

This page is mainly introduced the SUH 11M Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of SUH 11M, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Specialsteel SUH 11M

SUH 11M Standard Number:

| ITEM | Standard Number | Descriptions |
|------|------------------|--|
| 1 | SAE J 775 (2004) | Engine poppet valve information report |

SUH 11M Chemical composition (mass fraction) (wt.%)

| Chemical | Min.(%) | | | | | Max.(%) | | | | |
|----------|---------|----|----|----|----|-----------|----|----|-------|--|
| C | | | | | | 0.40 | | | | |
| Si | | | | | | 0.90 | | | | |
| Mn | | | | | | 0.30 | | | | |
| P | | | | | | | | | | |
| S | | | | | | | | | | |
| Ni | | | | | | | | | | |
| Cr | | | | | | 5.00 | | | | |
| Al | | | | | | | | | | |
| Cu | | | | | | | | | | |
| Ti | | | | | | | | | | |
| Fe | | | | | | remaining | | | | |
| Mo | | | | | | 1.30 | | | | |
| Co | | | | | | | | | | |
| V | | | | | | 0.50 | | | | |
| C | Si | Mn | P | S | Cr | Ni | Mo | V | Ta | |
| W | N | Cu | Co | Pb | B | Nb | Al | Ti | Other | |
| | | | | | | | | | | |

Engine poppet valve information report

SUH 11M Physical Properties

| | | |
|------------------|---------|--------------------------|
| Tensile strength | 115-234 | σ_b /MPa |
| Yield Strength | 23 | $\sigma_{0.2} \geq$ /MPa |
| Elongation | 65 | $\delta_5 \geq$ (%) |
| ψ | - | $\psi \geq$ (%) |
| Akv | - | Akv \geq /J |
| HBS | 123-321 | - |
| HRC | 30 | - |

SUH 11M Mechanical Properties

| | | |
|------------------|---------|--------------------------|
| Tensile strength | 231-231 | σ_b /MPa |
| Yield Strength | 154 | $\sigma_{0.2} \geq$ /MPa |
| Elongation | 56 | $\delta_5 \geq$ (%) |
| ψ | - | $\psi \geq$ (%) |
| Akv | - | Akv \geq /J |
| HBS | 235-268 | - |
| HRC | 30 | - |

SUH 11M Heat Treatment Regime

| Annealing | Quenching | Tempering | Normalizing | Q & T |
|-----------|-----------|-----------|-------------|-------|
| √ | √ | √ | √ | √ |

SUH 11M Range of products

| Product type | Products | Dimension | Processes | Deliver Status |
|-----------------|----------------------|-------------------|---------------------------------------|---|
| Plates / Sheets | Plates / Sheets | 0.08-200mm(T)*W*L | Forging, hot rolling and cold rolling | Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting |
| Steel Bar | Round Bar, Flat Bar, | Φ8-1200mm*L | Forging, hot rolling and | Black, Rough Turning, |

| | | | | |
|---------------|--|----------------------------|-----------------------------------|---|
| | Square Bar | | cold rolling, Cast | Shot Blasting, |
| Coil / Strip | Steel Coil /Steel Strip | 0.03-16.0x1200mm | Cold-Rolled & Hot-Rolled | Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting |
| Pipes / Tubes | Seamless Pipes/Tubes, Welded Pipes/Tubes | OD:6-219mm x WT:0.5-20.0mm | Hot extrusion, Cold Drawn, Welded | Annealed, Solution and Aging, Q+T, ACID-WASHED |

We can produce Specialsteel the specifications follows: