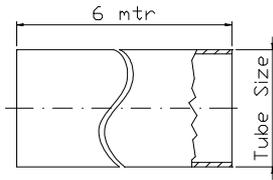


## High Purity Tubing



The Heleon Group distributes the complete range of **NEUMO®** high precision pharmaceutical tubing. These are available in the Pharmatube "S", "XS" and BPE quality. Tubing is available in the US OD, ISO and DIN sizes. Standard supplied with material certificates, outside continuously marked, separately packed and capsulated with plastic caps.

### Pharmatube® "S"

- $Ra \leq 0,8 \mu\text{m}$  (including weld seam)
- 1" - 4": welded acc. to DIN 17457, PK2 execution k2g/k3g, annealed, weld seam bead rolled
- ws 1.4435/1.4404, 316L and 1.4435 BN2
- Electro-Polish (EP) available on request (Pharmatube® "S-E":  $Ra \leq 0,6 \mu\text{m}$ )
- Annealed (standard)

### Pharmatube® "XS"

- $Ra \leq 0,4 \mu\text{m}$  (including weld seam)
- 1/4" - 3/4": fine drawn seamless acc. to DIN 17458, PK2 and ASTM-A-269
- 1" - 2 1/2" (DN15-DN50): welded acc. to DIN 17457, PK2 execution L2 and ASTM-A-269 / 270 weld seam bead rolled and cold drawn
- 3" - 4": welded acc. to DIN 17457, PK2 execution k2g/k3g, annealed, weld seam bead rolled, internal mechanically polished
- 1.4404/SS 316L and ws 1.4435 BN2
- Electro-Polish (EP) available on request (Pharmatube® "XS-E":  $Ra \leq 0,25 \mu\text{m}$ )
- Annealed (standard)

### Standards:

- Standards & Tolerances acc. to DIN 17457 / 17458; DT4/T4, and ISO 5252.

### Pharmatube® "BPE"

- $Ra \leq 0,5 \mu\text{m}$  (including weld seam)
- 1/4" - 3/4": fine drawn seamless acc. to DIN 17458, PK2 and ASTM-A-269
- 1" - 6" welded to ASTM-A-269 / 270 internally polished
- Controlled Sulphur content between 0,005-0,017%
- Annealed (standard)

### Outside Finish:

- Polished  $< 0,8 \mu\text{m}$  ra standard

### Certification:

- To EN 10204 3.1.B

Standard DIN	
Size DN	Tube Size
DN 10 **	12,0x1,0
DN 15 **	19,0x1,5
DN 20	23,0x1,5
DN 25	29,0x1,5
DN 32	35,0x1,5
DN 40	41,0x1,5
DN 50	53,0x1,5
DN 65	70,0x2,0
DN 80	85,0x2,0
DN 100	104,0x2,0
DN 125 *	129,0x2,0
DN 150 *	154,0x2,0

\* Only in Pharmatube "S"  
\*\* Seamless and only in "XS"

Standard ISO	
Size DN	Tube Size
DN 6 **	10,0x1,0
DN 8 **	13,5x1,6
DN 10 **	17,2x1,6
DN 15	21,3x1,6
DN 20	26,9x1,6
DN 25	33,7x2,0
DN 32	42,4x2,0
DN 40	48,3x2,0
DN 50	60,3x2,0
DN 65	76,1x2,0
DN 80	88,9x2,3
DN 100 *	114,3x2,3
DN 125 *	139,7x2,3
DN 150 *	168,3x2,6
DN 200 *	219,1x2,6

\* Only in Pharmatube "S"  
\*\* Seamless and only in "XS"

Standard US OD	
Size Inch	Tube Size
1/4" **	6,35x0,91
3/8" **	9,53x0,91
1/2" **	12,7x1,65
3/4"	19,05x1,65
1"	25,4x1,65
1 1/2"	38,1x1,65
2"	50,8x1,65
2 1/2"	63,5x1,65
3"	76,2x1,65
4"	101,6x2,11

\*\*\* Seamless and only in "XS"