

DIN 2450 SEAMLESS STEEL TUBES IN St 35 DIMENSIONS AND RANGE OF APPLICATION

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. At temperatures higher than 120°C and up to 300°C the drop in yield point must be taken into account (see also DIN 1629 Sheet 1, Issue of January 1961 table 4). The wall thicknesses apply only to tubes; for applications involving bends, exceptional stressing during installation, thermal stressing of cut-outs, a check shall be made whether the wall thickness is sufficient.

Designation of a seamless steel tube of 88.9mm outside diameter and of 4mm wall thickness in St 35 for working pressure up to 100 atu (atm) subject to delivery testing (see DIN 1629 Sheet 3)

Tube 88.9 * 4 DIN 2448 - St 35 with acceptance

Nominal width	Tube out	Maximum working pressure in atu 2) (atm)							
		40 with acceptance		64 with acceptance		80 with acceptance		100 with acceptance	
		Wall thickness	Weight 3) kg/m	Wall thickness	Weight 3) kg/m	Wall thickness	Weight 3) kg/m	Wall thickness	Weight 3) kg/m
10 12	14 *)			1.8	0.542			1.8	0.542
	16			1.8	0.632			1.8	0.632
	17.2			1.8	0.688			1.8	0.688
15/16	20			2	0.890			2	0.890
	21.3			2	0.962			2	0.962
20	25			2	1.13			2	1.13
	26.9			2.3	1.41			2.3	1.41
25	30			2.6	1.77			2.6	1.77
	33.7			2.6	2.01			2.6	2.01
32	38			2.6	2.29			2.6	2.29
	42.4			2.6	2.57			2.6	2.57
40	44.5			2.6	2.70			2.6	2.70
	48.3			2.6	2.95			2.6	2.95
50	57			2.9	3.90			2.9	3.90
	60.3			2.9	4.14			2.9	4.14
65	76.1			2.9	5.28	2.9	5.28	3.6	6.69
80	88.9			3.2	6.81	3.6	7.63	4	8.43
100	108	3.6		3.6	9.33	4	10.3	5	12.7

	114.3	3.6		4	11.0	4	11.0	5	13.5
125	133	4		4.5	14.2	5	15.8	6.3	19.8
	139.7	4		5	16.6	5	16.6	6.3	20
150	159	4.5		5.6	21.1	5.6	21.1	7.1	26.6
	168.3	4.5		5.6	22.4	6.3	25.3	7.1	28.3

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

- 1) The tube outside diameters are selected from DIN 2448.
- 2) The tube correlationn have been carried out according to DIN 2413, Issue of May 1954, Category is for the purpose the allowance c1 to compensate for permissible underleon wall thickness correspond to DIN 1629 Sheet 3 and allowance c2 for corroslon and wear has been as not less than 0.5 mm.
- 3) The weights in kg/m are taken from DIN 2448.
- *) It is not contained in DIN 2448; It is applied on the table of DIN 2391.

Nominal width	Tube out	Maximum working pressure in atu 2) (atm)							
		40 with acceptance		64 with acceptance		80 with acceptance		100 with acceptance	
		Wall thickness	Weight 3) kg/m	Wall thickness	Weight 3) kg/m	Wall thickness	Weight 3) kg/m	Wall thickness	Weight 3) kg/m
(175)	(191)	5.4	24.7	6.3	28.7	7.1	32.2	8.8	39.5
	193.7	5.4	25.0	6.3	29.2	7.1	32.8	8.8	40.0
200	216	6	31.1	7.1	36.6	8	41.0	10	50.8
	219.1	5.9	31.0	7.1	37.2	8	41.5	10	51.6
250	267	6.3	40.6	8.8	55.8	10	63.4	11	69.7
	273	6.3	41.6	8.8	57	10	64.9	12.5	80.9
300	318	7.5	57.4	11	83.3	11	83.3	14.2	106
	323.9	7.1	55.6	11	85.3	11	85.3	14.2	109
350	355.6	8	68.3	12.5	107	12.5	107	16	133
	368	8	70.8	12.5	110	12.5	110	16	133
400	406.4	8.8	85.9	14.2	138	14.2	138	17.5	168
	419	10	101	14.2	142	14.2	142	17.5	173
500	508	11	135	17.5	211	17.5	211	22.2	266
	521	11.5	144	17.5	217	17.5	217	22.2	273