

Shipbuilding steel

ASTM/ASME – A/SA131

**Shipping Registers: R.I.NA – A.B.S. –
 B.V. – G.L. – D.N.V. – L.R.S. – R.R.**

<i>Shipping Registers Cert. 3.2</i>	<i>ASTM/ASME - A/SA131 Cert. 3.1 - 3.2</i>	<i>Thickness (mm)</i>	<i>Width (mm)¹</i>	<i>Weight (tons)²</i>	<i>Delivery condition</i>
A	A	4-100	3150 max	3,0-15,0	AR - NR - NF
B	B	4-100	3150 max	3,0-15,0	AR - NR - NF
D	D	4-100	3150 max	3,0-15,0	NR - NF
E	E	4-100	3150 max	3,0-15,0	NF
AH32	AH32	4-100	3150 max	3,0-15,0	AR - NR - NF
DH32	DH32	4-100	3150 max	3,0-15,0	NR - NF
EH32	EH32	4-100	3150 max	3,0-15,0	NF
FH32	FH32	4-35	3150 max	3,0-15,0	NF
AH36	AH36	4-100	3150 max	3,0-15,0	AR - NR - NF
DH36	DH36	4-100	3150 max	3,0-15,0	NR - NF
EH36	EH36	4-100	3150 max	3,0-15,0	NF
FH36	FH36	4-35	3150 max	3,0-15,0	NF

¹ Width min/max related to thickness and heat treatment

² Minimum and maximum tonnage related to thickness and slabs availability

- AR As Rolled
- NR Normalizing rolling
- NF Normalized in furnace



Shipbuilding steel

Metinvest Trameal
Ferriera Valsider
Spartan UK

Grade ¹	Supply condition ²	Shipping Register ³					
		RINA	LRS	DNV-GL	BV	ABS	RR
Gr. A	AR	4 - 35	4 - 35	4 - 35	4 - 35	4 - 35	4 - 35
	CR	8 - 40		8 - 40	8 - 40	8 - 40	8 - 40
	N	4 - 60	4 - 60	4 - 60	4 - 60	4 - 60	4 - 60
Gr. B	AR	4 - 35	4 - 35	4 - 35	4 - 35	4 - 35	4 - 35
	CR	8 - 40	8 - 40	8 - 40	8 - 40	8 - 40	8 - 40
	N	4 - 60	4 - 60	4 - 60	4 - 60	4 - 60	4 - 60
Gr. D	CR	8 - 40		8 - 40	8 - 40	8 - 40	8 - 40
	N	4 - 60	4 - 60	4 - 60	4 - 60	4 - 50	4 - 60
Gr. D+Z	CR	15-40		15-40			15-40
	N	15 - 60	15 - 60	15 - 50	15 - 50	15 - 50	15 - 60
Gr. E	N	4 - 50	4 - 60	4 - 60	4 - 50	4 - 50	4 - 60
Gr E+Z	N	15 - 50	15 - 60	15 - 60	15 - 50	15 - 50	15 - 60
AH32	AR	4 - 25	4 - 25	4 - 25	4 - 25	4 - 25	4 - 25
	CR	8 - 40		8 - 40	8 - 40	8 - 40	8 - 40
	N	4 - 60	4 - 60	4 - 60	4 - 60	4 - 50	4 - 60
DH32	CR	8 - 40		8 - 40	8 - 40	8 - 40	8 - 40
	N	4 - 60	4 - 60	4 - 60	4 - 60	4 - 50	4 - 60
DH32+Z	CR	15-40		15-40			15-40
	N	15 - 60	15 - 60	15 - 50	15 - 50	15 - 50	15 - 60
FH32	N	8 - 35					
FH36	N	8 - 35					
EH32	N	4 - 50	4 - 60	4 - 60	4 - 50	4 - 50	4 - 60
EH32+Z	N	15 - 60	15 - 60	15 - 50	15 - 50	15 - 50	15 - 60
AH36	AR	4 - 25	4 - 25	4 - 25	4 - 25	4 - 25	4 - 25
	CR	8 - 40		8 - 40	8 - 40	8 - 40	8 - 40
	N	4 - 60	4 - 60	4 - 60	4 - 60	4 - 50	4 - 60
DH36	CR	8 - 40		8 - 40	8 - 40	8 - 40	8 - 40
	N	4 - 60	4 - 60	4 - 60	4 - 60	4 - 50	4 - 60
DH36+Z	CR	15-40		15-40			15-40
	N	15 - 60	15 - 60	15 - 60	15 - 50	15 - 50	15 - 60
EH36	N	4 - 50	4 - 60	4 - 60	4 - 50	4 - 50	4 - 60
EH36+Z	N	15 - 50	15 - 60	15 - 60	15 - 50	15 - 50	15 - 60
510LF	N	8 - 35					

¹ Z Test available only for thickness ≥ 15 , for thinner material conformity is guaranteed but test is not performed

² AR As Rolled
CR Control Rolling
N Normalized in Furnace

³ RINA Registro Navale Italiano
LRS Lloyd's Register
DNV-GL Det Norske Veritas/Germanischer Lloyd
BV Bureau Veritas
ABS American Bureau of Shipping
RR Russian Register