

China

GB712-88 (ship plate)

Chemical composition

Grade	Chemical composition, %							
	C	Mn	Si	P	s	Al	Nb	V
A	≤ 0.22	≥ 2.5C	0.10~0.35	≤ 0.035	≤ 0.035	-	-	-
B	≤ 0.21	0.60~1.00				-	-	-
C	≤ 0.21	0.60~1.10				≥ 0.015	-	-
D	≤ 0.18	0.70~1.20				≥ 0.015	-	-
AH32	≤ 0.18	0.70~1.60	0.10~0.50	≤ 0.035	≤ 0.035	≥ 0.015	-	-
DH32		0.90~1.60					-	-
EH32		0.90~1.60					-	-
AH36		0.70~1.60					-	-
DH36		0.90~1.60					0.015~0.050	0.030~0.10
EH36		0.90~1.60					-	-

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Mechanical properties

Grade	Thickness mm	Yield Strength N/mm2 (kgf/mm2) Not smaller than	Tensile Strength N/mm2 (kgf/mm2)	Elongation & Not smaller than	Impact Test		
					Temperature Degree Celsius	Average Impact	
						Vertical	Horizontal
						Not smaller than	
A	≤ 50	235 (24)	400~490 (41~50)	22	-	-	-
B					0	27 (2.8)	20 (2.0)
C					-10	27 (2.8)	20 (2.0)
D					-40	27 (2.8)	20 (2.0)
AH32	≤ 50	315 (32)	440~590 (45~60)	22	0	31 (3.2)	22 (2.2)
DH32					-20	31 (3.2)	22 (2.2)
EH32					-40	31 (3.2)	22 (2.2)
AH36	≤ 50	355 (36)	490~620 (50~63)	21	0	34 (3.5)	24 (2.5)
DH36					-20	34 (3.5)	24 (2.5)
EH36					-40	34 (3.5)	24 (2.5)