HEXAGON

Product catalogue

Absolute Arm systems and accessories

Version 2.5





Symbols

☑ : standard delivery

✓ : compatible with the item or accessory

– : incompatible with the item or accessory

O : mandatory accessory

opt : optional accessory

: not in standard delivery

Definition

V2P and V3P: Major items (Absolute Arms or Kits) are IP ready

V2 : Major items in the kit are NOT IP ready

This catalogue contains the complete range of products and accessories available for Absolute Arm systems from Hexagon. Whatever the industry or application, the Absolute Arm has a solution.

All systems and accessories offer the same high-end, straight-forward design and quality users expect from Hexagon products.



Visit our shop

| shop.hexagonmi.com

Hexagon Manufacturing Intelligence's online shop offers a streamlined search, order, and delivery service for a wide range of accessories and spare parts in many countries worldwide. Your benefits:

- Quickly find the right inspection solution with the shop's state-of-the-art search function: filter by price, radius, thread, and other criteria to pinpoint the exact product required
- Fast UPS dispatch
- Easy bulk purchase via CSV file uploads
- Convenient payment – on account or by credit card

Whether you're buying in bulk or single items, shop.hexagonmi.com takes the time and stress out of securing the measuring equipment you need.

Please direct any questions about Hexagon products or accessories to an authorised local sales representative to receive guidance and assistance in making an appropriate purchasing decision.

Important note

The information provided by Hexagon in this catalogue is for general information purposes only. All information and arm configurations are subject to change without further notice.

The images in this document are for reference only and are subject to change without notice. The colour, shape and weight of the products represented here may be different from those delivered.

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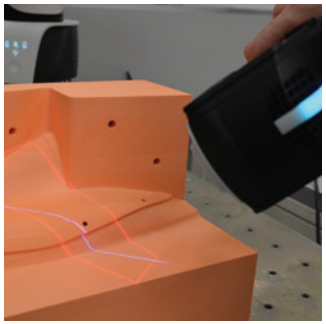
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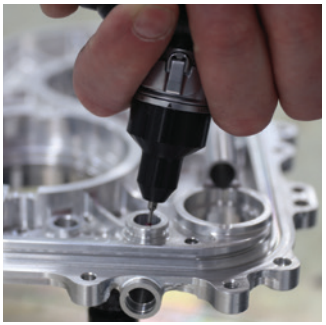
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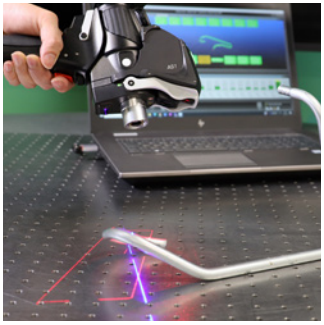


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Build and inspect

Tube and wire





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Mould and die

Shop floor




Gear measurement

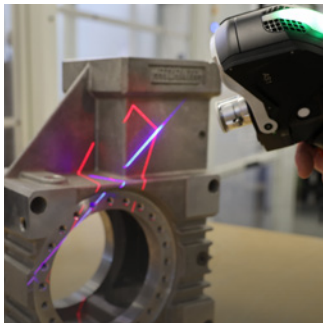
On-machine verification

Maintenance and repair









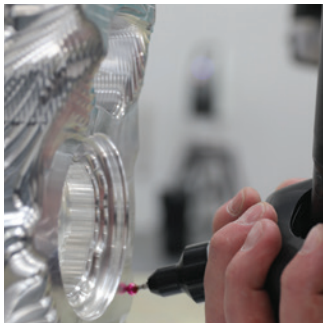
CAD-to-part

Reverse engineering

Virtual assembly







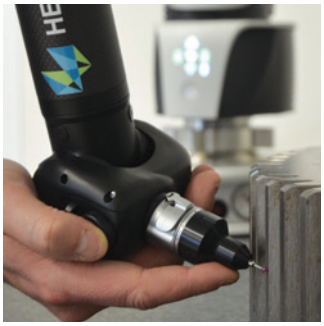












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Absolute Arm systems

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Accuracy

The Absolute Arm range offers probing accuracy as fine as only 6 microns and scanning system accuracy to within 39 microns.



Portability

Even the largest Absolute Arm weighs less than 13 kilograms, making set-up and repositioning a quick and easy process.



Productivity

The SHINE technology of the Absolute Scanner AS1 takes data quality to a new level without compromising on speed, while the Absolute Scanner AS1-XL decreases scan times for large parts thanks to its extra-wide laser scanline.



Repeatability

A patented kinematic probe joint minimises downtime by allowing all probes to be swapped on the fly with no need for realignment.



Certification

Probing accuracy certified according to ISO 10360-12 as standard, along with full scanning system accuracy according to ISO 10360-8 Annex D. Accuracy verification can be performed directly by the user with a supplied CMM-certified artefact.



Resilience

Full IP54 protection combined with robust and shock-resistant transportation cases keeps the arm properly protected and in perfect condition wherever and however it's needed.



Connectivity

Industry 4.0 ready with full 300 Hertz scanning performance over WiFi and simple integration within Hexagon's Smart Factory concept.



Asset management

The Absolute Arm is now compatible with the Metrology Asset Manager solution, allowing for monitoring and analysing device status in real-time, as with Hexagon laser tracker and CMM systems.



Monitoring

The SMART – Self-Monitoring Analysis and Reporting Technology – system provides full diagnostic monitoring for comprehensive measurement reliability.



Compatibility

An established and reliable software interface that is compatible with and supported by all major portable metrology software packages.

Movement
The unique Zero-G Counter Balance system and low-friction rotating grips reduce user fatigue and maximise accuracy by minimising inertia.

Touch control
Multi-functional control buttons and a convenient touchscreen OLED wrist display put measurement control directly in the user's hand.

Measurement
A wide range of probes and high-speed 3D scanners combined with a choice of 7 sizes and 3 accuracy levels delivers endlessly flexible measurement functionality.

Feedback
Easy user interaction in even the harshest industrial environments through visual, acoustic and haptic feedback functions, including alerts for significant changes to ambient temperature, base stability and joint stresses.



Encoders
Patented Absolute Encoders within every articulated joint are exclusive to Hexagon and make the Absolute Arm the only portable measuring arm that has completely eliminated warm-up times and encoder referencing before use.

Materials
High-tech carbon-fibre tube construction ensures strength and thermal stability under any environmental conditions, and the improved frame structure of the latest-generation Absolute Arm delivers better repeatability, increased accuracy and better performance throughout the temperature range.

Protection
High-quality construction and sealing have allowed the Absolute Arm to be the world's first IP54-rated portable arm, as well as allowing for operation in environmental temperatures as low as 5 and as high as 45 degrees Celcius.

Security
The HomeDock and SmartLock features allow the arm to be stowed and locked in place between measurements, for greater security during transport, setup and station changes.

Portability
True wireless connectivity and hot-swappable batteries give greater flexibility when moving the arm around the shop floor, along with full-speed WiFi scanning performance.

Accuracy Specifications

All probing specifications are achieved with an Absolute Arm mounted on a standard base plate or magnetic base (as available in this catalogue) under stable environmental conditions. This level of equipment accuracy is not guaranteed with other stands and volume extension products.

