

# Material: BS 10216-5 EN 1.4539

## Standard Specification for Seamless Steel Tubes for Pressure Purposes

**Group:** Ferrous Stainless Steel Alloys

**Sub Group:** BS 10216-5 Seamless Steel Tubes for Pressure Purposes

**Application:** Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade

**Belongs to the Industry:** Tube

Chemical Composition			Heat Treatment															
Carbon	C %	0.020 max.	Solution Annealing															
Silicon	Si %	0.700 max.																
Manganese	Mn %	2.000 max.																
Phosphorus	P %	0.030 max.																
Sulphur	S %	0.010 max.																
Chromium	Cr %	19.000 - 21.000																
Nickel	Ni %	24.000 - 26.000																
Molybdenum	Mo %	4.000 - 5.000																
Nitrogen	N %	0.150 max.																
Copper	Cu %	1.200 - 2.000																
Iron	Fe %	Balance	<table border="1"> <thead> <tr> <th colspan="2">Mechanical Properties</th> </tr> </thead> <tbody> <tr> <td>Tensile Strength in Mpa</td> <td>520 - 720</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>230 min.</td> </tr> <tr> <td>Elongation in %</td> <td>30 min.</td> </tr> <tr> <td>Reduction of Area in %</td> <td>-</td> </tr> <tr> <td>Hardness in BHN</td> <td>-</td> </tr> <tr> <td>Impact in Joule</td> <td>60 min. @ -196°C</td> </tr> </tbody> </table>		Mechanical Properties		Tensile Strength in Mpa	520 - 720	Yield Strength in Mpa	230 min.	Elongation in %	30 min.	Reduction of Area in %	-	Hardness in BHN	-	Impact in Joule	60 min. @ -196°C
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-	-	-																
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
1.4539	EN	European Union	Steel, Bar and Rod
1.4539	DIN	Germany	Steel, Bar and Rod
X1NiCrMoCu25-20-5	UNI	Italy	Steel, Sheet, Plate and Strip
X1NiCrMoCu25-20-5	AFNOR NF	France	Steel
X1NiCrMoCu25-20-5	DIN	Germany	Steel, Bar and Rod
1.4539	UNI	Italy	Steel, Bar and Rod
1.4539	AFNOR NF	France	Steel, Bar and Rod

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