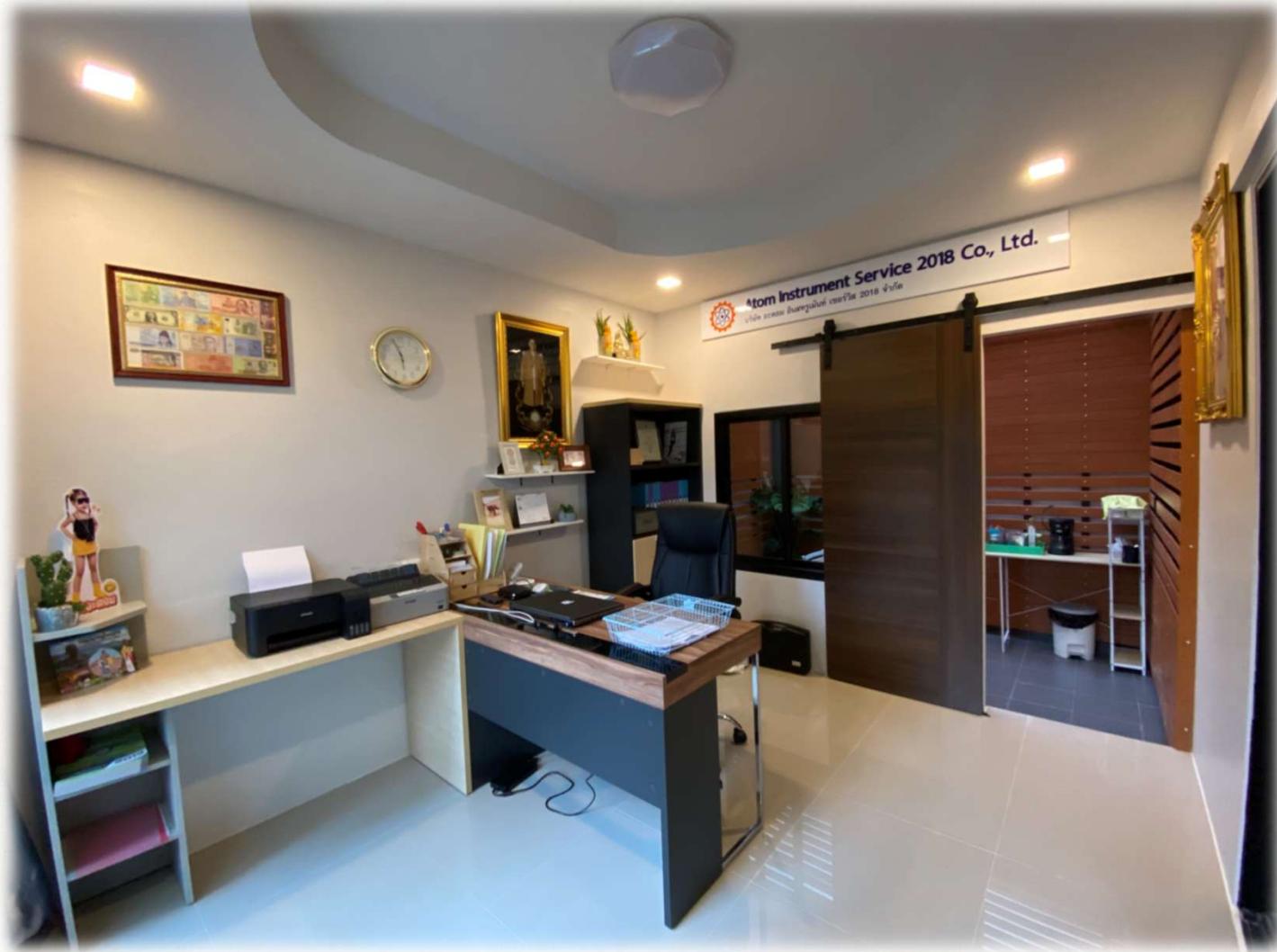


ATOM INSTRUMENT SERVICE 2018 CO., LTD

บริษัท อะตอม อินสตรูमेंท์ เซอร์วิส 2018 จำกัด





Company Profile: Atom Instrument Service 2018 Co., Ltd.

About Us

Atom Instrument Service 2018 Co., Ltd. was established in 2018 with a mission to provide comprehensive precision measurement and inspection services across various industries. We specialize in delivering innovative and high-efficiency solutions to support the operational needs of leading industries in Thailand and beyond.

Vision and Mission

- **Vision:**
To be the leading provider of precision measurement and inspection services in Southeast Asia, focusing on innovation and technology that meets the diverse needs of our clients.
- **Mission:**
 - To offer end-to-end services, including instrument sales and rentals, training, parts inspection, and production line setup and verification.
 - To deliver accurate and efficient solutions that enhance production capabilities and minimize errors in operational processes.
 - To build long-term relationships with clients through reliable and high-quality services.

CORE SERVICES

1. Portable CMM Instrument Sales and Rental Services

We provide portable Coordinate Measuring Machines (CMMs) for precise dimensional measurements across industries such as aerospace, automotive, and energy.

2. Training Services

- Specialized training for operating Portable CMM Arms and Leica Trackers.
- Software proficiency training in PolyWorks, PC-DMIS, and SpatialAnalyzer.
- Calibration and adjustment services to ensure optimal instrument performance.

3. Parts Inspection Services

- Precision inspection of parts to ensure compliance with quality standards and specifications.

4. Production Line and Machine Installation: Position Adjustment and Verification

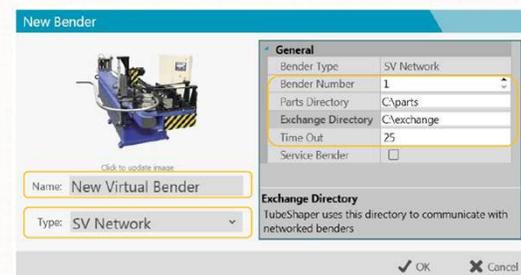
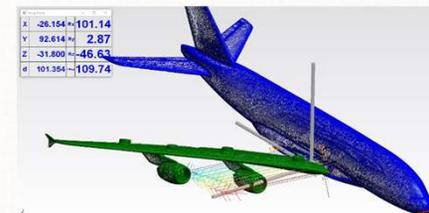
- Expertise in adjusting and verifying the installation positions of production lines and machinery to ensure accuracy and operational efficiency.

5. 3D Scanning and Reverse Engineering Services

- High-precision 3D scanning and reverse engineering solutions to support product design, development, and optimization.

6. Tube Inspection and Bender Machine Calibration Services

- Inspection of tubes and calibration of tube bender machines to ensure precision in fabrication and machine performance.



OUR SERVICE PLAN

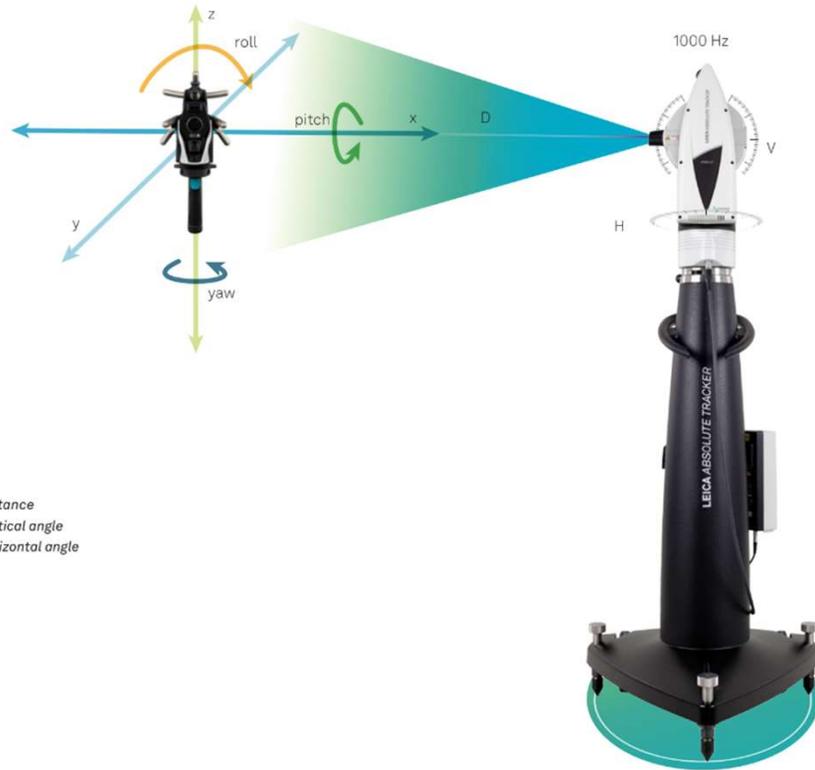
CONCEPT DATA FROM CUSTOMER

PROGRAM INSPECTION DESIGN

PARTS MEASUREMENT

Data reports to CUSTOMER

TOOLS AND TECHNOLOGIES



D: distance
V: vertical angle
H: horizontal angle



-Leica Absolute Tracker AT500 Probing.

Accuracy Systems : Reflector* $U(x,y,z) = \pm 15 \mu\text{m} + 6 \mu\text{m}/\text{m}$

Leica B-Probe Plus $U(x,y,z) = \pm 0.1\text{mm} (\pm 0.008'')$

Absolute Distance Performance : $\pm 10 \mu\text{m} (\pm 0.00039'')$

Range Measurement.

Typical Reflector Measurement Volume (ϕ) 320 m.

Minimum Reflector Measurement Distance < 0.8 m.

Power Management.

'Internal Lithium-ion battery with 8-hour typical runtime

External AC power supply.



Portable Absolute Arm.

Certifying absolute accuracy ISO 10360-12

Absolute Arm 7-Axis accuracy and size specification					
Model	E_{UNI}^1	P_{SIZE}^2	L_{DIA}^3	P_{FORM}^4	RS6 SSA ⁵
8525-7	0,031 mm	0,012 mm	0,048 mm	0,025 mm	0,047 mm

Range Measurement.

Measurement Volume Max reach (ø) 2.98 m.