Nomenclature

RA8525-7

- **-7** 7-Axis model
- **-6** 6-Axis model
- **-T** Tube model

12 1.2 m measuring volume
20 2.0 m measuring volume
25 2.5 m measuring volume
30 3.0 m measuring volume
35 3.5 m measuring volume
40 4.0 m measuring volume
45 4.5 m measuring volume

87 series - Ultimate solution for portable high-accuracy measurement
85 series - Perfect balance between value and accurate measurement
83 series - Entry-level measurement accuracy

Absolute Arm 7-Axis wrist packages

	Removable pistol grip	3 sizes hand grips	Nose cone	Absolute Scanner AS1	Absolute Scanner AS1-XL	RS5 Laser Scanner	Alignment sphere	Accessory case, IP rated
H00030936 - Probing kit V2P	☑	☑	☑				☑*	☑
H00030938 - AS1 kit V2P	☑	☑	☑	☑			☑	☑
H00030937 - RS5 kit V2	☑	☑	☑			☑	☑	☑
H00041758 - AS1-XL Kit V2P	☑	☑	☑	☑			☑	☑
H00041759 - Scanner Bundle Kit V2P	☑	☑	☑	☑	☑		☑	☑

*Certified chrome sphere for probing only.

Control packs

	Power AC	Battery		Ethernet -to-USB adaptor	WiFi		Ethernet cable		Scanners			
		Arm	Scanner		Arm	Scanner	Arm	Scanner	AS1	RS5	HP-L-8.9	AS1-XL
H00015423-01 Connector Pack (CP-C)***	✓			✓			✓	✓	✓	✓	✓	✓
H00012444-01 Wireless Pack (CP-W)***	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓**	✓
H00033888-01 Battery Pack (CP-B)***	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

See page 64 for more details about the Control Packs.

** HP-L-8.9 sensor does not support WiFi scanning.
*** Includes a 3-metre ethernet cable and Gigabit ethernet adaptor.

Absolute Arm 7-Axis 83 series

Entry-level 7-axis portable measuring arm for tactile measurement and scanning.
Includes:

- Zero-G Counterbalance
- SmartLock + HomeDock
- Base plate
- TKJ 3-mm / 6-mm / 15-mm ball probes
- RDS calibration and interface software
- Wrist display
- Travel case
- 24-month warranty
- Certified alignment sphere for probing/scanning
- ISO 10360-12 certification (for articulated arms for tactile measurement)
- IP54 protection
- Accessory case, IP54-rated
- Metrology Asset Manager solution compatibility



H00045538*	**Absolute Arm V3P, 8320-7** 2.0 m measurement volume
H00045539*	**Absolute Arm V3P, 8325-7** 2.5 m measurement volume
H00045540*	**Absolute Arm V3P, 8330-7** 3.0 m measurement volume
H00045541*	**Absolute Arm V3P, 8335-7** 3.5 m measurement volume
H00045542*	**Absolute Arm V3P, 8340-7** 4.0 m measurement volume
H00045543*	**Absolute Arm V3P, 8345-7** 4.5 m measurement volume

* Go to “Mandatory Kits - 7 AXIS” page to complete your configuration.
Mandatory to add CP-C at minimum. Go to “Mandatory CP” page to complete your configuration.

Encoder	Absolute Encoders	☑
Movement and security	Zero-G | SmartLock | HomeDock	☑
OLED display	Wrist display	☑
Haptic feedback	Wrist vibration	☑
Holding grips	Spin Grip [1], Spin Knob [1]	–
Cables	3-metre ethernet cable | Gigabit ethernet adaptor | Power supply	☑
Mounting base	Standard base plate with 4.5 inch mounting ring	☑
Probes	TKJ L 50 – ø 15-mm stainless steel TKJ L 50 – ø 6-mm ruby TKJ L 50 – ø 3-mm ruby	☑ ☑ ☑
Packaging	Hard case Accessory case, IP54-rated	☑ ☑
Dust cover	Dust cover, Hexagon-branded	opt
Software	USB Standard Package: RDS driver and interface [2] User manuals	 ☑ ☑

Control Pack	Connector pack (CP-C) Wireless pack (CP-W) Battery pack (CP-B)	○ ○ ○
Artefacts	Verification bar Certified sphere for probing [3]	opt ☑
7-Axis kits	7-Axis probing kit V2P, installed AS1 kit V2P, installed RS5 kit V2, installed AS1-XL kit V2P, installed Scanner bundle V2P, installed	○ ○ ○ ○ ○
Warranty	2 years [4]	☑
Certification	ISO 10360-12 [5] (standard for compensation of articulated arms for tactile measurement) ISO 10360-02 Arm - ISO 10360-8 Annex D (Certificate of combination from arm and laser scanner)	☑ –
Metrology Asset Manager	Every Absolute Arm comes bundled with a one-year Metrology Asset Manager Advanced subscription [4]	☑

[1] Spin Grip not available for 83 Arm series and for 8520 Arms. Spin Knob not available for 83 Arm series.
[2] RDS updates are available without SMA, through Hexagon Universal Updater.
[3] Only when purchased with 7 Axis probing kit V2P, installed.
[4] The warranty of two years is valid only if an Arm service check is perfomed during the first year. See standard factory warranty plan for more details.
[5] Compensation report under ISO 17025 accreditation from COFRAC. This declaration of conformity does not wholly respect ISO 10360-12 in that the test uncertainty is not considered in the accuracy analysis.

Absolute Arm 7-Axis 85 series

All-purpose 7-axis portable measuring arm for tactile measurement and scanning.
Includes:

- Zero-G Counterbalance
- SmartLock + HomeDock
- Base plate
- TKJ 3-mm / 6-mm / 15-mm ball probes
- RDS calibration and interface software
- Wrist display
- Travel case
- 24-month warranty
- Certified alignment sphere for probing scanning
- ISO 10360-12 certification (for articulated arms for tactile measurement)
- IP54 protection
- Accessory case, IP54-rated
- Metrology Asset Manager solution compatibility



H00045544*	**Absolute Arm V3P, 8520-7** 2.0 m measurement volume
H00045545*	**Absolute Arm V3P, 8525-7** 2.5 m measurement volume
H00045546*	**Absolute Arm V3P, 8530-7** 3.0 m measurement volume
H00045547*	**Absolute Arm V3P, 8535-7** 3.5 m measurement volume
H00045548*	**Absolute Arm V3P, 8540-7** 4.0 m measurement volume
H00045549*	**Absolute Arm V3P, 8545-7** 4.5 m measurement volume

* Go to “Mandatory Kits - 7 AXIS” page to complete your configuration.
Mandatory to add CP-C at minimum. Go to “Mandatory CP” page to complete your configuration.

Encoder	Absolute Encoders	☑
Movement and security	Zero-G | SmartLock | HomeDock	☑
OLED display	Wrist display	☑
Haptic feedback	Wrist vibration	☑
Handling grips	Spin Grip [1] | Spin Knob [1]	☑
Cables	3-metre ethernet cable | Gigabit ethernet adaptor | Power supply	☑
Mounting base	Standard base plate with 4.5 inch mounting ring	☑
Probes	TKJ L 50 – ø 15-mm stainless steel TKJ L 50 – ø 6-mm ruby TKJ L 50 – ø 3-mm ruby	☑ ☑ ☑
Packaging	Hard case Accessories case, IP54-rated	☑ ☑
Dust cover	Dust cover, Hexagon-branded	opt
Software	USB Standard Package: RDS driver and interface [2] User manuals	 ☑ ☑

Control Pack	Connector pack (CP-C) Wireless pack (CP-W) Battery pack (CP-B)	○ ○ ○
Artefact	Verification bar Certified sphere for probing [3]	☑ ☑
7-Axis kits	7-Axis probing kit V2P, installed AS1 kit V2P, installed RS5 kit V2, installed AS1-XL Kit V2P, installed Scanner Bundle V2P, installed	○ ○ ○ ○ ○
Warranty	2 years [4]	○
Certification	Arm-ISO 10360-12 [5] (standard for compensation of articulated arms for tactile measurement) Arm - ISO 10360-02 Arm - ISO 10360-8 Annex D (Certificate of combination from arm and laser scanner)	☑ ☑ –
Metrology Asset Manager	Every Absolute Arm comes bundled with a one-year Metrology Asset Manager Advanced subscription [4]	☑

[1] Spin Grip not available for 83 Arm series and for 8520 Arms. Spin Knob not available for 83 Arm series.
[2] RDS updates are available without SMA, through Hexagon Universal Updater.
[3] Only when purchased with 7 Axis probing kit V2P, installed.
[4] The warranty of two (2) years is valid only if an Arm service check is perfomed during the first year. See standard factory warranty plan for more details.
[5] Compensation report under ISO 17025 accreditation from COFRAC. This declaration of conformity does not wholly respect ISO 10360-12 in that the test uncertainty is not considered in the accuracy analysis.

