

# Seamless pipes DIN EN 10216-2 (DIN 17175)

Non-alloy and alloy steel tubes with specified elevated temperature properties

<b>Area of applications</b>	Boiler construction, pipeline and plant engineering, pressure vessels and apparatus engineering
<b>Order text for example</b>	Pipe, seamless, DIN EN 10220/10216-2, P235GH TC1/1.0345, inspection certificate acc. to DIN EN 10204/3.1, requirements acc. to PED 97/23/EC, AD 2000-W4 114.3 × 3.6 mm

## Materials

Material number	Designation acc. to EN	Designation acc. to DIN
1.0345	P235GH	St 35.8
1.0425	P265GH	St 45.8
1.5415	16Mo3 <sup>a</sup>	15 Mo 3
1.7335	13CrMo4-5 <sup>a</sup>	13 CrMo 44
1.4903	X10CrMoVNb-9-1 <sup>a</sup>	

<sup>a</sup> alloyed steels generally with US testing (TC2).

## Parameters

Material grade	Operating temperature	Working pressure
P235GH TC1	450 °C	160 bar
P235GH TC2	450 °C	Unlimited
16Mo3	500 °C	Unlimited
13CrMo4-5	500 °C	Unlimited
X10CrMoVNb-9-1	600 °C	Unlimited

<b>Scope of tests</b>	<b>TC1</b> Test category 1 (without US testing) <b>TC2</b> Test category 2 (with US testing for longitudinal errors)
<b>Delivery lengths</b>	5 to 7 m or double random lengths
<b>Range of sizes</b>	10.2 to 711.0 mm
<b>Wall thicknesses</b>	1.6 to 100.0 mm
<b>Dimensions and weights</b>	According to DIN EN 10220

## Tolerances on outside diameter and wall thickness

Outside diameter D	Tolerance on outside diameter D	Tolerances on wall thickness T at a T/D ratio of			
		≤ 0.025	> 0.025 to 0.050	> 0.050 to 0.10	> 0.10
≤ 219.1 mm	± 1% or ± 0.5 mm, whichever is the greater	± 12.5% or ± 0.4 mm, whichever is the greater			
> 219.1 mm		± 20%	± 15%	± 12.5%	± 10% <sup>b</sup>

<sup>b</sup> For outside diameter D > 355.6 mm is upper limit of the local wall thickness may be exceeded by a further 5% of the wall thickness T.

<b>Inspection certificate</b>	According to DIN EN 10204/3.1 or 3.2
<b>Marking</b>	Manufacturer's mark, EN standard, material grade, heat number, test category, mark of the inspection representative, identification number