Material properties

Material **RSt 37-2 (Germany / DIN)**

Group Structural and constructional steels

Subgroup DIN 17100 Steels for general structural purposes

Comment Quality standard; DIN 17100 was superseded by EN 10025, EN 10222-1, EN 10250-1 and EN 10250-2

Application -

Yield Stress[MPa]			
Dimension	**Min**	**Max**	**Approx**
Normalized; >= 0.5 < 1 mm	235	-	-
Note: Yield stress is Upper Yield Stress (ReH)			
Normalized; >= 1 < 1.5 mm	235	-	-
Note: Yield stress is Upper Yield Stress (ReH)			
Normalized; >= 1.5 < 2 mm	235	-	-
Note: Yield stress is Upper Yield Stress (ReH)			
Normalized; >= 2 < 2.5 mm	235	-	-
Note: Yield stress is Upper Yield Stress (ReH)			
Normalized; >= 2.5 < 3 mm	235	-	-
Note: Yield stress is Upper Yield Stress (ReH)			
Normalized; >= 3 <= 16 mm	235	-	-
Note: Yield stress is Upper Yield Stress (ReH)			
Normalized; > 16 <= 40 mm	225	-	-
Note: Yield stress is Upper Yield Stress (ReH)			
Normalized; > 40 <= 63 mm	215	-	-
Note: Yield stress is Upper Yield Stress (ReH)			
Normalized; > 63 <= 80 mm	215	-	-
Note: Yield stress is Upper Yield Stress (ReH)			
Normalized; > 80 <= 100 mm	215	-	-
Note: Yield stress is Upper Yield Stress (ReH)			

Tensile Stress[MPa]			
Dimension	**Min**	**Max**	**Approx**
Normalized; >= 0.5 < 1 mm	360	510	-
Normalized; >= 1 < 1.5 mm	360	510	-
Normalized; >= 1.5 < 2 mm	360	510	-
Normalized; >= 2 < 2.5 mm	360	510	-
Normalized; >= 2.5 < 3 mm	360	510	-
Normalized; >= 3 <= 16 mm	340	470	-
Normalized; > 16 <= 40 mm	340	470	-

Tensile Stress[MPa]

Dimension	Min	Max	Approx
Normalized; > 40 <= 63 mm	340	470	-
Normalized; > 63 <= 80 mm	340	470	-
Normalized; > 80 <= 100 mm	340	470	-

Elongation A5 [%]

Dimension	Min	Max	Approx
Normalized; >= 0.5 < 1 mm **Note:** Lo = 80 mm; (long.)	17.0	-	-
Normalized; >= 1 < 1.5 mm **Note:** Lo = 80 mm; (long.)	18.0	-	-
Normalized; >= 1.5 < 2 mm **Note:** Lo = 80 mm; (long.)	19.0	-	-
Normalized; >= 2 < 2.5 mm **Note:** Lo = 80 mm; (long.)	20.0	-	-
Normalized; >= 2.5 < 3 mm **Note:** Lo = 80 mm; (long.)	21.0	-	-
Normalized; >= 3 <= 16 mm **Note:** (long.)	26.0	-	-
Normalized; > 16 <= 40 mm **Note:** (long.)	26.0	-	-
Normalized; > 40 <= 63 mm **Note:** (long.)	25.0	-	-
Normalized; > 63 <= 80 mm **Note:** (long.)	24.0	-	-
Normalized; > 80 <= 100 mm **Note:** (long.)	24.0	-	-

Chemical Composition [%]

Criterion	Min	Max	Approx
C	-	0.1700	-
P	-	0.0500	-
S	-	0.0500	-
N	-	0.0090	-

- C C% = 0,20 ; 40 < d (mm) <= 100

Cross Reference Table

Material	Standard	Country
S 235 JRG 2	**AFNOR NF**	France
CR 37/23	**B.S.**	United Kingdom
S 235 JRG 2	**B.S.**	United Kingdom
BSt 3 sp	**BDS**	Bulgaria
BSt 3 ps	**BDS**	Bulgaria
WSt 3 sp	**BDS**	Bulgaria
WSt 3 ps	**BDS**	Bulgaria
11375	**CSN**	Czech Republic
RSt 37-2 / S235JRG2	**DIN**	Germany
S235JRG2 / Fe 360 BFN	**DIN**	Germany
S 235 JR G2	**EN**	European Union
Fe 360 BFN	**EN**	European Union
Fe 37-3 FU	**EN**	European Union
1.0122	**EN**	European Union
1.0038	**EN**	European Union
Fe 37 B1 FU	**EN**	European Union
Fe 37 B1 FN	**EN**	European Union
Fe 37 B3 FN	**EN**	European Union
Fe 37 B3 FU	**EN**	European Union
Fe 37-3 FN	**EN**	European Union
Q235B-Z	**GB**	China
Q235B-F	**GB**	China
Q235B-b	**GB**	China
Q235B	**GB**	China
St3sp	**GOST**	Russia
St3ps	**GOST**	Russia
C 0361	**JUS**	Yugoslavia
Fe 235 B/FN	**MSZ**	Hungary
S 235 JRG 2	**NBN**	Belgium
S 235 JRG 2	**NS**	Norway
1312	**SS**	Sweden
OL 37.1	**STAS**	Romania
S 235 JRG 2	**UNE**	Spain
S 235 JRG 2	**UNI**	Italy
Fe 360 B	**UNI**	Italy
1.0038	**WN**	Germany