Absolute Arm 7-Axis 87 series

High accuracy 7-axis portable measuring arm for tactile measurement and scanning.
Includes:

- Zero-G Counterbalance
- SmartLock + HomeDock
- Base plate
- TKJ 3-mm / 6-mm / 15-mm ball probes
- RDS calibration and interface software
- Wrist display
- Travel case
- 24-month warranty
- Certified alignment sphere for probing/ scanning
- ISO 10360-12 certification (for articulated arms for tactile measurement)
- IP54 protection
- Accessory case, IP54-rated
- Metrology Asset Manager solution compatibility



H00045550*	**Absolute Arm V3P, 8725-7** 2.5 m measurement volume
H00045551*	**Absolute Arm V3P, 8730-7** 3.0 m measurement volume
H00045552*	**Absolute Arm V3P, 8735-7** 3.5 m measurement volume
H00045553*	**Absolute Arm V3P, 8740-7** 4.0 m measurement volume
H00045554*	**Absolute Arm V3P, 8745-7** 4.5 m measurement volume

* Go to “Mandatory Kits - 7 AXIS” page to complete your configuration.

Encoder	Absolute Encoders	☑
Movement and security	Zero-G | SmartLock | HomeDock	☑
OLED display	Wrist display	☑
Haptic feedback	Wrist vibration	☑
Handling grips	Spin Grip [1] | Spin Knob [1]	☑
Cables	3-metre ethernet cable | Gigabit ethernet adaptor | Power supply	☑
Mounting base	Standard base plate with 4.5 inch mounting ring	☑
Probes	TKJ L 50 – ø 15-mm stainless steel TKJ L 50 – ø 6-mm ruby TKJ L 50 – ø 3-mm ruby	☑ ☑ ☑
Packaging	Hard case Accessories case, IP54-rated	☑ ☑
Dust cover	Dust cover, Hexagon-branded	opt
Software	USB Standard Package: RDS driver and interface [2] User manuals	 ☑ ☑

Control Pack	Connector pack (CP-C) Wireless pack (CP-W) Battery pack (CP-B)	☑
Artefacts	Verification bar Certified sphere for probing [3]	☑ ☑
7-Axis kits	7-Axis probing kit V2P, installed AS1 kit V2P, installed RS5 kit V2, installed AS1-XL kit V2P, installed Scanner Bundle V2P, installed	○ ○ ○ ○ ○
Warranty	2 years [4]	○
Certification	Arm - ISO 10360-12 [5] (standard for compensation of articulated arms for tactile measurement) ISO 10360-02 Arm - ISO 10360-8 Annex D (Certificate of combination from arm and laser scanner)	☑ ☑ –
Metrology Asset Manager	Every Absolute Arm comes bundled with a one-year Metrology Asset Manager Advanced subscription [4]	☑

[1] Spin Grip not available for 83 Arm series and for 8520 Arms. Spin Knob not available for 83 Arm series.
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[4] The warranty of two (2) years is valid only if an Arm service check is perfomed during the first year. See standard factory warranty plan for more details.
[5] Compensation report under ISO 17025 accreditation from COFRAC. This declaration of conformity does not wholly respect ISO 10360-12 in that the test uncertainty is not considered in the accuracy analysis.

Absolute Arm 6-Axis 83 series

Entry-level 6-axis portable measuring arm for tactile measurement.
Includes:

- Zero-G Counterbalance
- SmartLock + HomeDock
- Base plate
- TKJ 3-mm / 6-mm / 15-mm ball probes
- RDS calibration and interface software
- Travel case
- 24-month warranty
- Certified alignment sphere for probing
- ISO 10360-12 certification (for articulated arms for tactile measurement)
- IP54 protection
- Accessory case, IP54-rated
- Metrology Asset Manager solution compatibility



H00045518*	**Absolute Arm V3P, 8320-6** 2.0 m measurement volume
H00045519*	**Absolute Arm V3P, 8325-6** 2.5 m measurement volume
H00045520*	**Absolute Arm V3P, 8330-6** 3.0 m measurement volume
H00045521*	**Absolute Arm V3P, 8335-6** 3.5 m measurement volume
H00045522*	**Absolute Arm V3P, 8340-6** 4.0 m measurement volume
H00045523*	**Absolute Arm V3P, 8345-6** 4.5 m measurement volume

* Mandatory to add CP-C at minimum. Go to “Mandatory CP” page to complete your configuration.

Encoder	Absolute Encoders	☑
Movement and security	Zero G | SmartLock [1] | HomeDock [1]	☑
OLED display	Wrist display	–
Haptic feedback	Wrist vibration	☑
Handing grips	Spin Grip [1], Spin Knob [1]	–
Cables	3-metre ethernet cable | Gigabit ethernet adaptor | Power supply	☑
Mounting base	Standard base plate with 4.5 inch mounting ring [2] 3 Magnetic anchors [3]	☑ ☑
Probes	TKJ L 50 – ø 15-mm stainless steel TKJ L 50 – ø 6-mm ruby TKJ L 50 – ø 3-mm ruby	☑ ☑ ☑
Packaging	Hard case Accessories case, IP54-rated	☑ ☑
Dust cover	Dust cover, Hexagon-branded	opt

Software	USB Standard Package: RDS driver and interface [4] User manuals	 ☑ ☑
Control pack	Connector pack (CP-C) Wireless pack (CP-W) Battery pack (CP-B)	○ ○ ○
Artefact	Verification bar Certified sphere for probing	opt ☑
Warranty	2 years [5]	☑
Certification	Arm - ISO 10360-12 [6] (standard for compensation of articulated arms for tactile measurement) ISO 10360-02 [2]	☑ opt
Metrology Asset Manager	Every Absolute Arm comes bundled with a one-year Metrology Asset Manager Advanced subscription [5]	☑

[1] SmartLock and HomeDock not available for 8312 and 8512. Spin Grip not available for 83 Arm series and for 8520 Arms. Spin Knob not available for 83 Arm series.
[2] Optional for 8312 and 8512.
[3] Standard delivery for 8312 and 8512 only.
[4] RDS updates are available without SMA, through Hexagon Universal Updater.
[5] The warranty of two (2) years is valid only if an Arm service check is perfomed during the first year. See standard factory warranty plan for more details.
[6] Compensation report under ISO 17025 accreditation from COFRAC. This declaration of conformity does not wholly respect ISO 10360-12 in that the test uncertainty is not considered in the accuracy analysis.

Absolute Arm 6-Axis 85 series

All-purpose 6-axis portable measuring arm for tactile measurement.

Includes:

- Zero-G Counterbalance
- SmartLock + HomeDock
- Base plate
- TKJ 3-mm / 6-mm / 15-mm ball probes
- RDS calibration and interface software
- Travel case
- 24-month warranty
- Certified alignment sphere for probing
- ISO 10360-12 certification (for articulated arms for tactile measurement)
- IP54 protection
- Accessory case, IP54-rated
- Metrology Asset Manager solution compatibility



H00045525*	**Absolute Arm V3P, 8520-6** 2.0 m measurement volume
H00045526*	**Absolute Arm V3P, 8525-6** 2.5 m measurement volume
H00045527*	**Absolute Arm V3P, 8530-6** 3.0 m measurement volume
H00045528*	**Absolute Arm V3P, 8535-6** 3.5 m measurement volume
H00045529*	**Absolute Arm V3P, 8540-6** 4.0 m measurement volume
H00045530*	**Absolute Arm V3P, 8545-6** 4.5 m measurement volume

* Mandatory to add CP-C at minimum. Go to “Mandatory CP” page to complete your configuration.

Encoder	Absolute Encoders	☑
Movement and security	Zero G | SmartLock [1] | HomeDock [1]	☑
OLED display	Wrist display	–
Haptic feedback	Wrist vibration	☑
Handling grips	Spin Grip [1], Spin Knob [1]	☑
Cables	3-metre ethernet cable | Gigabit ethernet adaptor | Power supply	☑
Mounting base	Standard base plate with 4.5 inch mounting ring [2]	☑
Probes	TKJ L 50 – ø 15-mm stainless steel TKJ L 50 – ø 6-mm ruby TKJ L 50 – ø 3-mm ruby	☑ ☑ ☑
Packaging	Hard case Accessories case, IP54-rated	☑ ☑
Dust cover	Dust cover, Hexagon-branded	opt

Software	USB Standard Package: RDS driver and interface [4] User manuals	 ☑ ☑
Control Pack	Connector pack (CP-C) Wireless pack (CP-W) Battery pack (CP-B)	○ ○ ○
Artefacts	Verification bar Certified sphere for probing	☑ ☑
Warranty	2 years [5]	☑
Certification	Arm - ISO 10360-12 [6] (standard for compensation of articulated arms for tactile measurement) ISO 10360-02 [2]	☑ opt
Metrology Asset Manager	Every Absolute Arm comes bundled with a one-year Metrology Asset Manager Advanced subscription [5]	☑

[1] SmartLock and HomeDock not available for 8312 and 8512. Spin Grip not available for 83 Arm series and for 8520 Arms. Spin Knob not available for 83 Arm series.
[2] Optional for 8312 and 8512.
[3] Standard delivery for 8312 and 8512 only.
[4] RDS updates are available without SMA, through Hexagon Universal Updater.
[5] The warranty of two (2) years is valid only if an Arm service check is perfomed during the first year. See standard factory warranty plan for more details.
[6] Compensation report under ISO 17025 accreditation from COFRAC. This declaration of conformity does not wholly respect ISO 10360-12 in that the test uncertainty is not considered in the accuracy analysis.

Absolute Arm 6-Axis 87 series

High accuracy 6-axis portable measuring arm for tactile measurement.
Includes:

- Zero-G Counterbalance
- SmartLock + HomeDock
- Base plate
- TKJ 3-mm / 6-mm / 15-mm ball probes
- RDS calibration and interface software
- Travel case
- 24-month warranty
- Certified alignment sphere for probing
- ISO 10360-12 certification (for articulated arms for tactile measurement)
- IP54 protection
- Accessory case, IP54-rated
- Metrology Asset Manager solution compatibility



H00045531	**Absolute Arm V3P 8725-6** 2.5 m measurement volume
H00045532	**Absolute Arm V3P 8730-6** 3.0 m measurement volume
H00045533	**Absolute Arm V3P 8735-6** 3.5 m measurement volume
H00045534	**Absolute Arm V3P 8740-6** 4.0 m measurement volume
H00045535	**Absolute Arm V3P 8745-6** 4.5 m measurement volume

Encoder	Absolute Encoders	☑
Movement and security	Zero-G | SmartLock | HomeDock	☑
OLED display	Wrist display	–
Haptic feedback	Feedback vibrations on the wrist	☑
Handling grips	Spin Grip | Spin Knob	☑
Cables	3-metre ethernet cable | Gigabit ethernet adaptor | Power supply	☑
Mounting base	Standard base plate with 4.5 inch mounting ring	☑
Probes	TKJ L 50 – ø 15-mm stainless steel TKJ L 50 – ø 6-mm ruby TKJ L 50 – ø 3-mm ruby	☑ ☑ ☑
Packaging	Hard case Accessories case, IP54-rated	☑ ☑
Dust cover	Dust cover, Hexagon-branded	opt

Software	USB Standard Package: RDS driver and interface [1] User manuals	 ☑ ☑
Control Pack	Connector pack (CP-C) Wireless pack (CP-W) Battery pack (CP-B)	☑
Artefact	Verification bar Certified sphere for probing	☑ ☑
Warranty	2 years [2]	☑
Certification	Arm - ISO 10360-12 [3] (standard for compensation of articulated arms for tactile measurement) ISO 10360-02	☑ –
Metrology Asset Manager	Every Absolute Arm comes bundled with a one-year Metrology Asset Manager Advanced subscription [2]	☑

[1] RDS updates are available without SMA, through Hexagon Universal Updater.
[2] The warranty of two (2) years is valid only if an Arm service check is perfomed during the first year. See standard factory warranty plan for more details.
[3] Compensation report under ISO 17025 accreditation from COFRAC. This declaration of conformity does not totally wholly respect ISO 10360-12 in that the test uncertainty is not considered in the accuracy analysis.

Absolute Arm Compact

Versatile 6-axis small-diameter ultra-high-accuracy portable measuring arm.
Includes:

- Integrated base
- Counterweight balance system
- TKJ 3-mm / 6-mm / 15-mm ball probes
- RDS calibration and interface software
- Travel case
- 3 magnetic anchors
- Certified alignment sphere for probing
- ISO 10360-12 alignment (for articulated arms for tactile measurement)
- 24-month warranty
- IP54 protection
- Accessory case, IP54-rated
- Metrology Asset Manager solution compatibility



H00045517 **Absolute Arm 8312-6**
1.2 m measurement volume

H00045525 **Absolute Arm 8512-6**
1.2 m measurement volume

Encoder	Absolute Encoders	☑
Haptic feedback	Wrist vibration	☑
Display	LED pictograms	☑
Handling grips	Spin Knob*	☑
Cables	3-metre ethernet cable | Gigabit ethernet adaptor | Power supply	☑
Mounting base	Standard base plate Magnetic anchors	☑ ☑
Probes	TKJ L 50 – ø 15-mm stainless steel TKJ L 50 – ø 6-mm ruby TKJ L 50 – ø 3-mm ruby	☑ ☑ ☑
Packaging	Hard case Accessories case, IP54-rated	☑ ☑
Dust cover	Dust cover, Hexagon-branded	opt
Software	USB Standard Package: RDS driver and interface (4) User manuals	 ☑ ☑

Control pack	Connector pack (CP-C) Wireless pack (CP-W) Battery pack (CP-B)	○ ○ ○
Artefact**	Verification bar (83 series) Verification bar (85 series) Certified sphere for probing	opt ☑ ☑
Warranty	2 years ***	☑
Certification	Arm - ISO 10360-12 (standard for compensation of articulated arms for tactile measurement) ISO 10360-02 (certification for use in conjunction with a full-size CMM)	☑ opt
Metrology Asset Manager	Every Absolute Arm comes bundled with a one-year Metrology Asset Manager Advanced subscription ***	☑

* 85 Series only.

