

This page is mainly introduced the P460NH Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of P460NH, 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 P460NH

P460NH Standard Number:

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

P460NH Chemical composition (mass fraction) (wt.%)

| Chemical | | | Min.(%) | | | | Max.(%) | | | |
|----------|-----|-----------|---------|-------|-----|-----|---------|----|-------|--|
| C | Si | Mn | P | S | Cr | Ni | Mo | V | Ta | |
| 0.2 | 0.6 | 1.00-1.70 | 0.03 | 0.025 | 0.3 | 0.8 | 0.1 | | | |
| W | N | Cu | Co | Pb | B | Nb | Al | Ti | Other | |
| | | | | | | | | | | |

P460NH

P460NH 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 | - |

P460NH 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 | - |

P460NH Heat Treatment Regime

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

P460NH 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 | Φ8-1200mm*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 Structure Steel the specifications follows: