



METROLOGYWORKS®



SMR_S

Spherically Mounted RetroReflector

Americas, Asia-Pacific
sales@metrologyworks.com
Phone: 816-650-2266

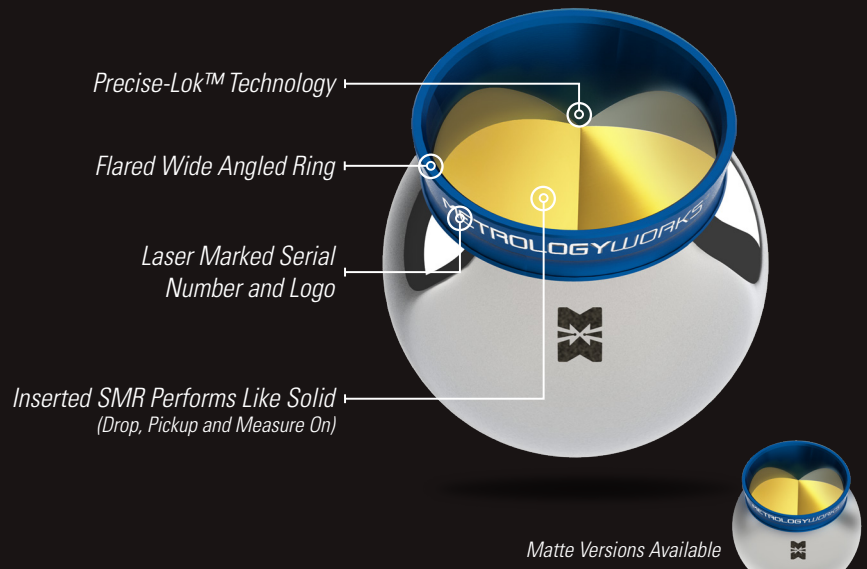
Europe
sales.eu@metrologyworks.com
Phone: +49 33845 48994 0

www.MetrologyWorks.com

TOUGH PROBE SMR

- ✦ Single Piece Aluminum Insert
- ✦ Rhino™ Series - Precision & Toughness
- ✦ 1.5", 0.875", 0.5" Sizes
- ✦ Compatible with All OEM Laser Trackers
- ✦ Affordably Priced
- ✦ Gold Optical Surface
- ✦ Insert Guaranteed Not to Pop Out

Rhino  Series®

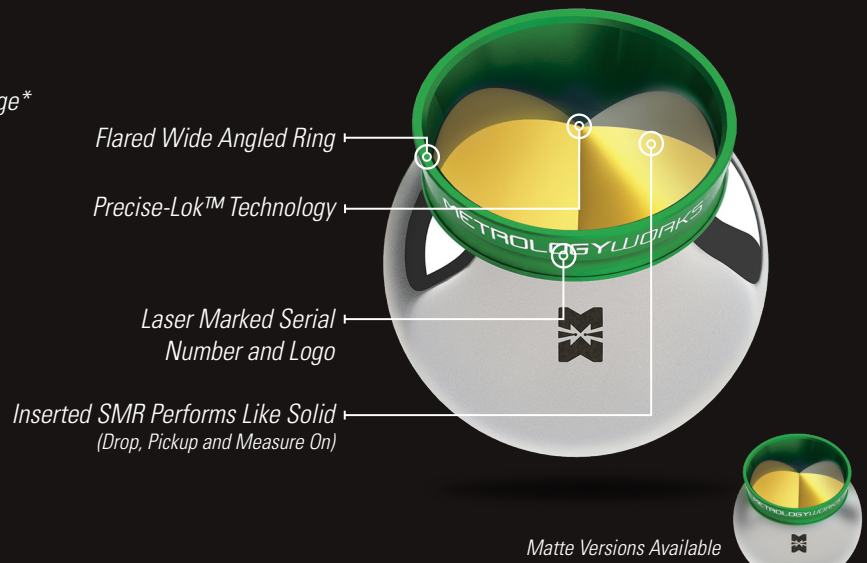


SEMI-SOLID SMR

- ✦ Single Piece Titanium Insert
- ✦ More Thermally Stable Over Larger Temperature Range*
- ✦ 1.5", 0.875", 0.5" Sizes
- ✦ Greater Fracture Toughness and Hardness*
- ✦ Semi-Solid Construction
- ✦ Gold Optical Surface
- ✦ Insert Guaranteed Not to Pop Out
- ✦ Toughest Inserted SMR on the Market

Gladiator  Series

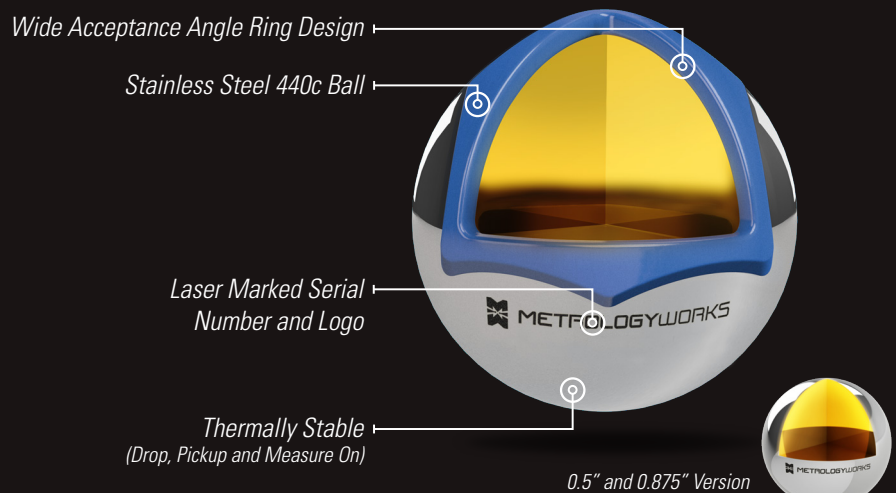
 NEXT GENERATION
TITANIUM INSERT



*As Compared to Aluminum

BREAK PROOF SMR

- ✦ Solid Coated Ball
- ✦ Unbreakable
- ✦ 1.5", 0.875", 0.5" Sizes
- ✦ Compatible with All OEM Laser Trackers
- ✦ Affordably Priced
- ✦ Gold Optical Surface



GLASS ELEMENT SMR - SILVERBACK

- ✦ Large Glass Optic
- ✦ Protected Glass Optic - 3 Piece Construction
- ✦ Flared Wide Angled Ring for Increased Entry Angle
- ✦ Isolation Core for Added Stability and Durability
- ✦ 1.5", 0.875", 0.5" Sizes
- ✦ Compatible with All OEM Laser Trackers

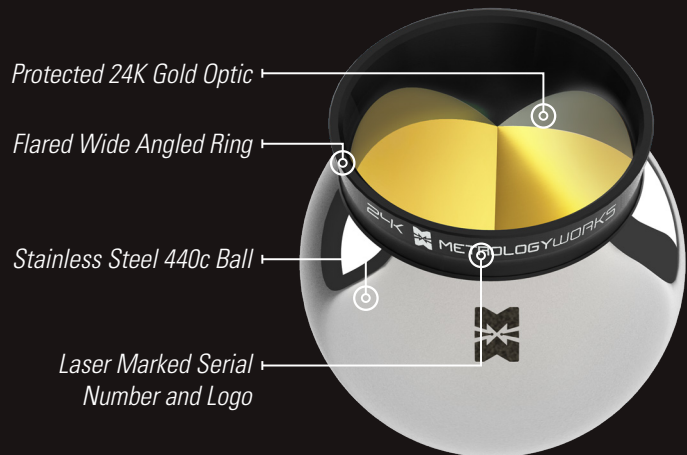
Silverback  Series®



GLASS ELEMENT SMR - 24K

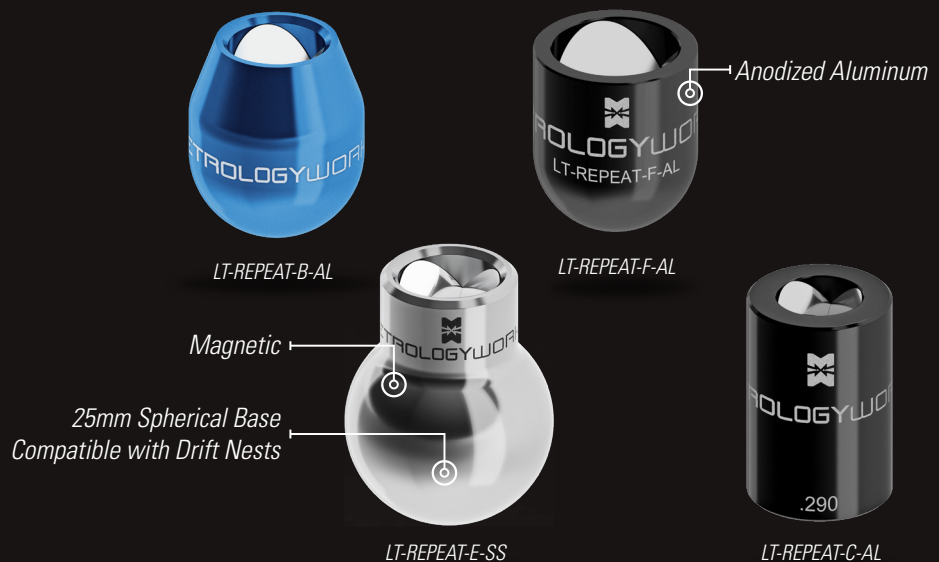
- ✦ Protected 24 Karat Gold Coating
- ✦ High Reflectivity
- ✦ Ultra-stable Coating Will Not Corrode
- ✦ Performs Well in Long Distance Applications
- ✦ Large Glass Optic
- ✦ Protected Glass Optic - 3 Piece Construction
- ✦ Flared Wide Angled Ring for Increased Entry Angle
- ✦ Isolation Core for Added Stability and Durability
- ✦ 1.5", 0.875", 0.5" Sizes
- ✦ Compatible with All OEM Laser Trackers

24K™



REPEAT TARGETS

- ✦ Easy to Clean Protected Optics
- ✦ Great for Drift Checks
- ✦ Glue in Place
- ✦ Aluminum or Stainless Steel Housings



LASER TRACKER TOOLING

- Precision Machining
- Three Point Contact
- Hardened Stainless Steel or Anodized Aluminum
- Certified and Traceable
- Custom Parts Possible
- Laser Marked
- Serial Number for Traceability



Edge Nest Configuration



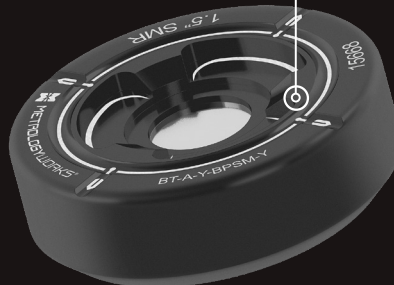
Negative Nest Configuration



Bolt Down Drift Nest



Standard Drift Nest



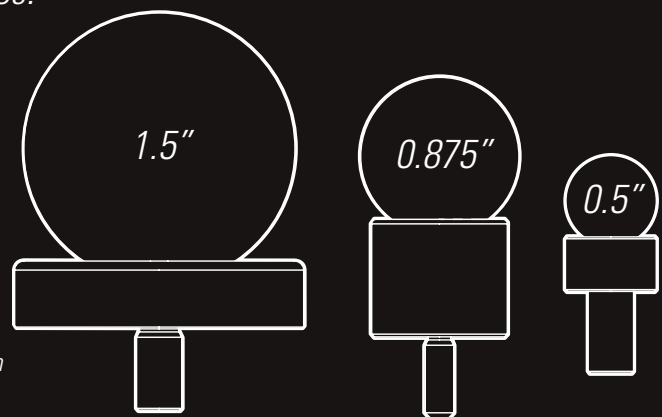
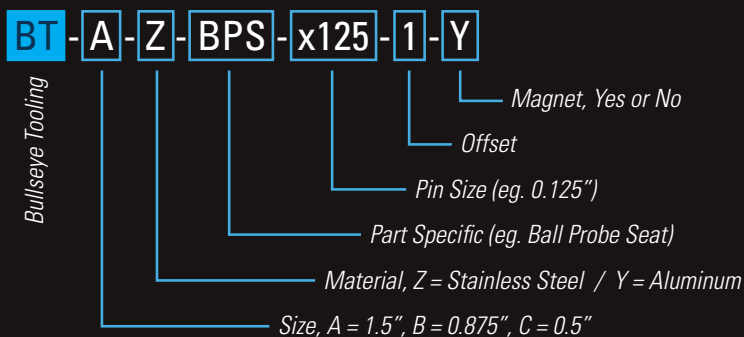
Pin Nest Configuration



SMR Lanyards available for all Versions and Sizes



Part Number Selection & Laser Tracker Tooling Sizes:



SPECIFICATIONS

SMR_S

Spherically Mounted RetroReflector

Break Proof SMR - Solid

Product Code	Size	SMR Description	Centering Accuracy - Inches (mm)
LTBP-A-Z-SO-SA	1.5	Solid Standard Accuracy	±0.0005" or Better (0.0127mm)
LTBP-A-Z-SO-MA	1.5	Solid Mid Accuracy	±0.0003" or Better (0.00762mm)
LTBP-A-Z-SO-HA	1.5	Solid High Accuracy	±0.00015" or Better (0.00381mm)
LTBP-B-Z-SO-SA	0.875	Solid Standard Accuracy	±0.00125" or Better (0.03175mm)
LTBP-B-Z-SO-MA	0.875	Solid Mid Accuracy	±0.0006" or Better (0.01524mm)
LTBP-B-Z-SO-HA	0.875	Solid High Accuracy	±0.0002" or Better (0.00508mm)
LTBP-C-Z-SO-SA	0.5	Solid Standard Accuracy	±0.00125" or Better (0.03175mm)
LTBP-C-Z-SO-MA	0.5	Solid Mid Accuracy	±0.0006" or Better (0.01524mm)
LTBP-C-Z-SO-HA	0.5	Solid High Accuracy	±0.0002" or Better (0.00508mm)

Semi-Solid - Gladiator SMR - Titanium Insert

Product Code	Size	SMR Description	Centering Accuracy - Inches (mm)
LTBP-A-Z-GS-SA	1.5	Semi-Solid Probe Standard Accuracy	±0.0005" or Better (0.0127mm)
LTBP-A-Z-GS-MA	1.5	Semi-Solid Probe Mid Accuracy	±0.0003" or Better (0.00762mm)
LTBP-A-Z-GS-HA	1.5	Semi-Solid Probe High Accuracy	±0.0001" or Better (0.00254mm)
LTBP-B-Z-GS-SA	0.875	Semi-Solid Probe Standard Accuracy	±0.0005" or Better (0.0127mm)
LTBP-B-Z-GS-MA	0.875	Semi-Solid Probe Mid Accuracy	±0.0003" or Better (0.00762mm)
LTBP-B-Z-GS-HA	0.875	Semi-Solid Probe High Accuracy	±0.0001" or Better (0.00254mm)
LTBP-C-Z-GS-SA	0.5	Semi-Solid Probe Standard Accuracy	±0.0005" or Better (0.0127mm)
LTBP-C-Z-GS-MA	0.5	Semi-Solid Probe Mid Accuracy	±0.0003" or Better (0.00762mm)
LTBP-C-Z-GS-HA	0.5	Semi-Solid Probe High Accuracy	±0.0001" or Better (0.00254mm)

Also available in Matte finish on request - Example PN: LTBP-A-**M**-GS-SA"

Tough Probe SMR - Rhino SMR - Aluminum Insert

Product Code	Size	SMR Description	Centering Accuracy - Inches (mm)
LTBP-A-Z-RS-SA	1.5	Tough Probe Standard Accuracy	±0.0005" or Better (0.0127mm)
LTBP-A-Z-RS-MA	1.5	Tough Probe Mid Accuracy	±0.0003" or Better (0.00762mm)
LTBP-A-Z-RS-HA	1.5	Tough Probe High Accuracy	±0.0001" or Better (0.00254mm)
LTBP-B-Z-RS-SA	0.875	Tough Probe Standard Accuracy	±0.0005" or Better (0.0127mm)
LTBP-B-Z-RS-MA	0.875	Tough Probe Mid Accuracy	±0.0003" or Better (0.00762mm)
LTBP-B-Z-RS-HA	0.875	Tough Probe High Accuracy	±0.0001" or Better (0.00254mm)
LTBP-C-Z-RS-SA	0.5	Tough Probe Standard Accuracy	±0.0005" or Better (0.0127mm)
LTBP-C-Z-RS-MA	0.5	Tough Probe Mid Accuracy	±0.0003" or Better (0.00762mm)
LTBP-C-Z-RS-HA	0.5	Tough Probe High Accuracy	±0.0001" or Better (0.00254mm)

Also available in Matte finish on request - Example PN: LTBP-A-**M**-RS-SA"

All SMRs are held to the following specifications:

Sphericity ± 0.00015" (0.00381mm)

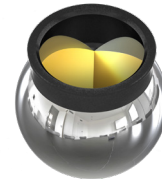
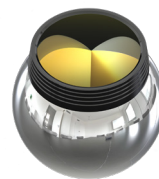
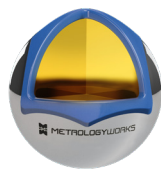
Radius ± 0.0001" (1.00254) of Nominal

Dihedral Angles: 1.5" ± 5 Arcseconds, 0.875" and 0.5" ± 8.5 Arcseconds

Note: All SMRs Ship with Centering Certificate

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SMR COMPARISON CHART-SOLID & INSERTED SMRs



SMR	Solid	Gladiator	Rhino	Competitor A	Competitor F
Removable Ring	✗	✓	✓	✗	✓
Bare Gold Optical Coating	✓	✓	✓	✓	✓
Insert Material	N/A	TITANIUM	Aluminum	Aluminum	Aluminum
Precise-Lok™ Technology	N/A	✓	✓	✗	✗
Ball Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel

Glass Element SMR - Silverback

Product Code	Size	SMR Description	Centering Accuracy - Inches (mm)
LTBP-A-Z-SB-SA	1.5	Standard Accuracy	±0.0005" or Better (0.0127mm)
LTBP-A-Z-SB-MA	1.5	Mid Accuracy	±0.0003" or Better (0.00762mm)
LTBP-A-Z-SB-HA	1.5	High Accuracy	±0.0001" or Better (0.00254mm)
LTBP-B-Z-SB-SA	0.875	Standard Accuracy	±0.0005" or Better (0.0127mm)
LTBP-B-Z-SB-MA	0.875	Mid Accuracy	±0.0003" or Better (0.00762mm)
LTBP-B-Z-SB-HA	0.875	High Accuracy	±0.0001" or Better (0.00254mm)
LTBP-C-Z-SB-SA	0.5	Standard Accuracy	±0.0005" or Better (0.0127mm)
LTBP-C-Z-SB-MA	0.5	Mid Accuracy	±0.0003" or Better (0.00762mm)
LTBP-C-Z-SB-HA	0.5	High Accuracy	±0.0001" or Better (0.00254mm)

Glass Element SMR - 24K

Product Code	Size	SMR Description	Centering Accuracy - Inches (mm)
LTBP-A-Z-24-SA	1.5	Standard Accuracy	±0.0005" or Better (0.0127mm)
LTBP-A-Z-24-MA	1.5	Mid Accuracy	±0.0003" or Better (0.00762mm)
LTBP-A-Z-24-HA	1.5	High Accuracy	±0.0001" or Better (0.00254mm)
LTBP-B-Z-24-SA	0.875	Standard Accuracy	±0.0005" or Better (0.0127mm)
LTBP-B-Z-24-MA	0.875	Mid Accuracy	±0.0003" or Better (0.00762mm)
LTBP-B-Z-24-HA	0.875	High Accuracy	±0.0001" or Better (0.00254mm)
LTBP-C-Z-24-SA	0.5	Standard Accuracy	±0.0005" or Better (0.0127mm)
LTBP-C-Z-24-MA	0.5	Mid Accuracy	±0.0003" or Better (0.00762mm)
LTBP-C-Z-24-HA	0.5	High Accuracy	±0.0001" or Better (0.00254mm)

Optional: LTBP-CASE / Laser Tracker Ball Probe Protective Case / Holds 2 SMRs of Any Size