

## Seamless EO Stainless Steel Tubes Material-No.: 1.4571

### Tolerances DIN EN 10305-1

Order code					1.4571 Design pressure bar DIN 2413 I Static	1.4571 burst pressure bar	Weight kg/m
1.4571	Tube O.D. (mm)	Tolerance	Wall thickness (mm)	Tube I.D. (mm)			
R04X171	4	±0.08	1.0	2	735		0.075
R06X171	6	±0.08	1.0	4	490	1850	0.125
R06X1.571	6	±0.08	1.5	3	735	2900	0.169
R08X171	8	±0.08	1.0	6	368	1300	0.175
R08X1.571	8		1.5	5	551	2050	0.244
R10X171	10		1.0	8	294	950	0.225
R10X1.571	10	±0.08	1.5	7	441	1750	0.319
R10X271	10		2.0	6	588	2400	0.401
R12X171	12		1.0	10	245	850	0.275
R12X1.571	12	±0.08	1.5	9	368	1400	0.394
R12X271	12		2.0	8	490	1900	0.501
R14X1.571	14		1.5	11	315	1200	0.469
R14X271	14	±0.08	2.0	10	420	1550	0.601
R14X2.571	14		2.5	9	525	2100	0.720
R15X171	15		1.0	13	196	675	0.351
R15X1.571	15	±0.08	1.5	12	294	1100	0.507
R15X271	15		2.0	11	392	1400	0.651
R16X1.571	16	±0.08	1.5	13	276	950	0.545
R16X271	16		2.0	12	368	1300	0.701
R16X2.571	16	±0.08	2.5	11	459	1850	0.845
R16X371	16		3.0	10	551	2400	0.977
R18X1.571	18	±0.08	1.5	15	245	800	0.620
R18X271	18		2.0	14	327	1150	0.801
R20X271	20		2.0	16	294	1050	0.901
R20X2.571	20	±0.08	2.5	15	368	1400	1.095
R20X371	20		3.0	14	441	1800	1.277
R22X1.571	22	±0.08	1.5	19	200	650	0.770
R22X271	22		2.0	18	267	900	1.002
R25X2.571	25	±0.08	2.5	20	294	1050	1.408
R25X371	25		3.0	19	353	1275	1.653
R28X1.571	28	±0.08	1.5	25	158	550	0.995
R28X271	28		2.0	24	210	700	1.302
R30X2.571	30	±0.08	2.5	25	245	850	1.722
R30X371	30	±0.08	3.0	24	294	1150	2.028
R30X471	30		4.0	22	392	1500	2.605
R35X271	35	±0.15	2.0	31	168	550	1.653
R38X471	38	±0.15	4.0	30	309	1150	3.405
R42X271	42	±0.2	2.0	38	140	475	2.003
R42X371	42		3.0	36	210	750	2.930

Table Q4 — Seamless EO stainless steel tubes

**Pressure Calculation:**

Pressure calculation given are according to DIN 2413 part I for static stress

$$P = \frac{20 \cdot K \cdot s \cdot c}{S \cdot da} \text{ (bar)}$$

Material characteristic value  $K=245 \text{ N/mm}^2$  (1.4571),  $K=245 \text{ N/mm}^2$  (1.4571) (1% proof stress)

Safety factor  $S = 1.5$

Factor "c" for consideration of wall thickness divergence: 0.9

da = Tube O.D. in mm

s = Wall thickness in mm

**Remarks:**

Corrosion — Additional allowances are not considered for the calculation of pressures.

Tubes with a diameter ratio  $da/di \geq 1.35$  are calculated according to DIN 2413 part III (formula see page Q5) with above characteristic K value.

**Conversion Factors:**

- Bar x 14.5 = psig
- kg/m x 0.672 = lbs/ft
- $\text{N/mm}^2 \times 145 = \text{lb/in}^2$

Dimensions and pressures for reference only, subject to change.

