

This page is mainly introduced the 28Mn6 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 28Mn6, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Structure Steel 28Mn6

| 28Mn6 Standard Number: |                                   |  |  |  |  |  |
|------------------------|-----------------------------------|--|--|--|--|--|
| ITEM                   | ITEM Standard Number Descriptions |  |  |  |  |  |

## 28Mn6 Chemical composition(mass fraction)(wt.%)

| Chemical  |     |           |       | Min.(%) |      |      | Max.(%) |    |       |
|-----------|-----|-----------|-------|---------|------|------|---------|----|-------|
| С         | Si  | Mn        | Р     | S       | Cr   | Ni   | Мо      | V  | Та    |
| 0.25-0.32 | 0.4 | 1.30-1.65 | 0.035 | 0.035   | 0.40 | 0.40 | 0.10    |    |       |
| W         | N   | Cu        | Со    | Pb      | В    | Nb   | Al      | Ti | Other |
|           |     |           |       |         |      |      |         |    |       |

## 28Mn6

| 28Mn6 Physical Properties |         |             |  |  |  |
|---------------------------|---------|-------------|--|--|--|
| Tensile strength          | 115-234 | σb/MPa      |  |  |  |
| Yield Strength            | 23      | σ 0.2 ≥/MPa |  |  |  |
| Elongation                | 65      | δ5≥ (%)     |  |  |  |
| ψ                         | -       | ψ≥ (%)      |  |  |  |
| Akv                       | -       | Akv≥/J      |  |  |  |
| HBS                       | 123-321 | -           |  |  |  |
| HRC                       | 30      | -           |  |  |  |

| 281              | 28Mn6 Mechanical Properties |             |  |  |
|------------------|-----------------------------|-------------|--|--|
| Tensile strength | 231-231                     | σb/MPa      |  |  |
| Yield Strength   | 154                         | σ 0.2 ≥/MPa |  |  |



| Elongation | 56      | δ5≥(%) |
|------------|---------|--------|
| Ψ          | -       | ψ≥(%)  |
| Akv        | -       | Akv≥/J |
| HBS        | 235-268 | -      |
| HRC        | 30      | -      |

|              | 28Mn6 Heat Treatment Regime                     |              |              |              |  |  |  |  |
|--------------|---|--------------|--------------|--------------|--|--|--|--|
| Annealing    | Annealing Quenching Tempering Normalizing Q & T |              |              |              |  |  |  |  |
| $\checkmark$ | $\checkmark$                                    | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |

| 28Mn6 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<br>Aging, Q+T, ACID-<br>WASHED, Shot Blasting |  |  |
| Steel Bar               | Round Bar, Flat Bar,<br>Square Bar          | Φ8-1200mm*L                   | Forging, hot rolling and cold rolling, Cast | Black, Rough Turning,<br>Shot Blasting,                              |  |  |
| Coil / Strip            | Steel Coil /Steel Strip                     | 0.03-16.0x1200mm              | Cold-Rolled & Hot-<br>Rolled                | Annealed, Solution and<br>Aging, Q+T, ACID-<br>WASHED, Shot Blasting |  |  |
| Pipes / Tubes           | Seamless Pipes/Tubes,<br>Welded Pipes/Tubes | OD:6-219mm x<br>WT:0.5-20.0mm | Hot extrusion, Cold<br>Drawn, Welded        | Annealed, Solution and<br>Aging, Q+T, ACID-<br>WASHED                |  |  |

## We can produce Structure Steel the specifications follows: