Geometrical Tolerances

It is inevitable that certain distortion are inherant in casting. To meet dimensional requirements the castings can be straightened or sized to the following general tolerance:

Flatness and Straightness

Dimension (mm)	Tolerance	Dimension (in.)	Tolerance
<50	±0.25	<200	±0.010
50-100	±0.38	2.00-4.00	±0.015
100-105	±0.50	4.00-6.00	±0.020
150-200	±0.75	6.00-8.00	±0.030

Circularity

Dimension (mm)	Tolerance	Dimension (in.)	Tolerance
<10	0.25	<0.50	0.010
10-25	±0.40	0.50-1.00	±0.015
25-50	±0.75	1.00-2.00	±0.023
50-100	±1.20	2.00-4.00	±0.040
100-200	±1.80	4.00-8.00	±0.060

Angle Tolerance Normally this should be $\pm\,1$ degree and should not be closer than 1/2 degree.

Machining Allowances Allow 0.80-2.0 mm for machining. For larger workpiece add 3-4 mm.