CAB WORLDWIDE

Geometric Dimensioning and Tolerancing Symbols:

Introduction:

The table below shows common symbols used to aid the user in understanding geometric dimensioning and tolerancing as per ASME Y14.5-2009. These symbols are used for specifying geometric characteristics and other dimensional requirements on engineering drawings. These geometric characteristic symbols, the tolerance value, and datum reference letters, (where applicable) are combined in a feature control frame to express a geometric tolerance.

	TYPE OF TOLERANCE	CHARACTERISTIC	SYMBOL
1	FORM	Straightness	▬
2		Flatness	▱
3		Circularity (Roundness)	○
4		Cylindricity	⌭
5	PROFILE	Profile of a Line	⌒
6		Profile of a Surface	⌓
7	ORIENTATION	Angularity	∠
8		Perpendicularity	⊥
9		Parallelism	∥
10	LOCATION	Position	⌖
11		Concentricity	◎
12		Symmetry	⌯
13	RUNOUT	Circular Runout	↗
14		Total Runout	↗↗