Absolute Arm technical specification

Operating Temperature +5° to +40°C

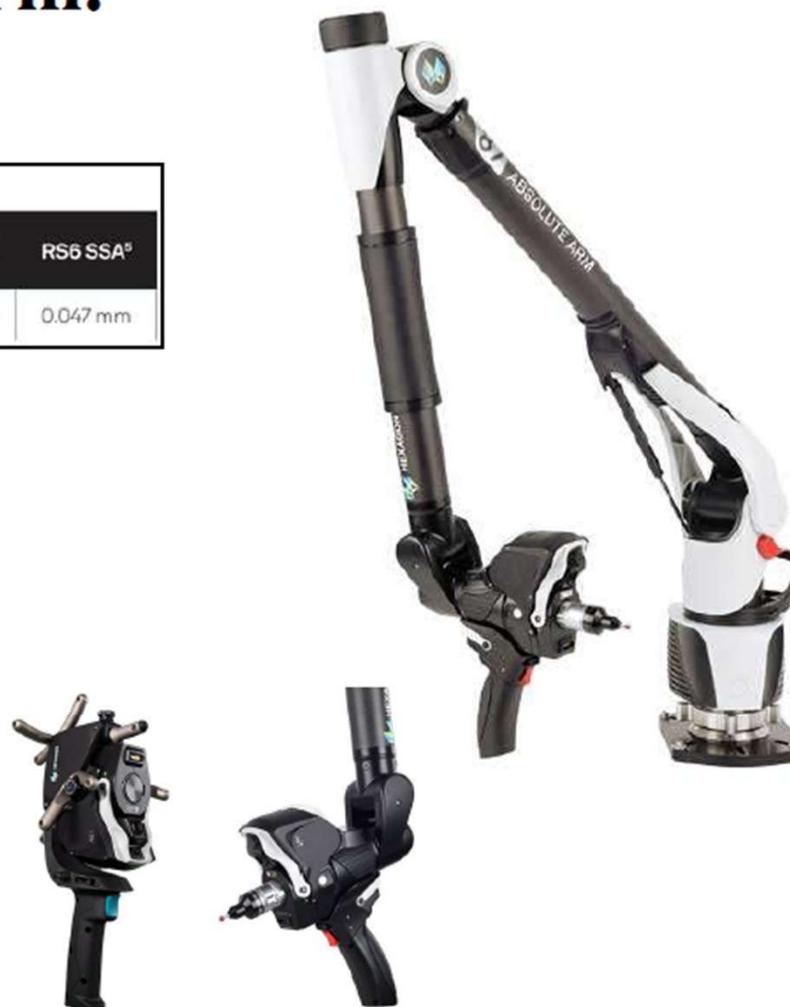
Storage Temperature -30° to +70°C

Operational Elevation up to 2000 m

Relative Humidity 10–90% non-condensing

Marks of Conformity CE – FCC – IC

Power Requirement 110–240 V





3D Alignment
AtomtrackMs.com



Compact and Wireless



Intelligent, Wireless and Palm-Sized 3D Scanner

SIMSCAN-E

PRECISION IN YOUR PALM

Precision in Your Palm

Dimension
203 mm × 80 mm × 44 mm

Weight
600 g

Edge Computing
Wireless Data Transfer



81 Blue Laser Lines
6,300,000 measurements/s

Dual-Power Design

Excellent for Narrow Spaces

Its **short-distance camera design**, with a **steep view angle**, greatly enhances the ability to scan hidden areas such as **gaps, slots, deep holes, and channels**. This significantly improves data integrity, providing more complete 3D data for further design, inspection, analysis, and more.



SIMSCAN-E features **large-capacity batteries** that offer a long operating time. Its **dual-power design** lets users easily swap batteries without interrupting the scanning process. The **intelligent battery level indicator** keeps you informed throughout the scanning process. Its **detachable charging base** allows for seamless switching between **wireless and wired modes**, adapting to different scenarios and needs.

Diverse Operating Modes

Ultra-fast scanning

63 blue laser lines for efficient scanning to evaluate the geometry and dimensions of parts quickly.



Hyperfine scanning

17 parallel blue laser lines for swift detail capturing of intricate features and complex structures.



Deep hole scanning

1 blue laser line for measuring deep holes and hard-to-reach areas.



Type	SIMSCAN-E	
Scan mode	Ultra-fast scanning	63 blue laser lines (Triple Cross Technology)
	Hyperfine scanning	17 parallel laser lines
	Deep hole scanning	1 extra blue laser line
Accuracy ⁽¹⁾	Up to 0.020 mm	
Scanning rate up to	6,300,000 measurements/s	
Scanning area up to	700 mm × 600 mm	
Laser class	Class II (eye-safe)	
Resolution up to	0.020 mm	
Volume accuracy ⁽²⁾	Standard	0.015 mm + 0.035 mm/m
	Paired with MSCAN-L15	0.015 mm + 0.012 mm/m
Stand-off distance	300 mm	
Depth of field	550 mm	
Output formats	.stl, .obj, .ply, .asc, .igs, .txt, .mk2, .umk and etc.	
Dimensions	203 mm × 80 mm × 44 mm	
Weight	600 g	
Operating temperature range	-10°C-40°C	
Operating humidity range (non-condensing)	10-90% RH	
Interface mode	USB3-B	
Patents	CN204329903U, CN104501740B, CN204854633U, CN204944431U, CN204902788U, CN105068384B, CN105049664B, CN204902784U, CN204902785U, CN106403845B, CN110030946B, CN212300269U, CN211904059U, CN211696268U, CN306953019S, CN12606697U, CN306321502S	

