| **Material designation:** | **SN 400 B** Add to Comparison |
| --- | --- |
| Standard: | CNS |
| Country: | China |
| Steel Group: | Structural and constructional steels |
| Subgroup: | G3262 Rolled steels for building structure |

[Show useful hint](http://www.keytometals.com/Search.aspx?id=ChemCrt&LN=EN&id1=447844&id2=2&SessionID=1186912714132013431143IY6U707MNT8N23N6IC)

**Cross-Reference Table**

Cross-reference tables are now upgraded with the categorization of equivalents and similarity, and available at a separate window.

[Click here to view cross-reference table.](http://www.keytometals.com/Search.aspx?LN=EN&id=crossRef&id1=447844&id2=2&SessionID=1186912714132013431143IY6U707MNT8N23N6IC)

**Chemical Composition**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Chemical Composition (%)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Min.** | **Max.** | **Approx** |
| C (\*) |  | 0.2000 |  |
| Mn | 0.6000 | 1.4000 |  |
| P |  | 0.0300 |  |
| S |  | 0.0150 |  |
| Si |  | 0.3500 |  |
| Other (\*) |  |  |  |
| CEV (\*) |  | 0.3600 |  |

 |

|  |  |
| --- | --- |
| **Criteria** | **Comment** |
| C | For 6 mm or over, up to 50 mm incl. in thickness. For t > 50 mm, up to 100 mm including in thickness C <= 0.22% |
| Other | The alloy elements other than those in the table may be added, if necessary. |
| CEV | For thicknesses t<=40 mm CEV=0.36; 40>t<=100 mm CEV=0.36; Ceq.=C + Mn/6 + Si/24 + Ni/40 + Cr/5 + Mo/4 + V/14 |

 |

| **Material designation:** | **SN 400 B** Add to Comparison |
| --- | --- |
| Standard: | CNS |
| Country: | China |
| Steel Group: | Structural and constructional steels |
| Subgroup: | G3262 Rolled steels for building structure |

**Mechanical Properties**

|  |
| --- |
| Measurement Units: Metric (SI)Anglo-Saxon |
|

|  |
| --- |
|  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Min. | Max. | Approx |
| **6 < t <= 12 mm** |
| Yield stress Rp0,2 (MPa) | 235 | - | - |
| Tensile stress, Rm (MPa) | 400 | - | - |
| Elongation, A (%) | - | - | - |
| Impact, Kv/Ku (J) | - | - | - |
| **12 < t <= 40 mm** |
| Yield stress Rp0,2 (MPa) | 235 | 335 | - |
| Tensile stress, Rm (MPa) | 400 | - | - |
| Elongation, A (%) | - | - | - |
| Impact, Kv/Ku (J) | - | - | - |
| **40 < t <= 100 mm** |
| Yield stress Rp0,2 (MPa) | 215 | 335 | - |
| Tensile stress, Rm (MPa) | 400 | - | - |
| Elongation, A (%) | - | - | - |
| Impact, Kv/Ku (J) | - | - | - |

 |
| **Material designation:****SN 400 B** | **Material designation:****SN 400 C** |



**Basic Information**

****

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|

|  |
| --- |
| **Standard:** |
| CNS |

 |

|  |
| --- |
| **Standard:** |
| CNS |

 |
|

|  |
| --- |
| **Country:** |
| China |

 |

|  |
| --- |
| **Country:** |
| China |

 |
|

|  |
| --- |
| **Steel Group:** |
| Structural and constructional steels |

 |

|  |
| --- |
| **Steel Group:** |
| Structural and constructional steels |

 |
|

|  |
| --- |
| **Subgroup:** |
|  |

 |

|  |
| --- |
| **Subgroup:** |
|  |

 |
|

|  |
| --- |
| **Subgroup:** |
| G3262 Rolled steels for building structure |

 |

|  |
| --- |
| **Subgroup:** |
| G3262 Rolled steels for building structure |

 |
|

|  |
| --- |
| **Comment** |
|  |

 |

|  |
| --- |
| **Comment** |
|  |

 |



**Chemical Composition (%)**

****

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Min.** | **Max.** | **Approx** |
| C (\*) |  | 0.2 |  |
| Mn | 0.6 | 1.4 |  |
| P |  | 0.03 |  |
| S |  | 0.015 |  |
| Si |  | 0.35 |  |
| Other (\*) |  |  |  |
| CEV (\*) |  | 0.36 |  |
| **Criteria** | **Comment** |
| C | For 6 mm or over, up to 50 mm incl. in thickness. For t > 50 mm, up to 100 mm including in thickness C <= 0.22% |
| Other | The alloy elements other than those in the table may be added, if necessary. |
| CEV | For thicknesses t<=40 mm CEV=0.36; 40>t<=100 mm CEV=0.36; Ceq.=C + Mn/6 + Si/24 + Ni/40 + Cr/5 + Mo/4 + V/14 |

 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Min.** | **Max.** | **Approx** |
| C (\*) |  | 0.2 |  |
| Mn | 0.6 | 1.4 |  |
| P |  | 0.02 |  |
| S |  | 0.008 |  |
| Si |  | 0.35 |  |
| Other (\*) |  |  |  |
| CEV (\*) |  | 0.36 |  |
| **Criteria** | **Comment** |
| C | For 16 mm or over, up to 50 mm incl. in thickness C=max0.20%. For thicknesses 50 < t <= 100 mm C max=0.22%; |
| Other | The alloy elements other than those in the table may be added, if necessary. |
| CEV | For thicknesses t<=40 mm CEV=0.36; 40>t<=100 mm CEV=0.36; Ceq.=C + Mn/6 + Si/24 + Ni/40 + Cr/5 + Mo/4 + V/14 |

 |



**Mechanical Properties**

****

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|

|  |  |  |  |
| --- | --- | --- | --- |
|  | Min. | Max. | Approx |
| **6 < t <= 12 mm** |
| Yield stress Rp0,2 (MPa) | 235 | - | - |
| Tensile stress, Rm (MPa) | 400 | - | - |
| Elongation, A (%) | - | - | - |
| Impact, Kv/Ku (J) | - | - | - |
| **12 < t <= 40 mm** |
| Yield stress Rp0,2 (MPa) | 235 | 335 | - |
| Tensile stress, Rm (MPa) | 400 | - | - |
| Elongation, A (%) | - | - | - |
| Impact, Kv/Ku (J) | - | - | - |
| **40 < t <= 100 mm** |
| Yield stress Rp0,2 (MPa) | 215 | 335 | - |
| Tensile stress, Rm (MPa) | 400 | - | - |
| Elongation, A (%) | - | - | - |
| Impact, Kv/Ku (J) | - | - | - |

 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Min. | Max. | Approx |
| **16 < t <= 40 mm** |
| Yield stress Rp0,2 (MPa) | 235 | 335 | - |
| Tensile stress, Rm (MPa) | 510 | - | - |
| Elongation, A (%) | - | - | - |
| Impact, Kv/Ku (J) | - | - | - |
| **40 < t <= 100 mm** |
| Yield stress Rp0,2 (MPa) | 215 | 235 | - |
| Tensile stress, Rm (MPa) | 510 | - | - |
| Elongation, A (%) | - | - | - |
| Impact, Kv/Ku (J) | - | - |  |

 |