** All artefacts are delivered with a certification.

*** The warranty of two (2) years is valid only if an arm service check is performed during the first year



Absolute Arm Tube

6-axis portable measuring arm designed for tube measurement, with a special counterbalance, including:

- Zero-G Counterbalance, tube version
- SmartLock + HomeDock
- Base plate
- TKJ 3-mm / 6-mm / 15-mm ball probes
- RDS calibration and interface software
- Travel case
- 24-month warranty
- Certified alignment sphere for probing
- ISO 10360-12 certification (for articulated arms for tactile measurement)
- IP54 protection
- Accessory case, IP54-rated
- Metrology Asset Manager solution compatibility

H00045536* **Absolute Arm V3P, 8325T-6**
2.5 m measurement volume

H00045537* **Absolute Arm V3P, 8330T-6**
3.0 m measurement volume

* Mandatory to add CP-C at minimum. Go to "Mandatory CP" page to complete your configuration.

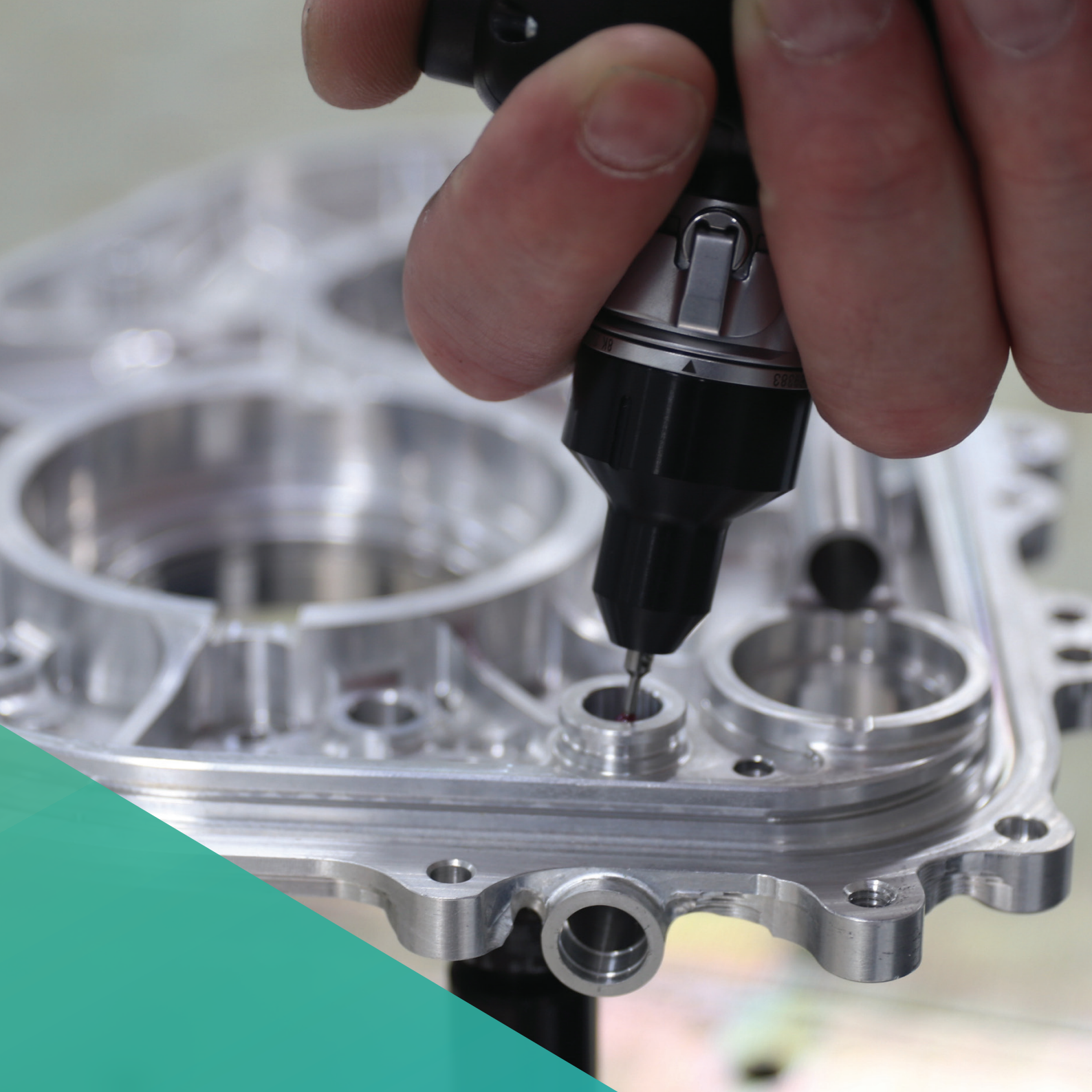


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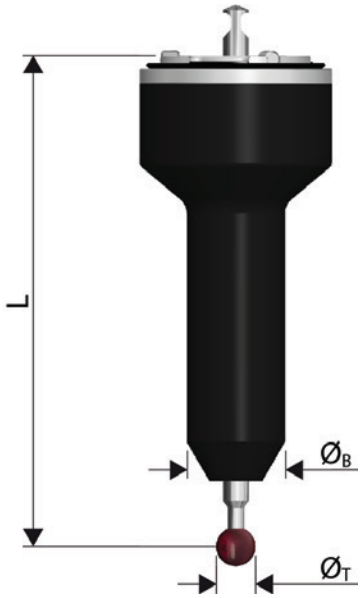
Encoder	Absolute Encoders	☑
Movement and security	Zero G | SmartLock [1] | HomeDock [1]	☑
OLED display	Wrist display	–
Haptic feedback	Feedback vibrations on the wrist	☑
Holding grips	Spin Grip [1], Spin Knob [1]	–
Cables	3-metre ethernet cable | Gigabit ethernet adaptor | Power supply	☑
Mounting base	Standard base plate with 4.5 inch mounting ring	☑
Probes	TKJ L 50 – ø 15-mm stainless steel TKJ L 50 – ø 6-mm ruby TKJ L 50 – ø 3-mm ruby	☑ ☑ ☑
Packaging	Hard case Accessories case, IP54-rated	☑ ☑
Dust cover	Dust cover, Hexagon-branded	opt
Software	USB Standard Package: RDS driver and interface [2] User manuals	 ☑ ☑

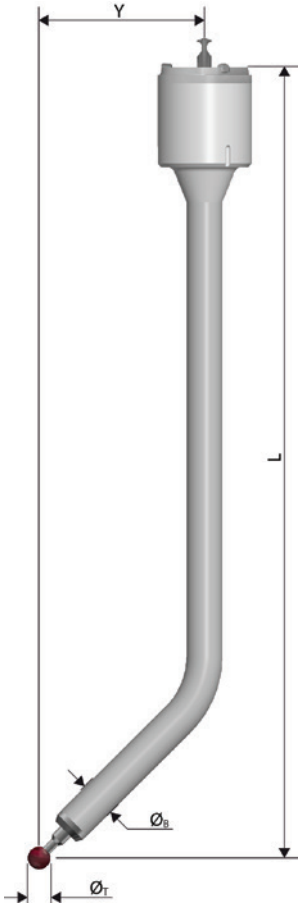
Control Pack	Connector pack (CP-C) Wireless pack (CP-W) Battery pack (CP-B)	○ ○ ○
Artefact	Verification bar Certified sphere for probing	opt ☑
Warranty	2 years [3]	☑
Certification	Arm - ISO 10360-12 [4] (standard for compensation of articulated arms for tactile measurement) Arm - ISO 10360-02	☑ –
Metrology Asset Manager	Every Absolute Arm comes bundled with a one-year Metrology Asset Manager Advanced subscription [3]	☑

[1] SmartLock and HomeDock not available for 8312 and 8512. Spin Grip not available for 83 Arm series and for 8520 Arms. Spin Knob not available for 83 Arm series.
[2] RDS updates are available without SMA, through Hexagon Universal Updater.
[3] The warranty of two (2) years is valid only if an Arm service check is perfomed during the first year. See standard factory warranty plan for more details.
[4] Compensation report under ISO 17025 accreditation from COFRAC. This declaration of conformity does not wholly respect ISO 10360-12 in that the test uncertainty is not considered in the accuracy analysis.



