

C55 steel plate
C55 steel

C55 EN 10250-2:1999, Number: 1.0535	Comparison of steel grades	
	JUS	Č.1630
	DIN	C55
	BS	070M55
	GOST	55
	AISI	1055
	UNI	C55
	NF	(AF70C55), IC55

C55 Chemical analysis -% by mass

Chemical elements	C	Si max.	Mn	P max.	S max.	Cr max.	Mo max.	Ni max.	Cr+Mo+Ni max.	
%, by mass	0,52-0,60	0,40	0,60-0,90	0,045	0,045	0,40	0,10	0,40	0,63	-
Permissible deviation	± 0,02	+ 0,03	± 0,04	+ 0,005	+ 0,005	+ 0,05	+ 0,03	+ 0,05		-

Bebon steel — The most professional exporter on weathering resistant steel

Tel:0086-371-86151527

E-mail:bb@bebonchina.com

Fax: 0086-371-86011881

Web:http://www.shipbuilding-steel.com

MSN:bebonchina@hotmail.com
<http://www.steel-plate-sheet.com>

Skype: bebonchina

<http://www.bebonchina.com>

Oficina Dir: 2801 B# International enterprise center Zhengzhou city in China.

At the option of the manufacturer the elements aluminium, titanium, vanadium and niobium may be added singly or in combination for grain size control purposes. Elements not quoted in table shall not be added to the steel without the agreement of the purchaser, except for the purpose of finishing the heat. Mechanical properties in the normalized and normalized and tempered conditions

Thickness of ruling section tR					
Diameter in mm	tR ≤ 100mm	100 < tR ≤ 250mm	250 < tR ≤ 500mm	500 < tR ≤ 1000mm	
Re min (N/mm ²)	330	330	260	250	
Rm min (N/mm ²)	640	620	600	590	
A % min.	l-longitudinal	12	12	12	11
	tr -transverse	-	9	9	8
KV min * (J)	l-longitudinal	-	-	-	-
	tr -transverse	-	-	-	-

1N/mm²=1MPa Maksimim hardness for forgings to be supplied in the annealed condition

HB max 229

Heat treatment conditions

Quenching Temperature, 0C	Cooling medium	Tempering Temperature, 0C	Normalizing temperature, 0C
805 to 845	Oil or water	550 to 660	825 to 865

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C55 EN 10083-2:2002, Number: 1.0535	Comparison of steel grades	
	JUS	Č.1630
	DIN	C55
	BS	070M55, (EN9)
	GOST	55
	AISI	1055
	UNI	C55, 1C55
	NF	(AF70C55), 1C55

C55 Chemical analysis -% by mass

Chemical elements	C	Si max.	Mn	P max.	S max.	Cr max.	Mo max.	Ni max.	Cr+Mo+Ni max.
%, by mass	0,52-0,60	0,40	0,60-0,90	0,045	0,045	0,40	0,10	0,40	0,63
Permissible deviation	± 0.02	+ 0,03	± 0,04	+ 0.005	+ 0.005	+0,05	+0,03	+0,05	-

Maximum hardness for products to be supplied in the "treated to improve shearability (+S)" or "soft annealed (+A)" condition

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+S HB max.	+A HB max.
255	229

C55 Mechanical properties in the quenched and tempered condition (+QT)

	Mechanical properties for the ruling sections (see prEN10083-1:2002, Annex A) with a diameter (d) or for flat products thickness (t) of		
	d ≤ 16mm t ≤ 8mm	16mm < d ≤ 40mm 8mm < t ≤ 20mm	40mm < d ≤ 100mm 20mm < t ≤ 60mm
Re min (MPa)	550	490	420
Rm (MPa)	800-950	750-900	700-850
A min. (%)	12	14	15
Z min. (%)	30	35	40
KV min. (J)	-	-	-

Re: Upper yield strength or, if on yield phenomenon occurs, the 0,2% proof strength Rp0,2. Rm: Tensile strength Mechanical properties in the normalized condition – (+N)

	Mechanical properties for products with a diameter (d) or, for flat products, a thickness (t) of		
	d ≤ 16mm t ≤ 16mm	16mm < d ≤ 100mm < t ≤ 100mm	100mm < d ≤ 250mm 100mm < t ≤ 250mm

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Re min. (MPa)	370	300	300
Rm min. (MPa)	680	640	620
A min. (%)	11	12	12

Heat treatment conditions

Quenching, 0C	Quenching agent	Tempering, 0C	Normalizing, 0C
805-845	Water or oil Oil or water	550-660	825 to 885

Bebon International is a professional C55 steel exporter and a steel Stockist in china. We keep more than 1000 tons C55 steel in stock every month. If you want to get the C55 steel price, please do not hesitate to contact us. Any need in C55 Chemical Composition and Mechanical Properties, please feel free to contact us by email or calling to us.

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