

Material properties



Material H IV / P295NH (Germany / DIN)
Group Structural and constructional steels
Subgroup DIN 17155-2 Steel plates and strips for pressure purposes
Comment Unalloyed and alloyed steels with specified elevated temperature properties; DIN 17155-2 was superseded by EN 10028-2
Application -

Yield Stress[MPa]			
Dimension	Min	Max	Approx
Plate; Strip; Normalized; <= 16 mm	290	-	-
Plate; Strip; Normalized; > 16 <= 40 mm	280	-	-
Plate; Strip; Normalized; > 40 <= 60 mm	270	-	-

Tensile Stress[MPa]			
Dimension	Min	Max	Approx
Plate; Strip; Normalized; <= 16 mm	470	560	-
Plate; Strip; Normalized; > 16 <= 40 mm	470	560	-
Plate; Strip; Normalized; > 40 <= 60 mm	470	560	-

Chemical Composition [%]			
Criterion	Min	Max	Approx
C	-	0.2600	-
Si	-	0.3500	-
Mn	0.6000	-	-
P	-	0.0500	-
S	-	0.0500	-
Cr	-	0.3000	-
N	-	0.0070	-

Heat Treatment

Hot working: 1100-850 C;

Cross Reference Table

Material	Standard	Country
7-490	AS	Australia
A 414 Grade F	ASTM	USA
A 516 Grade 70	ASTM	USA
A 515 Grade 70	ASTM	USA
17 GS	BDS	Bulgaria
11474	CSN	Czech Republic
19 Mn 5	DIN	Germany
SG 365	JIS	Japan
C 3133	JUS	Yugoslavia
19 G 2	PN	Poland
Fe 460-2 KT	UNI	Italy
Fe 460-1 KG	UNI	Italy
Fe 460-1 KW	UNI	Italy
Fe 460-2 KW	UNI	Italy
Fe 460-2 KG	UNI	Italy
Fe 460-1 KT	UNI	Italy
K03101	UNS	USA
K02700	UNS	USA
K03102	UNS	USA
1.0482	WN	Germany
1.0445	WN	Germany