Probes and scanners





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TKJ aluminium-body contact probes

Standard aluminium probes for the Absolute Arm are available from 50 to 100 millimetres in length. An M3 connector allows the use of any M3 sphere tip.

8x12	✓
83-6 / 85-6 / 87-6	✓
83-7 / 85-7 / 87-7	✓

		IP	L	Body	$Ø_B$	Tip type	Tip material	$Ø_T$	
H00007186*	**Probe with fixed ball (SS-15-SS-50)**	54	50 mm	Stainless steel	15 mm	Fixed ball	Stainless steel	15 mm	
H00007189-50*	**Probe with M3-stylus (R-3-A-50)**	54	50 mm	Aluminium	15 mm	M3	Synth. ruby	3 mm	
H00007187-50*	**Probe with M3-stylus (R-6-A-50)**	54	50 mm	Aluminium	15 mm	M3	Synth. ruby	6 mm	
H00007189-75	**Probe with M3-stylus (R-3-A-75)**	54	75 mm	Aluminium	15 mm	M3	Synth. ruby	3 mm	
H00007187-75	**Probe with M3-stylus (R-6-A-75)**	54	75 mm	Aluminium	15 mm	M3	Synth. ruby	6 mm	
H00007189-100	**Probe with M3-stylus (R-3-A-100)**	54	100 mm	Aluminium	15 mm	M3	Synth. ruby	3 mm	
H00007187-100	**Probe with M3-stylus (R-6-A-100)**	54	100 mm	Aluminium	15 mm	M3	Synth. ruby	6 mm	
54388-03	**Probe with M3-pointer stylus (A-50)**	-	50 mm	Aluminium	15 mm	M3	Tungsten carbide	Point	
54388-11	**Probe with M3-stylus (CE-12.7-A-50)**	54	50 mm	Aluminium	15 mm	Fixed ball	Ceramic	12.7 mm	
H00000906-01	**Probe with fixed ball (SS-9.5-SS-50)**	-	50 mm	Stainless steel	15 mm	Fixed ball	Stainless steel	9.5 mm	
54388-06	**Probe with M3-Pointer stylus (A-75)**	-	75 mm	Aluminium	15 mm	M3	Tungsten carbide	Point	
54388-09	**Probe with M3-Pointer stylus (A-100)**	-	100 mm	Aluminium	15 mm	M3	Tungsten carbide	Point	

* Already included as standard probes within all Absolute Arm packages.

TKJ carbon-body contact probes

Carbon-body probes for the Absolute Arm offer the largest range of probe sizes and types. Models available from 50 to 350 millimetres in length, and with standard M3 ball tips or fixed balls from 2 to 25 millimetres in diameter, for any kind of hard-contact probing task.

8x12	✓
83-6 / 85-6 / 87-6	✓
83-7 / 85-7 / 87-7	✓

		IP	L	Body	$Ø_B$	Tip type	Tip material	$Ø_T$
H00000383-01	**Probe with fixed ball (SS-9.5-C-50)**	-	*50 mm*	*Carbon fibre*	*16 mm*	*Fixed ball*	*Stainless steel*	*9.5 mm*
H00000383-02	**Probe with fixed ball (SS-10-C-50)**	-	*50 mm*	*Carbon fibre*	*16 mm*	*Fixed ball*	*Stainless steel*	*10 mm*
H00000383-03	**Probe with fixed ball (SS-15-C-50)**	-	*50 mm*	*Carbon fibre*	*16 mm*	*Fixed ball*	*Stainless steel*	*15 mm*
H00000383-04	**Probe with fixed ball (SS-10-C-75)**	-	*75 mm*	*Carbon fibre*	*16 mm*	*Fixed ball*	*Stainless steel*	*10 mm*
H00000383-05	**Probe with fixed ball (SS-15-C-75)**	-	*75 mm*	*Carbon fibre*	*16 mm*	*Fixed ball*	*Stainless steel*	*15 mm*
H00000383-06	**Probe with fixed ball (SS-9.525-C-82)**	-	*82 mm*	*Carbon fibre*	*16 mm*	*Fixed ball*	*Stainless steel*	*9.5 mm*
H00000383-07	**Probe with fixed ball (SS-12.7-C-85)**	-	*85 mm*	*Carbon fibre*	*16 mm*	*Fixed ball*	*Stainless steel*	*12.7 mm*
H00000383-09	**Probe with fixed ball (SS-25-C-85)**	-	*85 mm*	*Carbon fibre*	*16 mm*	*Fixed ball*	*Stainless steel*	*25 mm*
H00000576-01	**Probe with M3-stylus (R-2-C-85)**	-	*85 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*2 mm*
54397-01	**Probe with M3-stylus (R-3-C-85)**	-	*85 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*3 mm*
H00000576-02	**Probe with M3-stylus (R-4-C-85)**	-	*85 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*4 mm*
54397-02	**Probe with M3-stylus (R-6-C-85)**	-	*85 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*6 mm*
54397-03	**Probe with M3-pointer (C-85)**	-	*85 mm*	*Carbon fibre*	*16 mm*	*M3*	*Tungsten carbide*	*Point*



TKJ carbon-body contact probes

		IP	L	Body	$Ø_B$	Tip type	Tip material	$Ø_T$	
H00000576-04	**Probe with M3-stylus (R-10-C-100)**	-	*100 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*10 mm*	
H00000576-03	**Probe with M3-stylus (R-2-C-100)**	-	*100 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*2 mm*	
54397-04	**Probe with M3-stylus (R-3-C-100)**	-	*100 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*3 mm*	
54397-05	**Probe with M3-stylus (R-6-C-100)**	-	*100 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*6 mm*	
54397-06	**Probe with M3-pointer (C-100)**	-	*100 mm*	*Carbon fibre*	*16 mm*	*M3*	*Tungsten carbide*	*Point*	
H00000383-10	**Probe with fixed ball (SS-10-C-130)**	-	*130 mm*	*Carbon fibre*	*16 mm*	*Fixed ball*	*Stainless steel*	*10 mm*	
H00000383-11	**Probe with fixed ball (SS-15-C-130)**	-	*130 mm*	*Carbon fibre*	*16 mm*	*Fixed ball*	*Stainless steel*	*15 mm*	
54397-07	**Probe with M3-stylus (R-3-C-130)**	-	*130 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*3 mm*	
H00000576-05	**Probe with M3-stylus (R-4-C-130)**	-	*130 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*4 mm*	
54397-08	**Probe with M3-stylus (R-6-C-130)**	-	*130 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*6 mm*	
54397-09	**Probe with M3-pointer (C-130)**	-	*130 mm*	*Carbon fibre*	*16 mm*	*M3*	*Tungsten carbide*	*Point*	
H00000383-12	**Probe with fixed ball (SS-10-C-150)**	-	*150 mm*	*Carbon fibre*	*16 mm*	*Fixed ball*	*Stainless steel*	*10 mm*	
H00000383-13	**Probe with fixed ball (SS-15-C-150)**	-	*150 mm*	*Carbon fibre*	*16 mm*	*Fixed ball*	*Stainless steel*	*15 mm*	

