

## EN-39/BS: 1139



Table 1. Determination of Chemical Composition of steel by Ladle analysis			
Element	Percentage		
Carbon	≤ 0.20		
Manganese	≤ 1.40		
Phosphorus	≤ 0.040		
Sulphur	≤ 0.045		
Nitrogen	≤ 0.009		

Table 2. Mechanical Properties			
T 1 01 11 D N/ 0	≥ 340		
Tensile Strength Rm N/mm2	≤ 520		
Yield Stress ReH N/mm2	≥ 235		
Elongation A	≥ 24%		
(on Lo = 5.65 X (So) <sup>1/2<sup>1)</sup></sup> ) 1) In accordance with BS 18			
Lo = Original Gauge length of tensile test piece			
So = Original Cross sectional area of the gauge length			

Table 3. Nominal dimension, mass and tolerances for tubes			
Tube	Nominal Values Type 4.0	Tolerance	
Wall Thickness	3.2/ 4.0 mm	-10.0% <sup>1)</sup>	
Outside Diameter (Including Ovality)	48.3 mm	± 0.5 mm	
Mass, Single Tube	3.56/ 4.37 kg/m	-7.5% max	
Mass batches of Tubes (10 tons or more)	3.56/ 4.37 kg/m	± 7.5%	

**Note:** The inside diameter of Tubes shall allow insertion of a gauge of diameter 37,7 mm for a minimum length of 200 mm

1) Upper Tolerance- Governed by the tolerance on the mass

Lower Tolerance: Wall thickness shall be at least 3.6mmon type 4.0 tube; a tolerance of -15% being allowed in isolated places over a length not exceeding 100mm, but only if the decrease in thickness affects only the external surface

2) The tolerances for the inside diameter shall also include the weld zone.

Length		Tolerance of Length
Std Length: 6 m and 6.4 m		- 50 mm, + 150 mm
	6 mts	+ 10, - 0
Exact length 6 to 12 m	6 to 12 mts	+ 15, - 0