

**This page is mainly introduced the M29450 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of M29450, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.**

## Datasheet for Steel Grades Specialsteel M29450

M29450 Standard Number:

| ITEM | Standard Number | Descriptions |
|------|-----------------|--------------|
|------|-----------------|--------------|

### M29450 Chemical composition (mass fraction) (wt.%)

| Chemical | Min.(%) | Max.(%) |    |    |    |    |    |    |       |
|----------|---------|---------|----|----|----|----|----|----|-------|
| C        |         | 0.01    |    |    |    |    |    |    |       |
| Si       |         | 0.20    |    |    |    |    |    |    |       |
| Mn       |         | 0.30    |    |    |    |    |    |    |       |
| P        |         |         |    |    |    |    |    |    |       |
| S        |         |         |    |    |    |    |    |    |       |
| Ni       |         | 0.15    |    |    |    |    |    |    |       |
| Cr       | 28.00   | 30.00   |    |    |    |    |    |    |       |
| Al       |         |         |    |    |    |    |    |    |       |
| Cu       |         | 0.15    |    |    |    |    |    |    |       |
| Ti       |         |         |    |    |    |    |    |    |       |
| Fe       |         |         |    |    |    |    |    |    |       |
| N        |         | 0.02    |    |    |    |    |    |    |       |
| Mo       | 3.50    | 4.20    |    |    |    |    |    |    |       |
| C        | Si      | Mn      | P  | S  | Cr | Ni | Mo | V  | Ta    |
| W        | N       | Cu      | Co | Pb | B  | Nb | Al | Ti | Other |

Electrolytic Manganese

### M29450 Physical Properties

|                  |         |                          |
|------------------|---------|--------------------------|
| Tensile strength | 115-234 | $\sigma_b$ /MPa          |
| Yield Strength   | 23      | $\sigma_{0.2} \geq$ /MPa |
| Elongation       | 65      | $\delta 5 \geq$ (%)      |
| $\psi$           | -       | $\psi \geq$ (%)          |
| Akv              | -       | Akv $\geq$ /J            |
| HBS              | 123-321 | -                        |
| HRC              | 30      | -                        |

### M29450 Mechanical Properties

|                  |         |                          |
|------------------|---------|--------------------------|
| Tensile strength | 231-231 | $\sigma_b$ /MPa          |
| Yield Strength   | 154     | $\sigma_{0.2} \geq$ /MPa |
| Elongation       | 56      | $\delta 5 \geq$ (%)      |
| $\psi$           | -       | $\psi \geq$ (%)          |
| Akv              | -       | Akv $\geq$ /J            |
| HBS              | 235-268 | -                        |
| HRC              | 30      | -                        |

### M29450 Heat Treatment Regime

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

### M29450 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:**