



Optical Polygons

Webber Optical Polygons provide an easy, accurate method of checking and calibrating angles. They are designed for use with autocollimators in measuring angle spacing.

The exclusive one-piece design provides compact, fixed master for precise angle spacing. Target faces are highly reflective and optically flat.

Chrome carbide polygons provide a hardness of Rockwell 71-73 C and a corrosion resistance 10-20 times that of 18-8 stainless steel, resulting in lifetime accuracy.

Maintenance problems are virtually eliminated due to their ruggedness and extreme stability.

A 1" mounting hole, flanged bushing, lapped washer and hold-down bolt, furnished with each unit, permit mounting the polygon in any desired attitude. Available in two accuracy grades. Furnished in case. Certificate of Calibration included.



To order polygons, specify number in the following key/sequence:

Optical Polygon OP

No./Faces

Decimal

Accuracy Grade

Example: OP 3.0 = A 3-sided optical polygon with a 0 Reference Accuracy

Optical Polygon Specifications

No. of Sides	Angle Spacing Degrees	Diameter Across Corners Inch (mm)	Height Inch (mm)	Target Size Inch (mm)	Area Sq. In.	Area Sq. Cm.
3	120	2.90" (73.6mm)	.880" (22.3mm)	.75" x .75" (19 x 19mm)	.56	3.60
4	90					
5	72					
6	60					
8	45					
9	40					
10	36					
12	30					

Optical Polygon Specifications

Accuracy Grade	Target Area Flatness*	Accuracy of Calibration (Uncertainty)	Maximum Deviation of Faces from Nominal
Reference: 0	4 μ in. (.10 μ m)	±1.0 sec.	3-12
Calibration: 1			±1.0 sec. ±2.0 sec.

* Excludes .020" (0.5mm) from edges.

All sizes: Flatness and parallelism – top and bottom – .00005"; maximum pyramidal error ±15 seconds.