

DIN 2449 Seamless Steel Tubes in St 00 Dimensions and Range of Application

This Standard contains a selection of seamless steel tubes for line piping, process plant, tank and vessels.

The tubes are ordered according to DIN 2448.

Range of application

Tubes in the wall thicknesses indicated in the Table can be used at the stated working pressures up to working temperatures of 120°C.

The wall thicknesses apply only to tubes; for applications involving bends, exceptional stressing during installation, thermal stressing or cut-outs, a check shall be made whether the wall thickness is sufficient.

Designation of a seamless steel tube of 88.9 mm outside diameter and of 3.2mm wall thickness in St 00;

Tube 88.9 X 3.2 DIN 2448 - St 00

Nominal width	Tube outside diameter 1)	Maximum working pressures in atu 2) (atm)					
		10		16		25	
		Wall thickness	Weight 3) kg/m	Wall thickness	Weight 3) kg/m	Wall thickness	Weight 3) kg/m
10 12	14 *)					1.6	0.542
	16					1.8	0.632
	17.2					1.8	0.688
15/16	20					2	0.890
	21.3					2	0.962
20	25					2	1.13
	26.9					2.3	1.41
25	30					2.6	1.77
	33.7					2.6	2.01
32	38					2.6	2.29
	42.4					2.6	2.57
40	44.5					2.6	2.70
	48.3					2.6	2.95

50	57					2.9	3.90
	60.3					2.9	4.14
65	76.1					2.9	5.28
80	88.9					3.2	6.81
100	108					3.6	9.33
	114.3					3.6	9.90
125	133					4	12.8
	139.7					4	13.5
150	159					4.5	17.1
	168.3					4.5	18.1

Where dimensions and weights are not indicated, the values for the next higher working pressure apply.

- 1) The tube outside diameter are selected from DIN 2448; the wall thicknesses are those of the standard thickness in DIN 2448.
 - 2) The correlation of the tubes to the maximum working pressures has been carried out according to DIN 1629 Sheet 1, Issue of January 1961, table3. For liquid up to 25 at working pressure it is specified that the numerical product of the internal diameter in mmx working pressure in at shall be ≤ 7200 .
 - 3) The weight in kg/m are taken from DIN 2448.
- *) This also is not contained in DIN 2448; it is supplied on the basis of DIN 2391.

Nominal width	Tube outside diameter 1)	Maximum working pressures in atu 2) (atm)					
		10		16		25	
		Wall thickness	Weight 3) kg/m	Wall thickness	Weight 3) kg/m	Wall thickness	Weight 3) kg/m
(175)	(191)					5.4	24.7
	193.7					5.4	25.0
200	216					6	31.1
	219.1					5.9	31.0
250	267					6.3	40.6
	273					6.3	41.6
300	318			7.5	57.4		

	323.9			7.1	55.6		
350	355.6			8	68.3		
	368			8	70.8		
400	406.4			8.8	85.9		
	419			10	101		
500	503	11	135				
	521	11.5	144				

Where dimensions and weights are not indicated, the values for the next higher working pressure apply.

Bracketed nominal width should be avoided where possible.

Material: St -00 according to DIN 1629 Sheet 2

For technical conditions of delivery, see DIN 1629 Sheet 1 and Sheet 2

For seamless steel tubes in St 35, see DIN 2450

For seamless steel tubes in St 45, see DIN 2451

For seamless steel tubes in St 55, see DIN 2456

For seamless steel tubes in St 52, see DIN 2457

For pressure ratings, see DIN 2401