

ASTM

Tolerances according to ASTM A269 and A213 a.w. (Welded and seamless tube).

Outside Diam. mm	Tol. O.D. mm	Tol. wall %	Tol. ovality mm	Tol. cut length mm
up to 12,7 mm	± 0,13 mm	± 15 %	-	+ 3,18 mm - 0 mm
12,7 mm up to 38,1 mm	± 0,13 mm	± 10 %	max, 1,65 mm	+ 3,18 mm - 0 mm
38,1 mm up to 88,9 mm	± 0,25 mm	± 10 %	max, 2,41 mm	+ 4,76 mm - 0 mm

Tolerances according to ASTM A312 (Welded and seamless st. st. pipe).

Outside diameter mm	Tolerance in the outside diameter mm
10,29 mm up to 48,26 mm	+ 0,40 mm - 0,79 mm
> 48,26 mm up to 114,30 mm	+ 0,79 mm - 0,79 mm
> 114,30 mm up to 219,08 mm	+ 1,59 mm - 0,79 mm
> 219,08 mm up to 457,20 mm	+ 2,38 mm - 0,79 mm

Tolerance in the wall thickness - 12,5% + tolerance not specified.

Tolerances according to EN/ISO 1127: D4/T3 and EN/ISO : D3/T3 (>20 mm).

Tolerance in the outside diameter		Tolerance in the wall thickness	
Classes	Tolerances	Classes	Tolerances
D0	± 2,0 %	T0	± 20,0 % / min. ± 1,0 mm
D1	± 1,5 % / min. ± 0,75 mm	T1	± 15,0 % / min. ± 0,6 mm
D2	± 1,0 % / min. ± 0,50 mm	T2	± 12,5 % / min. ± 0,4 mm
D3	± 0,75 % / min. ± 0,30 mm	T3	± 10,0 % / min. ± 0,2 mm
D4	± 0,5 % / min. ± 0,10 mm	T4	± 7,5 % / min. ± 0,15 mm
		T5	± 5,0 % / min. ± 0,1 mm