TKJ carbon-body contact probes

		IP	L	Body	$Ø_B$	Tip type	Tip material	$Ø_T$	
H00000576-06	**Probe with M3-stylus (R-2-C-150)**	-	*150 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*2 mm*	
54397-10	**Probe with M3-stylus (R-3-C-150)**	-	*150 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*3 mm*	
54397-11	**Probe with M3-stylus (R-6-C-150)**	-	*150 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*6 mm*	
54397-12	**Probe with M3-pointer (C-150)**	-	*150 mm*	*Carbon fibre*	*16 mm*	*M3*	*Tungsten carbide*	*Point*	
H00000383-14	**Probe with fixed ball (SS-15-C-165)**	-	*165 mm*	*Carbon fibre*	*16 mm*	*Fixed Ball*	*Stainless steel*	*15 mm*	
H00000383-15	**Probe with fixed ball (SS-10-C-180)**	-	*180 mm*	*Carbon fibre*	*16 mm*	*Fixed Ball*	*Stainless steel*	*10 mm*	
H00000383-16	**Probe with fixed ball (SS-15-C-180)**	-	*180 mm*	*Carbon fibre*	*16 mm*	*Fixed Ball*	*Stainless steel*	*15 mm*	
H00000383-17	**Probe with fixed ball (SS-20-C-180)**	-	*180 mm*	*Carbon fibre*	*16 mm*	*Fixed Ball*	*Stainless steel*	*20 mm*	
54397-13	**Probe with M3-stylus (R-3-C-180)**	-	*180 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*3 mm*	
54397-14	**Probe with M3-stylus (R-6-C-180)**	-	*180 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*6 mm*	
54397-15	**Probe with M3-pointer (C-180)**	-	*180 mm*	*Carbon fibre*	*16 mm*	*M3*	*Tungsten carbide*	*Point*	
54397-16	**Probe with M3-stylus (R-3-C-200)**	-	*200 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*3 mm*	
54397-18	**Probe with M3-pointer (C-200)**	-	*200 mm*	*Carbon fibre*	*16 mm*	*M3*	*Tungsten carbide*	*Point*	

TKJ carbon-body contact probes

		IP	L	Body	$Ø_B$	Tip type	Tip material	$Ø_T$
H00000383-18	**Probe with fixed ball (SS-15-C-293)**	-	*293 mm*	*Carbon fibre*	*16 mm*	*Fixed ball*	*Stainless steel*	*15 mm*
H00000576-10	**Probe with M3-stylus (R-3-C-300)**	-	*300 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*3 mm*
H00000576-08	**Probe with M3-stylus (R-6-C-350)**	-	*350 mm*	*Carbon fibre*	*16 mm*	*M3*	*Synth. ruby*	*6 mm*



TKJ angled contact probes

For hard-to-reach areas of parts, the Absolute Arm can be equipped with special angled probes designed to allow for measuring around obstacles. Angles of 45, 60 and 90 degrees are available.

8x12	✓
83-6 / 85-6 / 87-6	✓
83-7 / 85-7 / 87-7	✓

		IP	L	Y	Body	Tip type	Tip material	$Ø_T$
H00033800-01	**Angle Probe 45DEG with M3-Pointer Stylus (TC-10)**	54	149 mm	38 mm	Aluminium	M3	Tungsten carbide	Point
H00033800-02	**Angle Probe 45DEG with M3-Stylus (R-3-SS-1.5-L10)**	54	149 mm	38 mm	Aluminium	M3	Synth. ruby	3 mm
H00033800-03	**Angle Probe 45DEG with M3-Stylus (R-4-SS-2.5-L10)**	54	149 mm	38 mm	Aluminium	M3	Synth. ruby	4 mm
H00033800-04	**Angle Probe 45DEG with M3-Stylus(R-6-SS-2.7-L10)**	54	149 mm	38 mm	Aluminium	M3	Synth. ruby	6 mm
H00033800-05	**Angle Probe 60DEG with M3-Pointer Stylus (TC-L10)**	54	149 mm	57 mm	Aluminium	M3	Tungsten carbide	Point
H00033800-06	**Angle Probe 60DEG with M3-Stylus (R-3-SS-1.5-L10)**	54	149 mm	57 mm	Aluminium	M3	Synth. ruby	3 mm
H00033800-07	**Angle Probe 60DEG with M3-Stylus (R-4-SS-2.5-L10)**	54	149 mm	57 mm	Aluminium	M3	Synth. ruby	4 mm
H00033800-08	**Angle Probe 60DEG with M3-Stylus (R-6-SS-2.7-L10)**	54	149 mm	57 mm	Aluminium	M3	Synth. ruby	6 mm
H00033800-09	**Angle Probe 90DEG with M3-Pointer Stylus (TC-L10)**	54	173 mm	43 mm	Aluminium	M3	Tungsten carbide	Point
H00033800-10	**Angle Probe 90DEG with M3-Stylus (R-3-SS-1.5-L10)**	54	173 mm	43 mm	Aluminium	M3	Synth. ruby	3 mm
H00033800-11	**Angle Probe 90DEG with M3-Stylus (R-4-SS-2.5-L10)**	54	173 mm	43 mm	Aluminium	M3	Synth. ruby	4 mm
H00033800-12	**Angle Probe 90DEG with M3-Stylus (R-6-SS-2.7-L10)**	54	173 mm	43 mm	Aluminium	M3	Synth. ruby	6 mm



TKJ contact probe kits

To enhance the possibilities of probing, customisable probe kits are available, each offering a different range of probe sizes.

8x12	✓
83-6 / 85-6 / 87-6	✓
83-7 / 85-7 / 87-7	✓

54388-50B

Probe Body (Aluminum / L=40 mm)
Individual solid aluminum probe shaft, length 40 millimetres, not IP-protected.
For use with all Absolute Arm models with a TESA kinematic joint connector.



54388-100B

Probe Body (Aluminum / L=90 mm)
Individual solid aluminum probe shaft, length 90 millimetres.
For use with all Absolute Arm models with a TESA kinematic joint connector.



54135

Probe Kit – Short body (Aluminum)
Short-body probe set consisting of 5 aluminum probe shafts,
5 styli with ruby-ball tips, 2 adaptors and tools, not IP-protected.
For use with all Absolute Arm models with a TESA kinematic joint connector.



Bodies *(Aluminum)*	Length	*50 mm / 60 mm / 70 mm / 85 mm / 100 mm*
Tips *(Synth. ruby)*	ø	*2 mm / 3 mm / 4 mm / 5 mm / 6 mm*
	Length	*10 mm*
Connectors		*2 x TKJ*
Tools		*Body probe wrench + probe pin wrench*
IP		*not IP-protected*

54136

Probe Kit – Long body (Aluminum)
Long-body probe set consisting of 4 carbon-fibre probe shafts,
5 styli with ruby-ball tips, 2 adaptors and tools.
For use with all Absolute Arm models with a TESA kinematic joint connector.



Bodies *(Carbon fiber)*	Length	*130 mm / 150 mm / 180 mm / 200 mm*
Tips *(Synth. ruby)*	ø	*2 mm / 3 mm / 4 mm / 5 mm / 6 mm*
	Length	*10 mm*
Connectors		*2 x TKJ*
Tools		*Body probe wrench + tip wrench*
IP		*not IP-protected*

TKJ special contact probes

Probes designed to seat spherical retroreflectors or for customised purposes.

8x12	✓
83-6 / 85-6 / 87-6	✓
83-7 / 85-7 / 87-7	✓

H00000742-01

Probe-Alu-L75-12.7 for Tracker

Reflector not included.

ø	Tip type	L	Body	IP
12.7 mm	*Magnetic seat*	*75 mm*	*Aluminium*	*not IP-protected*



H00000742-02

Probe-Alu-L75-22.225 for Tracker

Reflector not included.

ø	Tip type	L	Body	IP
22.225 mm	*Magnetic seat*	*75 mm*	*Aluminium*	*not IP-protected*



H00000742-03

Probe-Alu-L75-38.1 for Tracker

Reflector not included.

