

Tube Tolerances

Tube type	Din	OD	Wall	
Seamless precision steel tubes	DIN 2391 Part 1	from 4mm - 30mm	+/- 0,08mm	+/- 10%
		from 32mm - 40mm	+/- 0,15mm	+/- 10%
		from 42mm - 50mm	+/- 0,20mm	+/- 10%
		from 55mm - 60mm	+/- 0,25mm	+/- 10%
		from 65mm - 70mm	+/- 0,30mm	+/- 10%
	New: EN 10305-1	from 4mm - 30mm	+/- 0,08mm	+/- 10% or +/- 0,1mm*
		from 32mm - 40mm	+/- 0,15mm	+/- 10% or +/- 0,1mm*
		from 42mm - 50mm	+/- 0,20mm	+/- 10% or +/- 0,1mm*
		from 55mm - 60mm	+/- 0,25mm	+/- 10% or +/- 0,1mm*
		from 65mm - 70mm	+/- 0,30mm	+/- 10% or +/- 0,1mm*
* the higher value applies				
Cold drawn welded precision steel tubes	DIN 2393 Part 1	from 4mm - 30mm	+/- 0,08mm	+/- 7,5% +/- 0,35mm maximum
		from 32mm - 40mm	+/- 0,15mm	+/- 7,5% +/- 0,35mm maximum
		from 42mm - 50mm	+/- 0,20mm	+/- 7,5% +/- 0,35mm maximum
		from 55mm - 60mm	+/- 0,25mm	+/- 7,5% +/- 0,35mm maximum
		from 65mm - 70mm	+/- 0,30mm	+/- 7,5% +/- 0,35mm maximum
	New: EN 10305-2	from 4mm - 30mm	+/- 0,08mm	+/- 7,5% +/- 0,35mm maximum
		from 32mm - 40mm	+/- 0,15mm	+/- 7,5% +/- 0,35mm maximum
		from 42mm - 50mm	+/- 0,20mm	+/- 7,5% +/- 0,35mm maximum
		from 55mm - 60mm	+/- 0,25mm	+/- 7,5% +/- 0,35mm maximum
		from 65mm - 70mm	+/- 0,30mm	+/- 7,5% +/- 0,35mm maximum
Welded precision steel tubes	DIN 2394 Part 1	from 4mm - 18mm	+/- 0,12mm	+/- 10% +/- 0,35mm maximum
		from 20mm - 30mm	+/- 0,15mm	+/- 10% +/- 0,35mm maximum
		from 32mm - 40mm	+/- 0,20mm	+/- 10% +/- 0,35mm maximum
		from 45mm - 55mm	+/- 0,30mm	+/- 10% +/- 0,35mm maximum
		from 60mm - 80mm	+/- 0,40mm	+/- 10% +/- 0,35mm maximum
	New: EN 10305-3	from 6mm - 19mm	+/- 0,12mm	wall < 1,5mm: +/- 0,15mm or wall > 1,5mm: +/- 10% x wall or +/- 0,35mm*
		from 20mm - 30mm	+/- 0,15mm	wall < 1,5mm: +/- 0,15mm or wall > 1,5mm: +/- 10% x wall or +/- 0,35mm*
		from 32mm - 42,4mm	+/- 0,20mm	wall < 1,5mm: +/- 0,15mm or wall > 1,5mm: +/- 10% x wall or +/- 0,35mm*
		from 44mm - 51mm	+/- 0,25mm	wall < 1,5mm: +/- 0,15mm or wall > 1,5mm: +/- 10% x wall or +/- 0,35mm*
		from 55mm - 63,5mm	+/- 0,30mm	wall < 1,5mm: +/- 0,15mm or wall > 1,5mm: +/- 10% x wall or +/- 0,35mm*
from 70mm - 76mm	+/- 0,35mm	wall < 1,5mm: +/- 0,15mm or wall > 1,5mm: +/- 10% x wall or +/- 0,35mm*		
* the lower value applies				
Seamless stainless steel tubes	DIN 2462 Part 1 Cold Drawn	OD ≤ 219,1 D2: +/- 1,0% min. +/- 0,5mm	T3: +/- 10% min. +/- 0,2mm	
		D3: +/- 0,75% min. +/- 0,3mm	T4: +/- 7,5% min. +/- 0,15mm	
		D4: +/- 0,5% min. +/- 0,1mm		
	DIN 2462 Teil 1 Warm Manuf.	44,5 ≤ OD ≤ 219,1 D1: +/- 1,5% min. +/- 0,75mm	T1: +/- 15% min. +/- 0,6mm	
		D2: +/- 1,0% min. +/- 0,5mm	T2: +/- 12,5% min. +/- 0,4mm	
	New: EN ISO 1127	D1: +/- 1,5% min. +/- 0,1mm	T1: +/- 15% min. +/- 0,6mm	
		D2: +/- 1% min. +/- 0,5mm	T2: +/- 12,5% min. +/- 0,4mm	
		D3: +/- 0,75% min. +/- 0,3mm	T3: +/- 10% min. +/- 0,2mm	
		D4: +/- 0,5% min. +/- 0,1mm	T4: +/- 7,5% min. +/- 0,15mm	
			T5: +/- 5% min. +/- 0,1mm	