

## Product standard list

I perform various checks such as the cause of the severe quality control system, a chemical examination for ingredient, a shape, dimensions inspection in us and aim at the making of product superior to the night and day.

Chemical composition (%)								
Standards	C	Si	Mn	P	S	Cu	N	Ceq(※)
BS:B500B(2005)	0.22(0.24)	—	—	0.050 (0.055)	0.050 (0.055)	0.80 (0.85)	0.012 (0.014)	0.50 (0.52)
BS:460B(1997)	0.25(0.27)	—	—	0.050 (0.055)	0.050 (0.055)	—	0.012 (0.013)	0.51 (0.54)

(※)  $C_{eq} = C + Mn/6 + (Cr + Mo + V)/5 + (Ni + Cu)/15$

Mechanical properties				
Standards	Yield point	Tensile/Yield point ratio	Elongation	Elongation (at the time of the maximum stress)
BS:B500B(2005)	500Mpa(650 max.)	1.08	—	5.0%
BS:460B(1997)	460N/mm <sup>2</sup>	1.08	14%	5.0%

Bending test		
Standards	Nominal diameter (mm)	Mandrel diameter
BS:B500B(2005)	16min.	4d
BS:460B(1997)	16min.	3d

Nominal section area/Unit mass/Tolerance				
Standards	Nominal diameter (mm)	Nominal section area	Unit mass (Kg/m)	Tolerance
BS:B500B(2005)	10	78.5mm	0.617	±4.5%
	12	113mm	0.888	
	16	201mm	1.58	
BS:460B(1997)	10	78.5mm	0.616	±6.5%
	12	113.1mm	0.888	±4.5%
	16	201.1mm	1.579	±4.5%

Tolerances on length	
Standards	Allowance
BS:B500B(2005)	-0~+100mm
BS:460B(1997)	±25mm