

This page is mainly introduced the CG40 Datasheet, including chemical information,mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of CG40, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Tool Steel And Hard Alloy CG40

| CG40 Standard Number: | | | | | |
|-----------------------------------|--|--|--|--|--|
| ITEM Standard Number Descriptions | | | | | |

| CG40 Chemical composition(mass fraction)(wt.%) | | | | | | | | | |
|--|----|----|----|----|----|----|----|----|-------|
| Chemical Min.(%) Max.(%) | | | | | | | | | |
| С | Si | Mn | Р | S | Cr | Ni | Мо | V | Та |
| | | | | | | | | | |
| W | N | Cu | Co | Pb | В | Nb | Al | Ti | Other |
| | | | 11 | | | | | | |

| CG40 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 | - | | | |

| CG | CG40 Mechanical Properties | | | | |
|------------------|----------------------------|-------------|--|--|--|
| Tensile strength | 231-231 | σb/MPa | | | |
| Yield Strength | 154 | σ 0.2 ≥/MPa | | | |



Steel GradesCG40 Chemical information, Mechanical properties

Physical properties, Mechanical properties, Heat treatment, and Micro structure

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

| CG40 Heat Treatment Regime | | | | | | | |
|----------------------------|---|---|---|---|--|--|--|
| Annealing | Annealing Quenching Tempering Normalizing Q & T | | | | | | |
| √ | √ | √ | √ | √ | | | |

| CG40 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, Square Bar | Ф8-1200mm*L | Forging, hot rolling and cold rolling, Cast | Black, Rough Turning, 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 Tool Steel And Hard Alloy the specifications follows: