalogue

Carbide rods strips blades dies inserts pins buttons oil field parts rings tubes gears valve pairs and saw tips produced by LAMPSCITY CO., LTD in Changsha China.



|                   |                                                                                               |
|-------------------|-----------------------------------------------------------------------------------------------|
| Company           | LAMPSCITY CO., LTD                                                                            |
| Brand             | Solarson Carbide                                                                              |
| Location          | Changsha, Hunan Province, China                                                               |
| Address           | Room 1108, Tian You Building, 10 Ba Yi Road, Furong District, Changsha, Hunan Province, China |
| WhatsApp / WeChat | +86 187 7492 5813                                                                             |
| Telephone / Fax   | +86-731-88751071 / +86-731-88722051                                                           |
| Email             | sales@solarsoncarbide.com solarsoncarbide@vip.126.com                                         |
| Website           | carbidesolarson.com                                                                           |

## Production Procedure of Tungsten Carbide Products

WC powder → Ball milling → Spray drying → Mixed powder → Pressing → Sinter-HIP → Machining → Finished product

### Export Markets

USA, Germany, UK, Italy, Sweden, Chile, India, Vietnam, Turkey, South Africa

### Documented Production Facts

- Standard carbide strip length 330 mm. Maximum length produced in one piece 1800 mm.
- Carbide sleeve produced at OD 268 mm x ID 228.6 mm x H 160 mm carrying 176 holes.
- A second sleeve design in the same family carries 82 holes.
- Carbide ring and segment sets are supplied as 1 ring plus 4 segments per set.
- Saw tips produced in the F1 series similar to European style and in the U.S. standard series.

Grades tolerances hardness values and lead times are confirmed in writing against your specific drawing and application. Figures not listed in this catalogue are not published because they have not been documented for general use.

## PRODUCT CATEGORY 01

## Tungsten Carbide Rods and Blanks

Sintered tungsten carbide rod blanks for drills end mills reamers and wear pins supplied solid with two helical coolant holes chamfered or fully customised to your drawing.



*Tungsten carbide solid rods in mixed diameters ready for tool grinding*



*Carbide two helix rods with helical coolant holes for deep hole drilling tools*



*Custom made carbide rods produced to customer drawings*

### Types we produce

- Tungsten carbide solid rods
- Carbide two helix rods
- Custom made carbide rods
- Carbide rods with chamfer
- Sintered carbide rods

### Typical industries

- Wood and Metal Cutting
- Automotive and Bearing
- Metal Forming and Wire Drawing

More detail: [carbidesolarson.com/products/carbide-rods.html](http://carbidesolarson.com/products/carbide-rods.html)

## PRODUCT CATEGORY 02

## Tungsten Carbide Strips and Flat Blanks

Ground and unground tungsten carbide strips for wood planing knives cutting edges and wear protection. Standard length is 330 mm and the maximum length we can produce is 1800 mm.



*Stacked tungsten carbide strips after grinding*



*Carbide strips in several cross sections ready for despatch*



*Long carbide strips prepared for wear plate and knife applications*

### Types we produce

- Standard carbide strips 330 mm
- Long carbide strips up to 1800 mm
- Ground and unground flat blanks

### Typical industries

- Wood and Metal Cutting
- Paper Printing and Packaging
- Mining and Drilling

More detail: [carbidesolarson.com/products/carbide-strips.html](http://carbidesolarson.com/products/carbide-strips.html)

## PRODUCT CATEGORY 03

## Tungsten Carbide Blades Cutters and Saw Discs

All kinds of tungsten carbide blades and cutters together with circular carbide saw discs for paper board plastic film wood and light metal cutting lines.



Large tungsten carbide knife blank with ground cutting edge



Carbide cutter blanks with brazing faces prepared



Profiled carbide cutter with central bore and indexed teeth

### Types we produce

- Straight carbide knives and machine blades
- Profiled carbide cutters
- Carbide saw discs and slitting discs

### Typical industries

- Paper Printing and Packaging
- Wood and Metal Cutting
- Automotive and Bearing

More detail: [carbidesolarson.com/products/carbide-blades.html](http://carbidesolarson.com/products/carbide-blades.html)

## PRODUCT CATEGORY 04

## Tungsten Carbide Dies for Forging and Cold Forming

Tungsten carbide dies forging dies and cold forming dies produced with Sinter-HIP densification for good lifespan under repeated impact and high contact pressure.