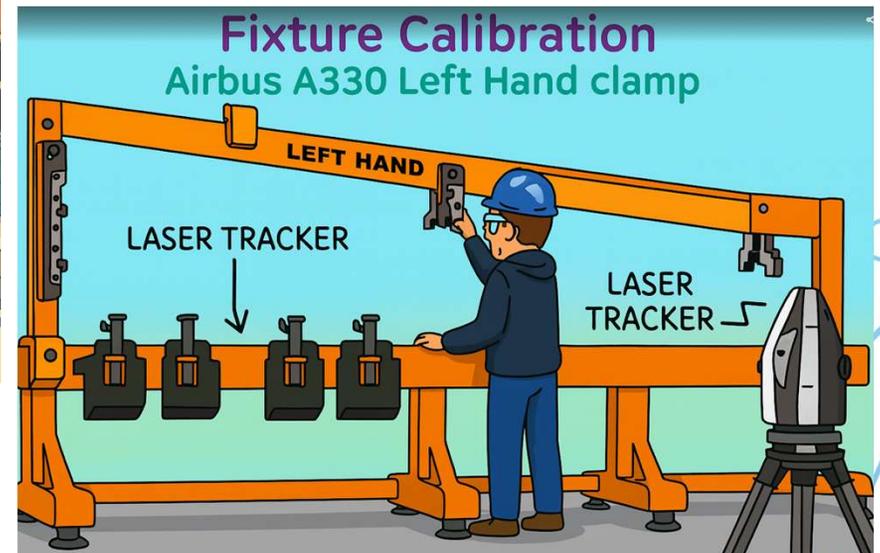
(1) ISO 17025 accredited: Based on VDI/VDE 2634 Part 3 standard and JJF 1961 specification, probing error (size) (PS) performance is evaluated.
(2) ISO 17025 accredited: Based on VDI/VDE 2634 Part 3 standard and JJF 1961 specification, sphere spacing error (SD) performance is evaluated.

OUR CLIENTS



- AAR COMPONENT SERVICES (THAILAND) LTD.

* AIRBUS FIXTURE CALIBRATION WITH LEICA TRACKER.





