

Steel Numbers

1.0XXX	Non-alloy steels	Number = 1.00XX Base steels Number = 1.01XX Quality steel (General structural steels with $R_m < 500$ MPa) Number = 1.02XX Other structural steels (Not intended for heat treatment with $R_m < 500$ MPa) Number = 1.03XX Steels with average $C < 0,12\%$ or $R_m < 400$ MPa Number = 1.04XX Steels with average $0,12\% \leq C < 0,25\%$ or $400 \text{ MPa} \leq R_m < 500 \text{ MPa}$ Number = 1.05XX Steels with average $0,25\% \leq C < 0,55\%$ or $500 \text{ MPa} \leq R_m < 700 \text{ MPa}$ Number = 1.06XX Steels with average $C \geq 0,55\%$ or $R_m \geq 700$ MPa Number = 1.07XX Steels with higher P or S content
1.0XXX	Alloy Steels	Number = 1.08XX Steels with special physical properties Number = 1.09XX Steels for other applications
1.1XXX	Non-alloy special steels	Number = 1.10XX Steels with special physical properties Number = 1.11XX Structural pressure vessel and engineering steels with $C < 0,5\%$ Number = 1.12XX Structural pressure vessel and engineering steels with $C \geq 0,5\%$ Number = 1.13XX Structural pressure vessel and engineering steels with special requirements Number = 1.14XX - Number = 1.15XX Tool steel Number = 1.16XX Tool steel Number = 1.17XX Tool steel Number = 1.18XX Tool steel Number = 1.19XX -
1.2XXX	Alloy Tool Steels	Number = 1.20XX Cr Number = 1.21XX Cr-Si, Cr-Mn, Cr-Mn-Si Number = 1.22XX Cr-V, Cr-V-Si, Cr-V-Mn, Cr-V-Mn-Si Number = 1.23XX Cr-Mo, Cr-Mo-V, Mo-V Number = 1.24XX W, Cr-W Number = 1.25XX W-V, Cr-W-V Number = 1.26XX W excluding groups 24, 25 and 27 Number = 1.27XX With Ni Number = 1.28XX Other Number = 1.29XX -
1.3XXX	Alloy Miscellaneous Steels	Number = 1.30XX - Number = 1.31XX - Number = 1.32XX High speed steel with Co Number = 1.33XX High speed steel without Co

		Number = 1.34XX - Number = 1.35XX Bearing steels Number = 1.36XX Materials with special magnetic properties without Co Number = 1.37XX Materials with special magnetic properties and with Co Number = 1.38XX Materials with special physical properties without Ni Number = 1.39XX Materials with special physical properties and with Ni
1.4XXX	Stainless and Heat Resisting steels	Number = 1.40XX Stainless steel with Ni < 2.5 % without Mo, Nb and Ti Number = 1.41XX Stainless steel with Ni < 2.5 % and Mo but without Nb and Ti Number = 1.42XX - Number = 1.43XX Stainless steel with Ni ≥ 2.5 % without Mo, Nb and Ti Number = 1.44XX Stainless steel with Ni ≥ 2.5 % with Mo but without Nb and Ti Number = 1.45XX Stainless steels with special additions Number = 1.46XX Chemical resistant and high temp Ni alloys Number = 1.47XX Heat resistant steels with Ni < 2.5 % Number = 1.48XX Heat resistant steels with Ni ≥ 2.5 % Number = 1.49XX Materials with elevated temperature properties
1.5XXX	Structural, pressure vessel and engineering steels	Number = 1.50XX Mn-Si-Cu Number = 1.51XX Mn-Si, Mn-Cr Number = 1.52XX Mn-Cu, Mn-V, Si-V, Mn-Si-V Number = 1.53XX Mn-Ti, Si-Ti Number = 1.54XX Mo, Nb, Ti, V, W Number = 1.55XX B, Mn-B Mn < 1.65 % Number = 1.56XX Ni Number = 1.57XX Cr-Ni with Cr < 1.0 % Number = 1.58XX Cr-Ni with 1.0 % ≤ Cr < 1.5 % Number = 1.59XX Cr-Ni with 1.5 % ≤ Cr < 2 %
1.6XXX	Structural, pressure vessel and engineering steels	Number = 1.60XX Cr-Ni with 2 % ≤ Cr < 3 % Number = 1.61XX - Number = 1.62XX Ni-Si, Ni-Mn, Ni-Cu Number = 1.63XX Ni-Mo, Ni-Mo-Mn, Ni-Mo-Cu, Ni-Mo-V, Ni-Mn-V Number = 1.64XX - Number = 1.65XX Cr-Ni-Mo with Mo < 0.4 % + Ni < 0.2 % Number = 1.66XX Cr-Ni-Mo with Mo < 0.4 % + 2.0 % ≤ Ni < 3.5 % Number = 1.67XX Cr-Ni-Mo with Mo < 0.4 % + 3.5 % ≤ Ni < 5 %, or Mo ≥ 0.4 % Number = 1.68XX Cr-Ni-V, Cr-Ni-W, Cr-Ni-V-W Number = 1.69XX Cr-Ni except groups 57 to 68
1.7XXX	Structural, pressure vessel and engineering steels	Number = 1.70XX Cr, Cr-B Number = 1.71XX Cr-Si, Cr-Mn, Cr-Mn-B, Cr-Si-Mn

		Number = 1.72XX Cr-Mo with Mo < 0.35 % , Cr-Mo-B Number = 1.73XX Cr-Mo with Mo >= 0.35 % Number = 1.74XX - Number = 1.75XX Cr-V with Cr < 2.0 % Number = 1.76XX Cr-V with Cr >= 2.0 % Number = 1.77XX Cr-Mo-V Number = 1.78XX - Number = 1.79XX Cr-Mn-Mo, Cr-Mn-Mo-V
1.8XXX	Structural, pressure vessel and engineering steels	Number = 1.80XX Cr-Si-Mo, Cr-Si-Mn-Mo, Cr-Si-Mo-V, Cr-Si-Mn-Mo-V Number = 1.81XX Cr-Si-V, Cr-Mn-V, Cr-Si-Mn-V Number = 1.82XX Cr-Mo-W, Cr-Mo-W-V Number = 1.83XX - Number = 1.84XX Cr-Si-Ti, Cr-Mn-Ti, Cr-Si-Mn-Ti Number = 1.85XX Nitriding steels Number = 1.86XX - Number = 1.87XX Steels not for heat treatment by user Number = 1.88XX High strength weldable steels not intended for heat treatment by user Number = 1.89XX High strength weldable steels not intended for heat treatment by user
1.9XXX	Non-alloy Quality steels	Number = 1.90XX Base steels Number = 1.91XX Quality steel (General structural steels with Rm < 500 MPa) Number = 1.92XX Other structural steels (Not intended for heat treatment with Rm < 500 MPa) Number = 1.93XX Steels with average C < 0,12% or Rm < 400 MPa Number = 1.94XX Steels with average 0,12% <= C < 0,25% or 400 MPa <= Rm < 500 MPa Number = 1.95XX Steels with average 0,25% <= C < 0,55% or 500 MPa <= Rm < 700 MPa Number = 1.96XX Steels with average C >= 0,55% or Rm >= 700 MPa Number = 1.97XX Steels with higher P or S content
2.XXXX	Alloy	Number = 2.XXXX

Steel Classification according to EN 10027-2. Designation systems for steels

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