

# Stainless Steel Bar Datasheet

Shaanxi Jiade Group Co Ltd — alloyworld.cn

Round square flat and hexagonal bar in 301 316 316L 317 410 and 904L, hot rolled or cold drawn, black peeled bright or polished, 0.3 m to 12 m.

## Capability

- Round bar from 3 mm up to 1200 mm depending on grade
- Square, flat and hexagonal profiles in the same grades
- Length 0.3 m to 12 m or cut to your list
- Black, peeled, bright and polished surface conditions
- MTC, CE, ISO and PED documentation on the 316L programme

## Problems This Category Solves

- Excess machining stock when black bar is bought instead of peeled or bright
- Offcut waste from fixed 6 m lengths on short component runs
- Shaft and fastener failure when the grade does not match the medium
- Austenitic grades that cannot be hardened for wear duty

## Products and Specifications

### 317 Stainless Steel Bar

|                    |                                                |
|--------------------|------------------------------------------------|
| Grade              | 317, SUS317, 317L                              |
| Type               | Hot rolled and cold drawn                      |
| Round Bar Diameter | 1/4 inch to 16 inch                            |
| Square Bar Size    | 15 x 15 mm to 300 x 300 mm                     |
| Length             | 0.3 to 12 m or customised                      |
| Standard           | ASTM A276, A564, A582, A484                    |
| Surface Treatment  | Black, peeled, bright, polished                |
| Product Forms      | Round bar, flat bar, square bar, hexagonal bar |
| Supply Status      | Bright wire drawing, bright annealing          |

### 316L Stainless Steel Bar

|                    |                                 |
|--------------------|---------------------------------|
| Grade              | 316L                            |
| Type               | Hot rolled and cold drawn       |
| Round Bar Diameter | 5 to 900 mm                     |
| Square Bar Size    | 15 x 15 mm to 300 x 300 mm      |
| Length             | 0.3 to 12 m or customised       |
| Standard           | ASTM A276, A564, A582, A484     |
| Surface Treatment  | Black, peeled, bright, polished |
| Certification      | MTC, CE, ISO, PED               |

|               |                               |
|---------------|-------------------------------|
| Minimum Order | 1000 kg                       |
| Shipping      | Air, express, rail, road, sea |
| Loading Port  | Shanghai                      |
| Origin        | China                         |

### 316 Stainless Steel Bar

|                             |                                 |
|-----------------------------|---------------------------------|
| Grade                       | 316                             |
| Type                        | Hot rolled and cold drawn       |
| Round Bar Diameter          | 1/4 inch to 16 inch             |
| Square Bar Size             | 15 x 15 mm to 300 x 300 mm      |
| Length                      | 1 to 12 m or customised         |
| Standard                    | ASTM A276, A564, A582, A484     |
| Surface Treatment           | Black, peeled, bright, polished |
| Maximum Service Temperature | 1200 C                          |
| Softening Onset             | Above 800 C                     |

### 301 Stainless Steel Bar

|                    |                                                                                                                 |
|--------------------|-----------------------------------------------------------------------------------------------------------------|
| Grade              | 301                                                                                                             |
| Type               | Hot rolled and cold drawn                                                                                       |
| Round Bar Diameter | 3 to 1200 mm                                                                                                    |
| Square Bar Size    | 10 x 10 mm to 800 x 800 mm                                                                                      |
| Hexagonal Bar Size | H8 to H100 mm                                                                                                   |
| Length             | 1000 to 12000 mm or customer specified                                                                          |
| Standard           | ASTM A276, A564/A564M, A582, A193/A193M, A194/A194M, A320/A320M, A453/A453M, A479/A479M, A484/A484M, EN 10088-3 |
| Magnetic Response  | Non magnetic annealed, increasingly magnetic with cold working                                                  |

### 410 Stainless Steel Bar

|                    |                                                        |
|--------------------|--------------------------------------------------------|
| Grade              | 410, EN 1.4006, X12Cr13, UNS S41000                    |
| Structure          | Martensitic                                            |
| Round Bar Diameter | 10 to 900 mm                                           |
| Square Bar Size    | 10 x 10 mm to 500 x 500 mm                             |
| Length             | 1000 to 12000 mm                                       |
| Carbon             | 0.08 to 0.15 percent                                   |
| Silicon            | 1.00 percent maximum                                   |
| Manganese          | 1.00 percent maximum                                   |
| Phosphorus         | 0.040 percent maximum                                  |
| Sulphur            | 0.030 percent maximum                                  |
| Chromium           | 11.50 to 13.50 percent                                 |
| Heat Treatment     | Heat treatable, often supplied hardened and machinable |

### 201 Stainless Steel Pipe

|          |                                                              |
|----------|--------------------------------------------------------------|
| Grade    | 201, TP201                                                   |
| Standard | ASTM A213 TP201, ASTM A249 TP201                             |
| Types    | Decorative pipe, industrial pipe, boiler pipe, seamless pipe |

|                     |                                                            |
|---------------------|------------------------------------------------------------|
| <b>Surface</b>      | Polished without bubbles or pinholes                       |
| <b>Typical Uses</b> | Decoration pipe, industrial pipe, shallow stretch products |

## Frequently Asked Questions

### What is the largest round bar diameter available

1200 mm on grade 301, 900 mm on 316L and 410, and 800 mm on 904L.

### Which surface condition should I order

Order peeled or bright when the finished diameter is close to the stock size, since that removes machining stock and cuts cycle time. Black bar is the cheapest but needs the most turning.

### Can you cut bar to our length

Yes. Length runs from 0.3 m to 12 m or is customised to your cut list.

### What is the minimum order on 316L bar

1000 kg, loading at Shanghai and shipped by air, express, rail, road or sea.

### Which bar grade can be hardened by heat treatment

410, which is the basic martensitic grade. Austenitic grades such as 301 gain strength only by cold working.

### Do you provide third party inspection on bar

Yes. ISO 9001 applies to production and third party inspection by SGS or BV can be arranged on the 904L programme and on request elsewhere.