- CATERPILLAR (THAILAND)LIMITED. UNDERGROUND MINING

** PARTS & JIG FIXTURE INSPECTION WITH LEICA TRACKER AND PORTABLE ARM*



- AUTO ALLIANCE (THAILAND) COMPANY LIMITED

****ROBOT BODY ASSEMBLY LINE ALIGNMENT WITH LEICA TRACKER.***



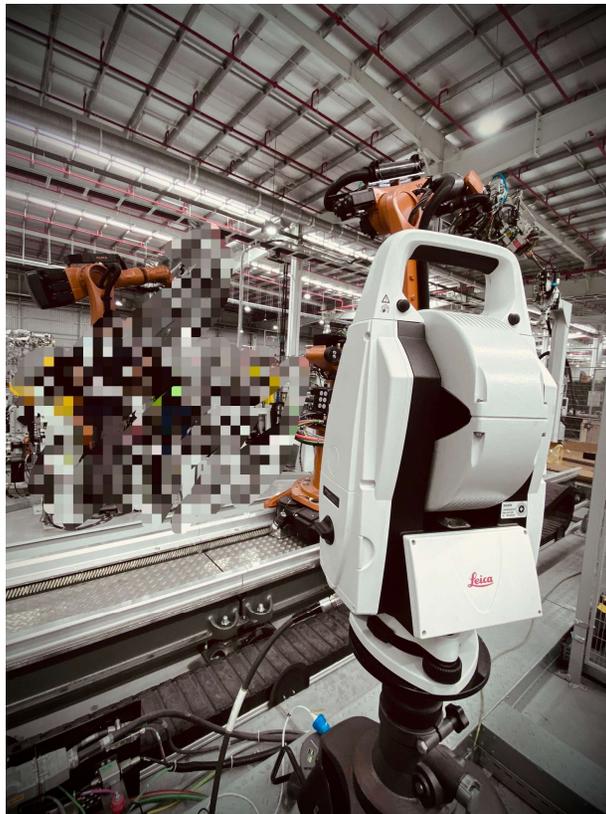


**BMW Manufacturing
(Thailand) Amata City,
Rayong**

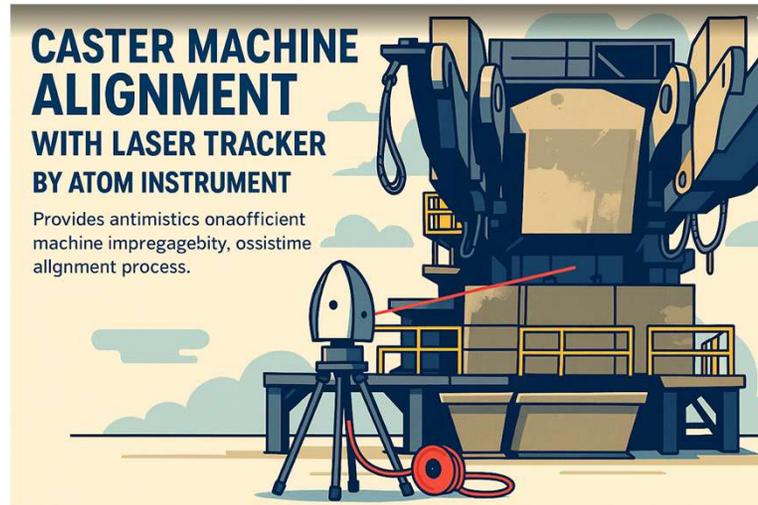
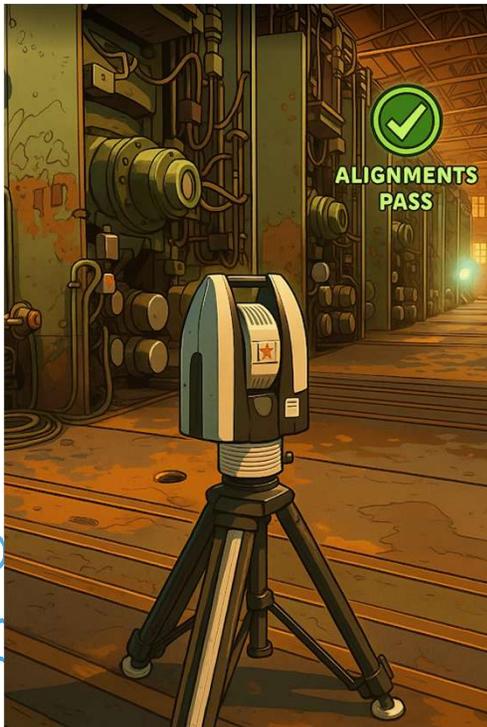


- BMW MANUFACTURING (THAILAND) CO., LTD.

***ROBOT BODY ASSEMBLY LINE ALIGNMENT WITH LEICA TRACKER.**



- *MOLD & SEGMENTS LASER TRACKER CHECK.
- *MILL STAND CHECK ALIGNMENT HSM AREA (RM TO DOWN COILER)
 - MEASURE ELEVATION LEVEL WATER FLANGE OF SEGMENT.
 - MEASURE THE SETTING PLATE OF THE SEGMENT.
 - OSCILLATING CYLINDER POSITION CHECK.



*ME-MSD CHECK ALIGNMENT HSM AREA (RM TO DOWN COILER)

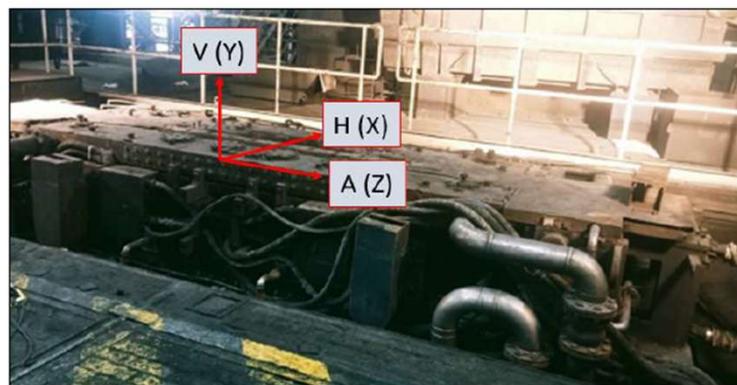


Figure 01: Direction measurement

Vibration directions are described in this report as follows:

- Horizontal direction (X Axis).
- Vertical direction (Y Axis).
- Axial direction (Z Axis).

Importance of Maintenance in Tire Production with Laser Tracker

- **Precision & Quality**
Correct machine alignment ensures consistent tire performance
- **Efficiency**
Early detection of issues reduces downtime
- **Durability**
Proper alignment extends equipment lifespan
- **Safety**
Reliable machines create a safer workplace



- *Laser tracker technology provides high accuracy and fast measurement, making maintenance*



- PREPACK (THAILAND) CO. LTD

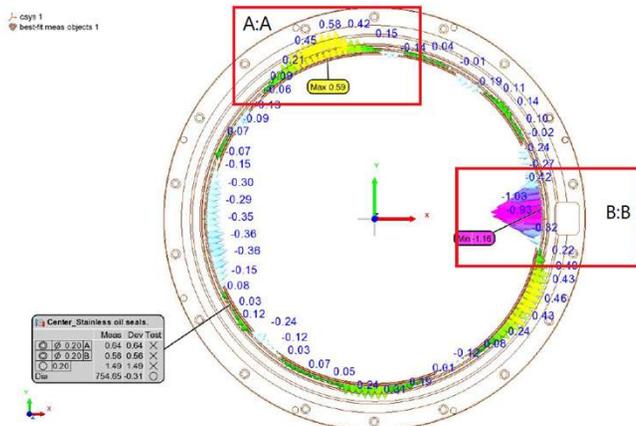
***BEIREN LINE MACHINE 3D ALIGNMENT CHECK .**



- VALMET CO., LTD.

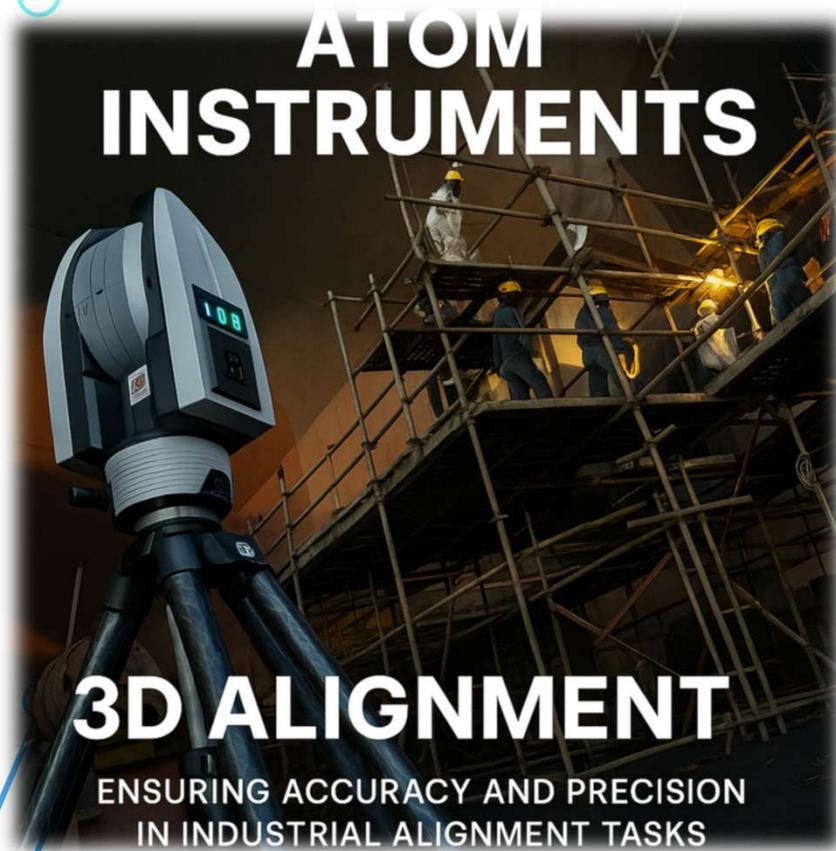
*HOUSING BEARING INSPECTION WITH PORTABLE CMM ARM.

*HOUSING BEARING 3D SCANNING TO CAD REVERSE.

