

## ASTM and ISO tolerances

### Tolerances acc. ASTM A1016 (welded and seamless pipes)

OD mm	Tol. OD mm	Tol. S %	Tol. Ovalty (mm)	Tol. Exact lengths mm
tot 12.7	± 0.13	± 15%	-	+3.18 -0
> 12.7 tot 38.1	± 0.13	± 10%	max. 1.65	+3.18 -0
> 38.1 tot 88.9	± 0.25	± 10%	max. 2.41	+4.76 -0
> 88.9 tot 139.7	± 0.38	± 10%	max. 3.81	+4.76 -0
> 139.7 tot 203.2	± 0.76	± 10%	-	+4.76 -0

### Tolerances acc. ASTM A999 (welded and seamless pipes)

OD mm	Tol. OD mm
10.29 t/m 48.26	+ 0.40 -0.79
> 48.26 t/m 114.30	+0.79 -0.79
> 114.30 t/m 219.08	+1.59 -0.79
> 219.08 t/m 457.20	+2.38 -0.79
> 457.20 t/m 609.60	+3.18 -0.79

Tolerance wall thickness -12.5% + Tolerance by weight  
For seamless and welded pipes a weight tolerance applies according ASM A 999

### Tolerances acc. EN ISO 1127 (welded and seamless pipes)

Tol. KI / CI	Outside diameter			Wall thickness		
	Tol. OD	Tol. S	Tol. Class	Tol. S	Tol. S	
D <sub>1</sub>	± 1.5% ± of / or 0.75mm <sup>1)</sup>	± 15%	T1	± 15%	of / or 0.6mm <sup>1)</sup>	
D <sub>2</sub>	± 1% ± of / or 0.5mm <sup>1)</sup>	± 12.5%	T2	± 12.5%	of / or 0.4mm <sup>1)</sup>	
D <sub>3</sub>	± 0.75% ± of / or 0.3mm <sup>1)</sup>	± 10%	T3	± 10%	of / or 0.2mm <sup>1)</sup>	
D <sub>4</sub>	± 0.5% ± of / or 0.1mm <sup>1)</sup>	± 7.5%	T4	± 7.5%	of / or 0.15mm <sup>1)</sup>	
		± 5%	T5	± 5%	of / or 0.1mm <sup>1)</sup>	

1) The highest value applies  
The tolerances on the outside diameter include ovality