Large tungsten carbide die blanks with ground faces before finishing



Carbide die blank under caliper check at 50.05 mm during inspection



Carbide die blank measured at 42.5 mm during dimensional control

### Types we produce

- Hot forging dies
- Cold forming and extrusion dies
- Die blanks and die inserts

### Typical industries

- Metal Forming and Wire Drawing
- Automotive and Bearing

More detail: [carbidesolarson.com/products/carbide-dies.html](http://carbidesolarson.com/products/carbide-dies.html)

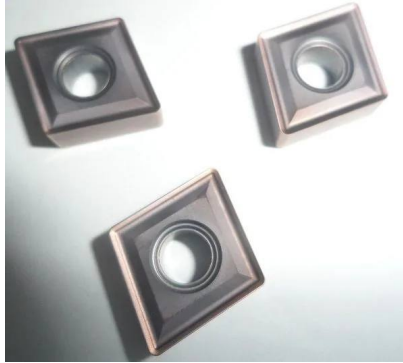
## PRODUCT CATEGORY 05

## Tungsten Carbide Inserts and Cutting Inserts

Varieties of tungsten carbide inserts including coated and uncoated indexable shapes for turning and milling and interchangeable cutting inserts for machine tools.



*Mixed tungsten carbide insert shapes coated and uncoated*



*Square carbide inserts with clamping bore and chip breaker*



*Carbide insert blanks with ground rake face*

### Types we produce

- Indexable turning inserts
- Milling inserts
- Interchangeable cutting inserts and insert blanks

### Typical industries

- Wood and Metal Cutting
- Automotive and Bearing
- Metal Forming and Wire Drawing

More detail: [carbidesolarson.com/products/carbide-inserts.html](http://carbidesolarson.com/products/carbide-inserts.html)

## PRODUCT CATEGORY 06

## Tungsten Carbide Pins and Horseshoe Pins

Tungsten carbide pins and horseshoe pins with very good wear resistance for tyre skid studs horseshoe grips bearing seats and general wear locations.



*Tungsten carbide pins in production batch quantity*



*Carbide pin blanks after grinding ready for pressing into holders*

### Types we produce

- Carbide pins for tyre skid studs
- Horseshoe pins
- Wear pins and locating pins

### Typical industries

- Automotive and Bearing
- Mining and Drilling

More detail: [carbidesolarson.com/products/carbide-pins.html](http://carbidesolarson.com/products/carbide-pins.html)

## PRODUCT CATEGORY 07

## Tungsten Carbide Buttons for Mining and Drilling

Tungsten carbide buttons for mining applications including rock roller bits down the hole button bits water well drilling coal picks and cutter picks.



Conical tungsten carbide buttons for rock drilling bits



Mixed carbide button shapes including conical and spherical tops



Ballistic and spherical carbide buttons after grinding

**Types we produce**

- Conical buttons
- Spherical and ballistic buttons
- Coal pick and cutter pick tips

**Typical industries**

- Mining and Drilling

More detail: [carbidesolarson.com/products/carbide-buttons.html](http://carbidesolarson.com/products/carbide-buttons.html)

## PRODUCT CATEGORY 08

## Tungsten Carbide Parts for the Petroleum Industry

Tungsten carbide sleeves cores seats shaft sleeves drilling bushes flow beans tubes and valve cores for oil exploration and well completion equipment.



Tungsten carbide sleeve with drilled hole pattern for oil field service equipment



Carbide sleeve OD 268 mm x ID 228.6 mm x H 160 mm with 176 holes



Carbide sleeves and cores after machining

**Types we produce**

- Carbide sleeves with drilled hole patterns
- Carbide cores
- Carbide seats
- Carbide oil shaft sleeves drilling bushes flow beans and valve cores

**Typical industries**

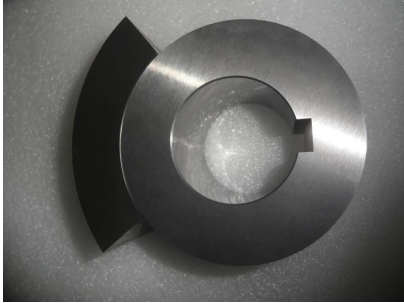
- Petroleum and Gas
- Mining and Drilling

More detail: [carbidesolarson.com/products/carbide-for-oil-industry.html](http://carbidesolarson.com/products/carbide-for-oil-industry.html)

## PRODUCT CATEGORY 09

## Tungsten Carbide Rings and Roll Rings

Tungsten carbide rings supplied as grinding rings fully machined rings and segment sets where one carbide ring and four segments make one set. Used as mechanical seal rings and rolling wear rings.



