

Carbon Manganese Steel Tube

Typical Applications

- Roll cages
- Space Frames
- Aerospace Impact Protection
- Roll Bars
- Pilot seats/ Crew seats

Key features:

- High strength
- Ease of forming
- Easy welding
- No requirement for pre or post heat treatments
- Can improve structural strengths without increasing the weight drastically

Product Description

T45 is a very unique seamless carbon based steel tube that has been used in many applications in different industries. It is widely used in the aerospace sector in equipment such as pilot's seats and crew's seats due to the materials ability to withstand high G forces without snapping or splitting.

Corrosion Resistance

Good

Availability

Tube

Chemical Composition (weight %)

	Fe	C	Cr	Mn	Mo	Ni	P	S	Si
Min	Bal	0.17		1.3					0.1
Max	Bal	0.25	0.25	1.7	0.1	0.4	0.04	0.04	0.35

Mechanical Properties

Ultimate Tensile Strength	700-900 MPa
0.2% Proof stress	620 MPa
Hardness (Brinell)	201 - 262 HB

Physical Properties

Hardening	870 - 910 degrees (quench in oil or water)
Tempering	675 degrees (Cool in suitable manner)

Technical Assistance

Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.

UK Service Centres:

Smiths Belfast	02895 908 897
Smiths Biggleswade	01767 604 704
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Quality & Testing:



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