**This page is mainly introduced the EN P275NL1 Datasheet, including chemical information,mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of EN P275NL1,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 EN P275NL1

| EN P275NL1 Standard Number: | | |
|---|---|---|
| ITEM | Standard Number | Descriptions |

| EN P275NL1 Chemical composition(mass fraction)(wt.%) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Chemical | | | Min.(%) | | | | Max.(%) | | |
| C | Si | Mn | P | S | Cr | Ni | Mo | V | Ta |
| 0.16 | 0.40 | 0.50-1.50 | 0.030 | 0.020 | 0.30 | 0.50 | 0.08 | | |
| W | N | Cu | Co | Pb | B | Nb | Al | Ti | Other |
| | | | | | | | | | |

Euronorm Structural steel, EN P275NL1

| EN P275NL1 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 | - |

| EN P275NL1 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 | - |

| EN P275NL1 Heat Treatment Regime | | | | |
|---|---|---|---|---|
| **Annealing** | **Quenching** | **Tempering** | **Normalizing** | **Q & T** |
| √ | √ | √ | √ | √ |

| EN P275NL1 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: