



UNDERHILL
SINCE 1913

Laser Trackers

LEICA AT-403



ULTRA-PRECISE
3D MEASUREMENT
ANYWHERE

Underhill utilizes the Leica AT-403, a high-performance, portable laser tracker designed for both industrial and field environments. This advanced technology enables measurement of large-scale objects and assemblies with micron-level precision, delivering metrology-grade accuracy where reliability is critical.

KEY APPLICATIONS

- Hydro turbine alignment
- Dam gate and spillway geometry verification
- Tunnel boring machine guidance and setup
- Hydroelectric component fit checks
- Large equipment or jig calibration
- Structural deformation monitoring

UNMATCHED ACCURACY

With a typical 3D measurement accuracy of $\pm 15 \mu\text{m} + 6 \mu\text{m}/\text{m}$, the AT-403 delivers results far beyond the capability of total stations or scanners. Using a combination of absolute and interferometric distance measurement, it provides both rapid acquisition and extreme precision — even over long distances up to 320 m.

WHY IT'S UNIQUE

Unlike conventional survey instruments, the AT-403 bridges the gap between industrial metrology and field surveying. It allows Underhill's teams to:

- Perform sub-millimeter alignment on structures hundreds of metres long
- Integrate real-time QA/QC into construction workflows
- Capture 3D coordinate data for modeling, fabrication verification, and as-built records

This capability makes the Leica AT-403 a cornerstone of Underhill's precision measurement and industrial alignment services.



Combining Hexagon's Leica AT-403 with their Spatial Analyzer software allows Underhill to undertake complex inspections, perform advanced data analysis, and quickly verify measurements.