

Quality SAE 1117
 According to standards ASTM A 576-90b:2000
 Number

Hot Rolled



| Equivalent | USA AISI/SAE | Italy UNI | China G8 | Germany DIN | UK |
|------------|--------------|-----------|----------|-------------|----|
|------------|--------------|-----------|----------|-------------|----|

| | | | | | |
|--|----------------------|-------|--|--|--|
| | SAE 1116 SAE 1117 | 10S20 | | | |
|--|----------------------|-------|--|--|--|

Chemical composition

| C% max | Si% | Mn% | P% max | S% max | Cr% max |
|-----------|-----|-----------|-----------|-----------|------------|
| 0.14-0.20 | - | 1.10-1.40 | 0.04 | 0.16-0.23 | - |

| Mo% max | Ni% max | V% max | Cu% max |
|------------|------------|-----------|------------|
| - | - | - | - |

Mechanical properties

ASTM A 311/A 311M: 2004 cold-drawn stress relief cl. A +C +SR

| Size (MM) | Testing at room temperature (longitudinal) | | | | |
|-----------|--|--------------|--------|----|-----|
| from to | R (N/mm2 min) | Rp 0.2 N/mm2 | A% min | Z% | HB |
| 20 | 520 | 450 | 15 | 40 | 155 |
| 20 to 30 | 485 | 415 | 15 | 40 | 147 |
| 30 to 50 | 450 | 380 | 13 | 35 | 135 |
| 50 to 75 | 415 | 345 | 12 | 30 | 123 |

Hot rolled normalized at 900°C

| Size (MM) | Testing at room temperature (longitudinal) | | | | |
|-----------|--|--------------|--------|----|-----|
| > ≥ | R (N/mm2 min) | Rp 0.2 N/mm2 | A% min | Z% | HB |
| all size | 490 | 305 | 33 | 63 | 146 |
| | 470 | 305 | 33.5 | 54 | 137 |
| | 430 | 285 | 32.8 | 58 | 126 |