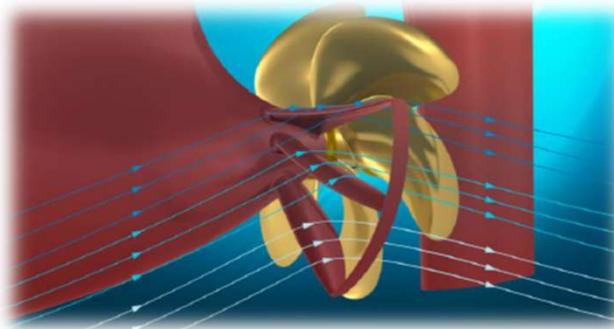


-ENERGOFLOW 3D ALIGNMENTS

**ATOM
INSTRUMENTS**



3D ALIGNMENT
ENSURING ACCURACY AND PRECISION
IN INDUSTRIAL ALIGNMENT TASKS

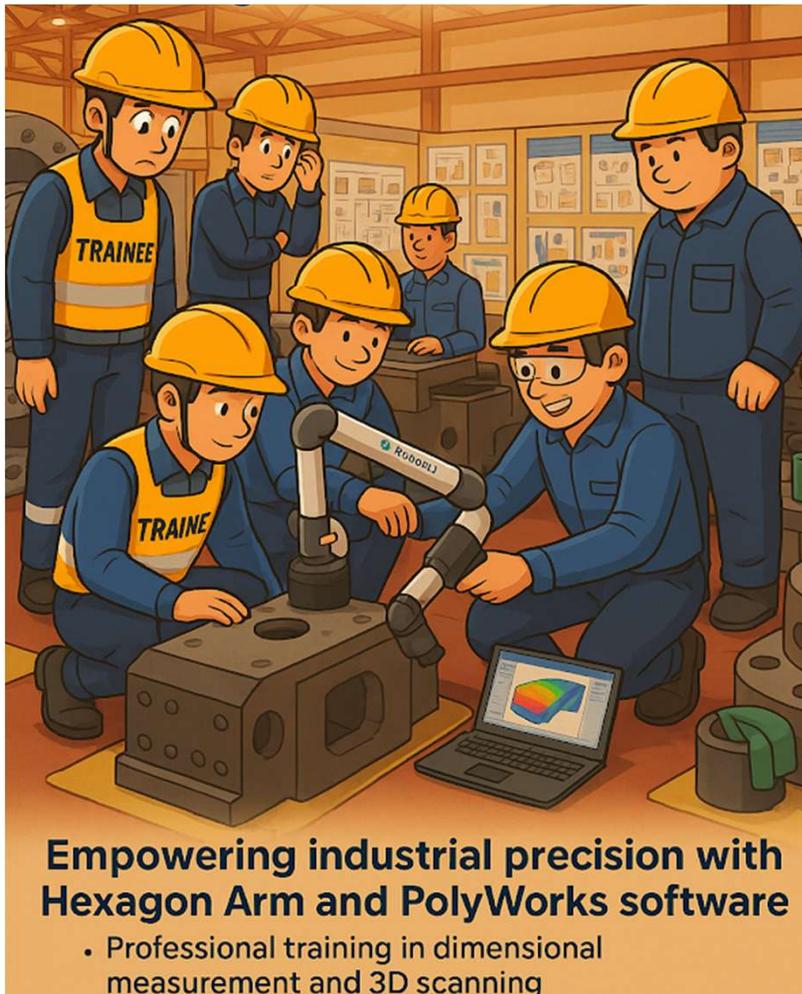




NIPPON STEEL
NS-SUS

NS-SIAM UNITED STEEL CO., LTD.

-ROLL SHOP ALIGNMENTS WITH 3D PORTABLE ARM



**Empowering industrial precision with
Hexagon Arm and PolyWorks software**

- Professional training in dimensional measurement and 3D scanning



HDMC (THAILAND) CO.,LTD

-INCOMING PARTS INSPECTION WITH CMM AND 3D SCAN.

Precision Inspection of Harley Motorcycles Using CMM & 3D Scanners



Accurate measurements essential for quality control and manufacturing perfection

Conclusion

- **Atom Instrument Service 2018 Co., Ltd.** is committed to being a trusted partner in precision measurement and inspection services. With a team of experts and state-of-the-art tools, we are dedicated to delivering solutions that meet the unique needs of our clients, ensuring enhanced productivity and accuracy in their operations.

Contact Information

- **Address:** 29/24 M Modern Home Bowin, Moo 8, Bowin, Sriracha, Chonburi 20230
- **Phone:** +66 89-054-1504
- **Email:** atom2018service@atominstruments.com
- **Contact Person:** Mr. Orots Muangtan (General Manager)
Email: orots.muangtan@atominstruments.com
- **Website:** www.atomtrackms.com



**THANK
CUSTOMER**