

TUBE TOLERANCES



The tolerances below are for standard tubes, we can also offer parts outside of these limitations, please ask for details.

TABLE 1			
ID TOLERANCES ON ALL TUBES			
PERMISSABLE DEVIATION FROM NOMINAL INTERNAL DIAMETER OF ROUND ROLLED TUBES			
MANDREL RANGE IN mm			MAXIMUM DEVIATION, + / - IN mm
6.4	TO	30	0.15
30	TO	50	0.20
50	TO	75	0.30
75	TO	100	0.40
100	TO	150	0.50
150	TO	200	0.70
200	TO	300	1.00
300	TO	500	1.50

TABLE 2			
WALL THICKNESS TOLERANCES ON ALL TUBES			
PERMISSABLE DEVIATION FROM NOMINAL WALL THICKNESS ON ALL TUBES			
NOMINAL WALL THICKNESS IN mm			MAXIMUM DEVIATION, + / - IN mm
1.00	TO	1.50	0.15
1.50	TO	3.00	0.20
3.00	TO	6.00	0.30
6.00	TO	12.00	0.40
12.00	TO	25.00	0.50
>25.00			0.70

TABLE 3			
OD TOLERANCES ON GROUND TUBES			
PERMISSABLE DEVIATION FROM NOMINAL EXTERNAL DIAMETER OF ROUND ROLLED TUBES IN THE GROUND SECTION			
NOMINAL EXTERNAL DIAMETER IN mm			MAXIMUM DEVIATION, + / - IN mm
6.4	TO	10	0.15
10	TO	25	0.20
25	TO	50	0.25
50	TO	75	0.30
75	TO	100	0.35

ANYTHING GREATER THAN 100mm NEEDS TO BE TURNED

TABLE 4								
OD TOLERANCES ON UNGROUND TUBES								
PERMISSABLE DEVIATION FROM NOMINAL EXTERNAL DIAMETER OF ROUND ROLLED TUBES IN THE UNGROUND SECTION								
NOMINAL EXTERNAL IN mm			MAXIMUM DEVIATION, + / - IN mm					
			T1	UD	T32 T48	T36 EHT	T38 T42	CFT CC40
6.4	TO	10	0.2	0.3	0.4			0.5
10	TO	30	0.3			0.5		
30	TO	50	0.3			0.5		
50	TO	75	0.4			0.7		
75	TO	100	0.5			1		
100	TO	150	0.6			1.5		
150	TO	200	0.7			1.7		
200	TO	300	0.9			2		
300	TO	500	1.2			2.2		
>500			1.5			2.5		

TABLE 5			
OD TOLERANCES ON TURNED TUBES			
PERMISSABLE DEVIATION FROM NOMINAL EXTERNAL DIAMETER OF ROUND ROLLED TUBES IN THE GROUND SECTION			
NOMINAL EXTERNAL DIAMETER IN mm			MAXIMUM DEVIATION, + / - IN mm
50	TO	75	0.30
75	TO	100	0.35
100	TO	125	0.40
125	TO	150	0.45
150	TO	200	0.50
200	TO	250	0.60
250	TO	300	0.75

ANYTHING GREATER THAN 300mm IS UNGROUND ONLY

TABLE 6	
DEPARTURE FROM STRAIGHTNESS	
NOMINAL EXTERNAL DIAMETER	MAXIMUM DEVIATION
MM	
<8.0 mm	8 x L ²
>8.0 mm	6 x L ²

WHERE L = THE LENGTH OF THE TUBE