*Large machined tungsten carbide ring with keyway and one of the four matching segments*



*Set of tungsten carbide rings in graduated diameters*



*Fully machined carbide ring with ground bore and side faces*

**Types we produce**

- Grinding carbide rings
- Fully machined carbide rings
- Ring and segment sets with 1 ring and 4 segments per set
- Mechanical seal rings

**Typical industries**

- Petroleum and Gas
- Metal Forming and Wire Drawing
- Paper Printing and Packaging

More detail: [carbidesolarson.com/products/carbide-rings.html](http://carbidesolarson.com/products/carbide-rings.html)

## PRODUCT CATEGORY 10

## Tungsten Carbide Tubes and Bushes

Tungsten carbide tubes and bushes for pump sleeves guide bushes nozzle bodies and downhole flow components where an internal bore has to keep its size in abrasive service.



*Tungsten carbide tubes and bushes after grinding of bore and outside diameter*

**Types we produce**

- Carbide tube blanks
- Ground carbide bushes
- Carbide drilling bushes

**Typical industries**

- Petroleum and Gas
- Metal Forming and Wire Drawing

More detail: [carbidesolarson.com/products/carbide-tubes.html](https://carbidesolarson.com/products/carbide-tubes.html)

## PRODUCT CATEGORY 11

## Tungsten Carbide Gears and Toothed Parts

Tungsten carbide gears and toothed wear components produced from pressed blanks and finished by profile grinding and EDM for drive positions that destroy hardened steel.



*Tungsten carbide gear and matching toothed ring after profile machining*

**Types we produce**

- Carbide gears
- Toothed carbide rings and hubs

**Typical industries**

- Metal Forming and Wire Drawing
- Automotive and Bearing

More detail: [carbidesolarson.com/products/carbide-gear.html](http://carbidesolarson.com/products/carbide-gear.html)

## PRODUCT CATEGORY 12

## API V11 Series Tungsten Carbide Ball and Seat Valve Pairs

Tungsten carbide ball and seat as valve pairs in the API V11 series for subsurface oil well sucker rod pumps supplied as finished valve pairs or as ball and seat blanks.



*Tungsten carbide balls and seats forming API V11 series valve pairs*

API V11-225 Standard valve ball and seat for Subsurface oil well pump



*API V11 standard valve ball and seat used in subsurface oil well pumps*

**Types we produce**

- API V11 series valve pairs
- Tungsten carbide ball and seat blanks

**Typical industries**

- Petroleum and Gas

More detail: [carbidesolarson.com/products/api-v11-valve-pairs.html](http://carbidesolarson.com/products/api-v11-valve-pairs.html)

## PRODUCT CATEGORY 13

## Tungsten Carbide Saw Tips for Circular and Band Saws

Tungsten carbide saw tips in our standard F1 series similar to the European style in the U.S. standard series and for metal cutting and band saws with non standard shapes such as hollow tip V top and Kodiak available on request.



*Tungsten carbide saw tips in production quantity ready for brazing*



*Carbide saw tips sorted by size before packing*

**Types we produce**

- F1 series saw tips similar to European style
- U.S. standard series saw tips
- Saw tips for metal cutting and band saws
- Non standard shapes such as hollow tip V top and Kodiak on request

**Typical industries**

- Wood and Metal Cutting
- Paper Printing and Packaging

More detail: [carbidesolarson.com/products/carbide-saw-tips.html](http://carbidesolarson.com/products/carbide-saw-tips.html)

## How to Order

There is no enquiry form. Send the drawing or photographs of the worn part with measured dimensions to WhatsApp +86 187 7492 5813 or email [sales@solarsoncarbide.com](mailto:sales@solarsoncarbide.com) and the message reaches a production engineer directly. Where you do not have a drawing we prepare one for your approval before any material is pressed. CAD files are supplied on request via WhatsApp rather than published for open download.

### What to send with an enquiry

- Drawing sketch or measured photographs of the part
- Quantity and how often you expect to reorder
- What the part does and what it contacts
- How the current part fails and after how long
- Operating temperature and any corrosive media
- Which dimensions actually control the function