格尼钢铁
GNEE STEEL

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Product Catalogue

What is ShipBuilding Steel Plate

Shipbuilding steel plate refers to hot-rolled steel for the manufacture of ship structures produced in accordance with the requirements of the construction society. Often used as a special steel ordering, scheduling, sales, a ship including ship plates, steel and so on.

Shipbuilding Steel Classification:
The Shipbuilding steel plate can be divided into general strength structural steel and high strength structural steel according to its minimum yield point strength level.

Gnee steel supplies and exports 2 types of ship steel, medium strength shipbuilding plate and high strength shipbuilding plate. All steel plate product can be manufactured according to Society LR, ABS, NK, GL, DNV, BV, KR, RINA, CCS, etc.

Shipbuilding Steel Plate Development
Shipbuilding requires large quantities of structural steel plate to build to ship hull. Ship steel has developed into 2 series: high strength and corrosion resistant steels for modern shipbuilding, which can reduce the ship weight as well as maintenance cost. Gnee steel is able to supply high strength steel plate for Large container ships construction.

Shipbuilding traditionally uses structural steel plate to fabricate ship hulls. Modern steel plates have much higher tensile strengths than their predecessors, making them much better suited to the efficient construction of large container ships. Here are the Advantages of Shipbuilding Plates High corrosion resistant steel plate is perfect steel type for oil tanks, and when used in shipbuilding, ship weight is less for the same capacity ships, fuel cost and CO2 emission can be reduced.

These shipbuilding steel can also be used for offshore structures, if you are looking for shipbuilding steel plate or offshore structure steel plate, Contact Gnee now for the latest quotation.

Grade and Chemical Composition (%)

Grade	C%≤	Mn %	Si %	p % ≤	S % ≤	Al %	Nb %	V %
A	0.22	≥ 2.5C	0.10~0.35	0.04	0.40	—	—	—
B	0.21	0.60~1.00	0.10~0.35	0.04	0.40	—	—	—
D	0.21	0.60~1.00	0.10~0.35	0.04	0.04	≥0.015	—	—
E	0.18	0.70~1.20	0.10~0.35	0.04	0.04	≥0.015	—	
A32 D32	0.18	0.70~1.60 0.90~1.60	0.10~0.50	0.04	0.04	≥0.015	—	—

E32		0.90~1.60						
A36 D36 E36	0.18	0.70~1.60 0.90~1.60 0.90~1.60	0.10~0.50	0.04	0.04	≥0.015	0.015~0.050	0.030~0.10

Shipbuilding Steel Plate Mechanical Properties:

Grade	Thickness (mm)	Yieldpoint (Mpa) ≥	Tensile Strength (Mpa)	Elongation （%）≥	V-impact test			cold bend test	
					Temperature （℃）	Average AKV A kv /J		b=2a 180°	b=5a 120°
						lengthways	crosswise		
						≥			
A	≤50	235	400~490	22	—	—	—	d=2a	—
B					0	27	20	—	d=3a
D					-10				
E					-40				
A32	≤50	315	440~590	22	0	31	22	—	d=3a
D32					-20				
E32					-40				
A36	≤50	355	490~620	21	0	34	24	—	d=3a
D36					-20				
E36					-40				

Shipbuilding Plate Available Dimensions:

variety		Thickness (mm)	Width (mm)	Length/ inner diameter (mm)
Shipbuilidng plate	cutting edges	6~50	1500~3000	3000~15000
	non- cutting edges		1300~3000	
Shipbuilidng coil	cutting edges	6~20	1500~2000	760+20~760-70
	non-cutting edges		1510~2010	

Shipbuilding Steel Theoretical Weight

Thickness (mm)	theoretical weight		Thickness (mm)	theoretical weight	
	Kg/ft2	Kg/m2		Kg/ ft2	Kg/m2
6	4.376	47.10	25	18.962	196.25
7	5.105	54.95	26	20.420	204.10
8	5.834	62.80	28	21.879	219.80
10	7.293	78.50	30	23.337	235.50
11	8.751	86.35	32	25.525	251.20
12	10.21	94.20	34	26.254	266.90
14	10.939	109.90	35	27.713	274.75
16	11.669	125.60	40	29.172	314.00
18	13.127	141.30	45	32.818	353.25
20	14.586	157.00	48	35.006	376.80
22	16.044	172.70	50	36.464	392.50
24	18.232	188.40			

Dimensional Deviation

nominal thickness（mm）	The thickness deviation with following width (mm)			
	≤1200	>1200~1500	>1500~1800	>1800
>6.0~8.0	±0.29	±0.30	±0.31	±0.35
>8.0~10.0	±0.32	±0.33	±0.34	±0.35
>10.0~12.0	±0.35	±0.36	±0.37	±0.43

nominal thickness （mm）	minus deviation (mm)	The thickness deviation with following width (mm)									
		> 1000 ~1200	> 1200 ~1500	> 1500 ~1700	> 1700 ~1800	> 1800 ~2000	> 2000 ~2300	> 2300 ~2500	> 2500 ~2600	2600 ~2800	> 2800 ~3000
>12~25	-0.8	+0.2	+0.2	+0.3	+0.4	+0.6	+0.8	+0.8	+1.0	+1.1	+1.2
>25~30	-0.9	+0.2	+0.2	+0.3	+0.4	+0.6	+0.8	+0.9	+1.0	+1.1	+1.2
>30~3	-1.0	+0.2	+0.3	+0.3	+0.4	+0.6	+0.8	+0.9	+1.0	+1.2	+1.3

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>34~40	-1.1	+0.3	+0.4	+0.5	+0.6	+0.7	+0.9	+1.0	+1.1	+1.3	+1.4
>40~45	-1.2	+0.4	+0.5	+0.6	+0.7	+0.8	+1.0	+1.1	+1.2	+1.4	+1.