

Material properties

Material **A 106 Grade B (USA / ASTM)**
Group Structural and constructional steels
Subgroup ASTM A 106 / A 106M Seamless carbon steel pipe for high temperature service

Comment

Application

Yield Stress[MPa]			
Dimension	Min	Max	Approx
Pipe; Longitudinal	240	-	-
Pipe; Transverse	240	-	-

Tensile Stress[MPa]			
Dimension	Min	Max	Approx
Pipe; Longitudinal	415	-	-
Pipe; Transverse	415	-	-

Elongation A5 [%]			
Dimension	Min	Max	Approx
Pipe; Longitudinal	22.0	-	-
Pipe; Transverse	12.0	-	-

Chemical Composition [%]			
Criterion	Min	Max	Approx
C	-	0.3000	-
Si	0.1000	-	-
Mn	0.2900	1.0600	-
P	-	0.0350	-
S	-	0.0350	-
Cr	-	0.0400	-
Mo	-	0.1500	-

Chemical Composition [%]

Criterion	Min	Max	Approx
Ni	-	0.4000	-
V	-	0.0800	-
Cu	-	0.4000	-

Heat Treatment

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Cold-drawn pipe shall be heat treated after the final cold draw pass at a temperature of 650°C or higher.

Cross Reference Table

Material	Standard	Country
38 MS 5	AFNOR NF	France
L 245 MB	AFNOR NF	France
B	API	USA
A 420 Grade WPL 6	ASTM	USA
A 369 Grade FPB	ASTM	USA
A 53 Type E Grade B	ASTM	USA
A 334 Grade 6	ASTM	USA
A 53 Type S Grade B	ASTM	USA
A 234 Grade WPB	ASTM	USA
A 333 Grade 6	ASTM	USA
A 106 Grade C	ASTM	USA
A 556 Grade C2	ASTM	USA
A 523 Grade B	ASTM	USA
430 LT	B.S.	United Kingdom
430	B.S.	United Kingdom
13240	CSN	Czech Republic
L245MB	DIN	Germany
St 45	DIN	Germany
37 MnSi 5	DIN	Germany
St 45.4	DIN	Germany
L 245 MB	EN	European Union
1.0418	EN	European Union

Cross Reference Table

Material	Standard	Country
35SiMn	GB	China
ZG35SiMn	GB	China
C 1213	JUS	Yugoslavia
R 45	PN	Poland
35 SG	PN	Poland
OLT 45 K	STAS	Romania
35 MnSi 13	STAS	Romania
OLT 45	STAS	Romania
F.130.A	UNE	Spain
K03006	UNS	USA
K03005	UNS	USA
1.0408	WN	Germany
1.5122	WN	Germany
1.0418	WN	Germany