



STANDARD CYLINDRICAL AND CONTROLLED CONTOUR ROLLERS

These rollers are divided into three classes:

- 1st class rollers with a flat ground head
- 2nd class rollers with a flat ground head
- 2nd class rollers with a flat non-ground head

Most Common Sizes of Cylindrical Rollers

D x L (mm)	D x L (mm)	D x L (mm)	D x L (mm)	D x L (mm)	D x L (mm)	D x L (mm)	D x L (mm)
2.5x5	4x12	6x10	6.5x9	8x12	11x11	15x15	20x20
3x4	5x5	6x12	7x7	8x14	11x15	15x22	20x30
3x5	5x8	6x15	7x12	8x16	12x12	16x16	22x34
4x4	5x10	6x17.8	7x14	8x20	12x18	16x24	
4x5	5x12	6x18	7x18	9x9	13x13	17x17	
4x6	5x15	6x21.8	7.5x7.5	9x14	13x20	18x18	
4x8	6x6	6x24	8x8	10x10	14x14	18x16	
4x10	6x8	6.5x6.5	8x10	10x14	14x20	19x19	

Tolerances - 1st Class Rollers with a Flat Ground Head

Diameter

Diameters in mm	D Tolerance	D Selection Groups	Max Roundness Error	Max Orthogonality Error	Max Roughness
from 2.5 to 26	+5-10 μ	2 μ	0.8 μ	6 μ	0.1 μ Ra
from 26 to 50	+5-10 μ	3 or 4 μ	1.2 μ	10 μ	0.15 μ Ra

Length

From 3mm to 15mm : 0 - 30 μ (it is also possible to supply the lengths classified in groups of 6 μ).

From 15mm to 50mm : 0-50 μ

The first class rollers can have enhanced variants such as:

diameter selection in groups of 1 μ

super finish of the diameter to reduce surface roughness to a value of Ra=0.04 and circularity value within 0.5 μ

controlled contour "ZB" profile, that is with the roller generating lines suitably shaped towards the extremities so as to allow a better distribution of loads in the case of rollers subjected to heavy stresses

Tolerances - 2nd Class Rollers with a Flat Ground Head

Diameter

Diameters in mm	D Tolerance	D Selection Groups	Max Roundness Error	Max Orthogonality Error	Max Roughness
from 2.5 to 50	+5-10 μ	5 μ	1.5 μ	10 μ	0.15 μ Ra

Length

From 3mm to 15mm : 0 - 30 μ

From 15mm to 50mm : 0-50 μ

Tolerances - 2nd Class Rollers with a Flat Non-ground Head

Diameter

Diameters in mm	D Tolerance	D Selection Groups	Roundness	Max Roughness
from 3 to 12	+5-10 μ	in 5 ex 10 μ	2 μ	0.2 μ Ra

Length

From 3mm to 50mm : 0 - 200 μ