

This page is mainly introduced the SUS XM27 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of SUS XM27, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Special Steel SUS XM27

SUS XM27 Standard Number:

| ITEM | Standard Number | Descriptions |
|------|-----------------|--|
| 1 | G 4305 (2012) | Cold-rolled stainless steel plate, sheet and strip |

SUS XM27 Chemical composition (mass fraction) (wt.%)

| Chemical | | Min.(%) | | | | | Max.(%) | | | |
|----------|----|---------|----|----|----|----|---------|----|-------|--|
| C | | | | | | | 0.10 | | | |
| Si | | | | | | | 0.40 | | | |
| Mn | | | | | | | 0.40 | | | |
| P | | | | | | | 0.03 | | | |
| S | | | | | | | 0.02 | | | |
| Cr | | 25.00 | | | | | 27.00 | | | |
| Ni | | | | | | | 0.50 | | | |
| Mo | | 0.75 | | | | | 1.50 | | | |
| N | | | | | | | 0.015 | | | |
| Cu | | | | | | | 0.20 | | | |
| NI+Cu | | | | | | | 0.50 | | | |
| C | Si | Mn | P | S | Cr | Ni | Mo | V | Ta | |
| W | N | Cu | Co | Pb | B | Nb | Al | Ti | Other | |
| | | | | | | | | | | |

Cold-rolled stainless steel plate, sheet and strip

SUS XM27 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 | - |

SUS XM27 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 | - |

SUS XM27 Heat Treatment Regime

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

SUS XM27 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, | $\Phi 8$ -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: