

*Designed for deep-bore,
large-diameter bore
straightness applications*

The A-516-II 2-Axis Target Rolling Self-Centering Bore Adapters

Hamar Laser's new A-516-II Target is a 2-axis, self-centering target with roller-bearing measuring legs, designed for deep-bore, large-diameter bore straightness applications, such as large extruder barrels, artillery barrels and hydraulic cylinders. It can measure bores as small as 3.90 in. (99.1 mm) and as large as 30 in. (762.0 mm) for straightness and alignment.

With a 20x20 mm PSD, it has a very large measuring range for large straightness errors typically seen in long cylinders. The roller bearing measuring tips make it extremely easy to insert the target into the bore and push it deep into the cylinder up to 66 ft. (20 m). Use with Bore9 to collect the data and calculate the straightness.

Target Features:

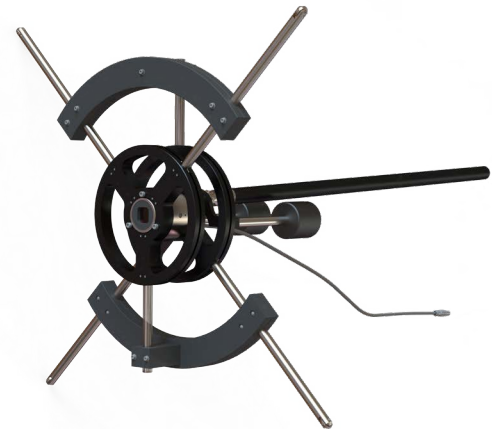
- ✦ 20x20 mm PSD, (position sensing device) with 0.001 mm resolution and < 1% linearity.
- ✦ Self-centering bore adapters that use A-516-II-A/B/C Customized Bore Adapter Rings and M-516-II-CLR-ID Measuring Legs with roller-bearing measuring tips for easy insertion into very deep bores.
- ✦ Can perform straightness checks on gun barrels or cylinders up to 66 ft. (20 m) long
- ✦ For bores using the roller tips, the A-516-II can accommodate bores from to Ø3.90 in. (Ø99.1 mm) to Ø29.5 in. (Ø750.0 mm). For bores using non-roller tips, the A-516-II can accommodate bores from Ø2.68 in. (Ø68.0 mm) to Ø29.5 in. (Ø750.0 mm). Quick connect poles to push target deep into the bore.
- ✦ Supports our R-1307 2-Axis Readouts.
- ✦ Use with Bore9 Software to record alignment data, calculate the straightness and plot the alignment data points.

Applications:

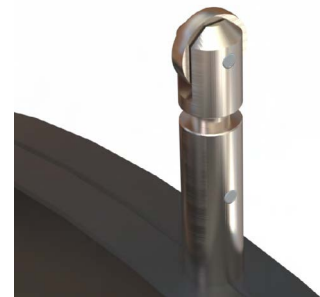
- ✦ Straightness checks on large artillery barrels, large extruder barrels and cylinders.



A-516-II 2-Axis Self-Centering Target



A-516-II with A-516-II-TA-C Large Bore Adapter/Counterweight



Roller-Bearing Measuring Tip



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[Click here](#) for a list of our distributors.



Specifications

The A-516-II 2-Axis Self-Centering Target

Weight:	1.7 lbs. (.78 kg)
Material:	440C Stainless Steel
Resolution:	0.001 mm
Target Cell Error:	<1% over the effective measuring range
Bore Diameter Range:	Roller Measuring Tips: 3.90 in. (99.1 mm) to 29.5 in. (750.0 mm) Non-Roller Measuring Tips: Ø2.68 in. (Ø68.0 mm) to Ø29.5 in. (Ø750.0 mm)
Bore Adapters:	Use A-516-II-A/B/C Customized Bore Adapter Rings from below. Then order 1 set of customized M-516-II-CLR-ID or M-516-II-CL-ID Measuring Legs for each bore ID. <ul style="list-style-type: none"> • Ø3.9-9.8 in. (Ø100-250 mm) bores - use A-516-II-TA-A • Ø9.8 -19.7 in. (Ø250-500 mm) bores - use A-516-II-TA-B • Ø19.7-29.5 in. (Ø500-750 mm) bores - use A-516-II-TA-C
Bore Diameter Range:	Each bore adapter can accommodate ± .040 in. (± 1 mm) diameter change and still self center.
PSD Size and Type:	.78 x .78 in. (20 x 20 mm) 2-axis
Measuring Range (L-705, L-706, L-708):	± .30 in. (7.5 mm)
Measuring Range (L-708LD):	± .10 in. (2.5 mm)
Cord Dimensions	33 ft. (10 m) - Use T-231AL or T-231BL Extension Cords for longer barrels.
Housing OD	2.5 in. (63.5 mm)
PSD Concentricity to Housing	.0005 in. (0.01 mm)

