

DIN17100 STEELS FOR GENERAL STRUCTURAL PURPOSES



DIN 17100 Standard applies to steel sections (including wide flange beams), steel bars, wire rod, flat products(strip, plate, wide flats) seamless and welded, square and rectangular hollow sections, forgings and semi-finished products in the general structural steels named which are delivered in the hot formed or normalized condition after production. DIN 17100 Standard main steel grade: USt37-2, St37-2, St37.2, RSt37-2, St52-3 and so on.

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Standard: DIN17100
Grade :USt37-2, St37-2, St37.2, RSt37-2, St52-3

Thickness : 8mm-500mm
Width : 1000mm-4000mm
Length : 1000mm-20000mm

MOQ: 1 PC
Product type : Steel plate
Delivery time : Promptly (Stock) or 10-40 days (Production)
Stock : Available
MTC: Available

Delivery condition: AS REQUIREMENTS

Steel grade				Chemical composition in % by wt.										Steel Grade	
Code number	Material number		Type of deoxidation ¹⁾	Sample analysis							P	S	N ²⁾		
	new	previous		C											
				for product thicknesses in mm											
16Max	>16 32Max	>30 40Max	>40 63Max	>63 100Max	>100										
St33	1.0035	1.0033	Optional	-	-	-	-	-	-	-	-	-	-	-	-
St37.2	1.0037	-	Optional	0.21	0.25	0.25	0.25	0.25	0.25	-	0.065	0.065	0.010	St37.2	
USt37.2	1.0036	1.0112	U	0.21	0.25	0.25	0.25	0.25	0.25	-	0.065	0.065	0.09	USt37.2	
RSt37.2	1.0038	1.014	P	0.19	0.19	0.19	0.22	0.33	-	by agree	0.060	0.060	0.010	RSt37.2	
St37.3	1.0116	1.0116	RR	0.19	0.19	0.19	0.19	0.19	0.19	-ment	0.050	0.050	-	St37.3	
St44.2	1.0044	-	R	0.24	0.24	0.24	0.25	0.25	-	-	0.060	0.060	0.010	St44.2	
St44.3	1.0144	-	RR	0.23	0.23	0.23	0.23	0.23	-	-	0.050	0.050	-	St44.3	
St52-3 ³⁾	1.0570	1.0841	RR	0.22 ⁴⁾	0.22 ⁴⁾	0.24	0.24	0.24	-	-	0.050	0.060	-	St52.3	
St50.2	1.0050	1.0532	R	-	-	-	-	-	-	-	0.060	0.060	0.010	St50.2	
St60.2	1.0060	1.0542	R	-	-	-	-	-	-	-	0.060	0.060	0.010	St60.2	
St70.2	1.0070	1.0632	R	-	-	-	-	-	-	-	0.060	0.060	0.010	St70.2	

¹⁾U rimming. R killed (including balanced steel), RR special killed

²⁾It is permissible to exceed the maximum value indicated, provided a phosphorous content per 0.001% N of 0.005% P below the maximum value indicated is maintained. The nitrogen content may not, however, exceed a value of 0.0012%N in the ladle analysis and 0.0014%N in the sample analysis.

³⁾The content may not exceed 0.55%Si and 1.60% Mn in the ladle analysis or 0.60%Si and 1.70% Mn in the sample analysis.

⁴⁾Maximum 0.22% C for steels KSt 52-3 and RoSt 52-3 according to Table 3

⁵⁾In the case of steels suitable for bright drawing according to Table 3 the following guide values for the carbon content can be assumed:

0.30% C for Z St 50-2, 0.40% C for ZSt 60-2, 0.50% C for Z St 70-2

Steel grade				Chemical composition in % by wt.										Steel Grade							
Code number	Material number		Type of deoxidation ¹⁾	Ladle analysis					Additional nitrogen combining elements (e.g. at least 0.020% Al total)	Sample analysis											
	new	previous		C						P	S	N ²⁾	C								
				for product thicknesses in mm									for product thicknesses in mm								
16Max	>16 32Max	>30 40Max	>40 63Max	>63 100Max	>100	16Max	>16 32Max	>30 40Max	>40 63Max				>63 100Max	>100							
St33	1.0035	1.0033	Optional	-	-	-	-	-	-	-	-	-	-	-	-	-					
St37.2	1.0037	-	Optional	0.17	0.20	0.20	0.20	0.20	0.050	0.050	0.009	-	0.21	0.25	0.25	0.25	0.25	0.065	0.065	0.010	St37.2
USt37.2	1.0036	1.0112	U	0.17	0.20	0.20	0.20	0.20	0.050	0.050	0.007	-	0.21	0.25	0.25	0.25	0.25	0.065	0.065	0.09	USt37.2
RSt37.2	1.0038	1.0114	P	0.17	0.17	0.17	0.20	0.20	0.050	0.050	0.009	-	0.19	0.19	0.19	0.22	0.33	0.060	0.060	0.010	RSt37.2
St37.3	1.0116	1.0116	RR	0.17	0.17	0.17	0.17	0.17	0.040	0.040	-	yes	0.19	0.19	0.19	0.19	0.19	0.050	0.050	-	St37.3
St44.2	1.0044	-	R	0.21	0.21	0.21	0.22	0.22	0.050	0.050	0.009	-	0.24	0.24	0.24	0.25	0.25	0.060	0.060	0.010	St44.2
St44.3	1.0144	-	RR	0.20	0.20	0.20	0.20	0.20	0.040	0.040	-	yes	0.23	0.23	0.23	0.23	0.23	0.050	0.050	-	St44.3
St52-3 ³⁾	1.0570	1.0841	RR	0.20 ⁴⁾	0.20 ⁴⁾	0.22	0.22	0.22	0.040	0.040	-	yes	0.22 ⁵⁾	0.22 ⁵⁾	0.24	0.24	0.24	0.050	0.060	-	St52.3
St50.2	1.0050	1.0532	R	- ⁵⁾	- ⁵⁾	- ⁵⁾	- ⁵⁾	- ⁵⁾	-	0.050	0.050	0.009	-	-	-	-	-	0.060	0.060	0.010	St50.2
St60.2	1.0060	1.0542	R	- ⁵⁾	- ⁵⁾	- ⁵⁾	- ⁵⁾	- ⁵⁾	-	0.050	0.050	0.009	-	-	-	-	-	0.060	0.060	0.010	St60.2
St70.2	1.0070	1.0632	R	- ⁵⁾	- ⁵⁾	- ⁵⁾	- ⁵⁾	- ⁵⁾	-	0.050	0.050	0.009	-	-	-	-	-	0.060	0.060	0.010	St70.2

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³⁾The content may not exceed 0.55%Si and 1.60% Mn in the ladle analysis or 0.60%Si and 1.70% Mn in the sample analysis.

⁴⁾Maximum 0.22% C for steels KSt 52-3 and RoSt 52-3 according to Table 3

⁵⁾In the case of steels suitable for bright drawing according to Table 3 the following guide values for the carbon content can be assumed:

0.30% C for Z St 50-2, 0.40% C for ZSt 60-2, 0.50% C for Z St 70-2

⁶⁾Maximum 0.24% C for steels KSt 52-3 and RoSt 52-3 according to Table 3