

# MANUFACTURING STANDARDS

## TUBE MANUFACTURING STANDARDS

- **ASTM:**  
A240- A480 A249- A269- A270- A312- A358- A530- A554- A632- A778- A908- B751- A269- A803- A789 - A790
- **DIN:**  
11850
- **EN:**  
10088/2 - 10217/7 - 10312 - 10296
- **PED:**  
97/23/EC ANNEXI par 4.3

## TUBE CONTROL STANDARDS

- **ASTM:**  
A450
- **SEP:**  
1914 - 1925
- **EN:**  
10204 - 10893/1/2 - 8492 - 8493 - 8494 - 8495 - 1127 - 3651/2 - 10002/1 - 10028/7

## QUALITY

### **TESTS AND CONTROLS:**

Currently, we are able to perform the following tests on our tubes:



Chemical analysis of material



Eddy Current testing in line and offline with complete circular coil



Tightness test to a pressure of 8 bar and 200 bar for reel tube



Tightness test to a pressure of 5 bar and 100 bar for bar tubes



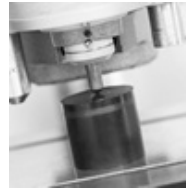
In-line laser control of external diameter



Traction tests



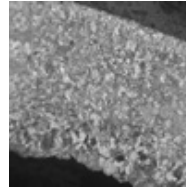
Burst tests



Hardness tests



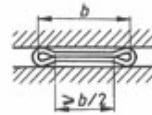
Roughness tests



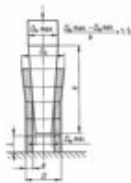
Micrograph

**EN 10217-7**  
European  
Standard

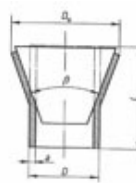
All mechanical tests according to  
standard 10217/7



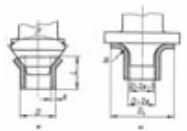
Crushing test



Drift expanding test on a ring



Expanding test by tube expander



Beading test



Bend test on welding

For all other tests: corrosion, migration, etc .. we make use of credited laboratories.