ø	Tip type	L	Body	IP
38.1 mm	*Magnetic seat*	*75 mm*	*Aluminium*	*not IP-protected*



54431

Universal Probe Adaptor – TKJ male to M8

Probe body for adapting any M8 standard or customised probe adaptor.
Not IP-protected.



TKJ touch-trigger probes

Touch-trigger probes allow for the measurement of sensitive parts. Available in fixed or adjustable versions, the touch-trigger probe is triggered immediately upon touching the surface. Suitable for any soft surface and for easily movable parts.

8x12	✓
83-6 / 85-6 / 87-6	✓
83-7 / 85-7 / 87-7	✓

34386

HP-T-EF Touch-Trigger Probe Kit

TKJ male probe with touch-trigger contact.

TKJ-M8-TTP		*NCA7-5-19344 included*
Tips *(Synth. ruby)*	ø	*3 mm / 6 mm*
	Length	*20 mm / 10 mm*
Trigger force		*Extended force (0.10 N at 50mm)*
Length		*73 mm*
IP		*not IP-protected*



NCA7-3-52596

HP-T-RP M8 Adjustable Touch-Trigger Probe Head

M8 head for TKJ adaptor touch-trigger probe.

TKJ-M8-TTP		*NCA7-5-19344 included*
Tips *(Synth. ruby)*	ø	*3 mm / 6 mm*
	Length	*10 mm*
Trigger force		*Adjustable 0.11 N - 0.30 N*
Length		*85 mm*
IP		*not IP-protected*



34385

TP20 Renishaw Touch-Trigger Probe Kit

TKJ male probe with touch-trigger contact.

TKJ-M8-TTP		*NCA7-5-19344 included*
Tips *(Synth. ruby)*	ø	*3 mm / 6 mm*
	Length	*20 mm (ø 3 mm) / 10 mm (ø 6 mm)*
Trigger Force		*Extended force (0.1N at 50 mm) – 2 heads*
Length		*83 mm*
IP		*not IP-protected*



NCA7-5-19344

TTP Adaptor – M8

TKJ-M base for all M8 touch-trigger probe heads.
Not IP-protected.

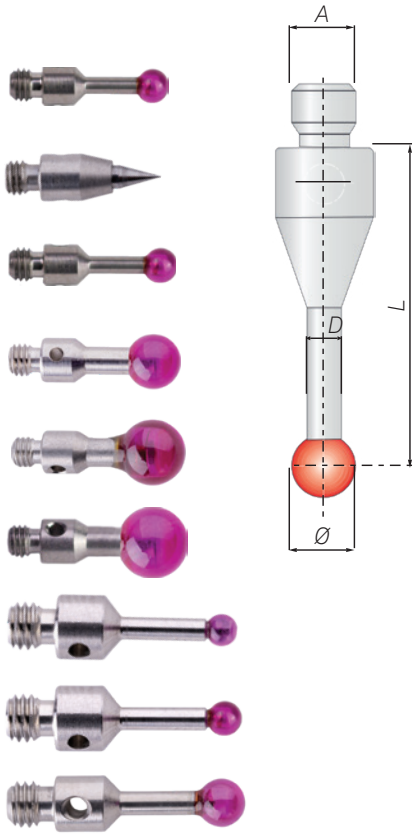


M3 styli

A range of tips is available to allow for adapting the probe to the measurement object. All tips are fixed with a M3 thread and can be used on any hard-contact body probe or touch-trigger probe.

8x12	✓
83-6 / 85-6 / 87-6	✓
83-7 / 85-7 / 87-7	✓

		ø	D	A	Tip material	L
74128	**M3-Stylus (R-2-SS-1.5-L10)**	*2 mm*	*1.5 mm*	*M3*	*Synth. ruby*	*10 mm*
74133	**M3-Pointer Stylus (TC-L10)**	*Point*	-	*M3*	*Tungsten carbide*	*10 mm*
03969327	**M3-Stylus (R-3-SS-2-L10)**	*3 mm*	*2 mm*	*M3*	*Synth. ruby*	*10 mm*
74130	**M3-Stylus (R-4-SS-2.5-L10)**	*4 mm*	*2.5 mm*	*M3*	*Synth. ruby*	*10 mm*
74131	**M3-Stylus (R-5-SS-2.5-L10)**	*5 mm*	*2.5 mm*	*M3*	*Synth. ruby*	*10 mm*
03969326	**M3-Stylus (R-6-SS-2.5-L10)**	*6 mm*	*2.7 mm*	*M3*	*Synth. ruby*	*10 mm*
NCA7-7-18998	**M3-Stylus (R2-SS-1.5-L20)**	*2 mm*	*1.5 mm*	*M3*	*Synth. ruby*	*20 mm*
NCA7-7-19997	**M3-Stylus (R3-SS-2-L20)**	*3 mm*	*2 mm*	*M3*	*Synth. ruby*	*20 mm*
NCA7-7-19998	**M3-Stylus (R6-SS-2.5-L20)**	*6 mm*	*2.7 mm*	*M3*	*Synth. ruby*	*20 mm*



Non-contact tube probes

Infrared non-contact probes for tube measurement are available in 6 sizes, allowing measurement of all kinds of tubes. A laser dot (class 2M) guides the user for precise placement.
Compatible with TubeShaper, GTube and Docs software.

8x12	✓
83-6 / 85-6 / 87-6	✓
83-7 / 85-7 / 87-7	✓

NCA7-2-21952-01 **NCP1 Non-Contact Tube Probe (12.5 mm)**

ø	*4-13 mm*
Recommended T-bar*	*ø 6.4 mm (ref NCA7-2-21953-01)*
Recommended Z Gage*	*ø 8 mm (ref NCA7-2-21954-01)*
IP	*not IP-protected*



NCA7-2-21952-02 **NCP2 Non-Contact Tube Probe (25 mm)**

ø	*6-20 mm*
Recommended T-bar*	*ø 6.4 mm (ref. NCA7-2-21953-01)*
Recommended Z Gage*	*ø 8 mm (ref. NCA7-2-21954-01)*
IP	*not IP-protected*



NCA7-2-21952-03 **NCP3 Non-Contact Tube Probe (50 mm)**

ø	*10-40 mm*
Recommended T-bar*	*ø 12.7 mm (ref. NCA7-2-21953-02)*
Recommended Z Gage*	*ø 20 mm (ref. NCA7-2-21954-02)*
IP	*not IP-protected*



NCA7-2-21952-04 **NCP4 Non-Contact Tube Probe (75 mm)**

ø	*12-65 mm*
Recommended T-bar*	*ø 12.7 mm (ref. NCA7-2-21953-02)*
Recommended Z Gage*	*ø 20 mm (ref. NCA7-2-21954-02)*
IP	*not IP-protected*



NCA7-2-21952-05 **NCP5 Non-Contact Tube Probe (100 mm)**

ø	*20-85 mm*
Recommended T-bar*	*ø 25.4 mm (ref. NCA7-2-21953-03)*
Recommended Z Gage*	*ø 40 mm (ref. NCA7-2-21954-03)*
IP	*not IP-protected*



NCA7-2-21952-06 **NCP6 Non-Contact Tube Probe (150 mm)**

ø	*30-130 mm*
Recommended T-bar*	*ø 25.4 mm (ref. NCA7-2-21953-03)*
Recommended Z Gage*	*ø 40 mm (ref. NCA7-2-21954-03)*
IP	*not IP-protected*



* Certified T-bar for alignment and certified Z Gage for verification not included.

Absolute Scanner AS1

H00027250



AS1 kit, Accessory, for RA8 V1, 7 Axis
The Absolute Scanner AS1 for use with RA8 v1 7 axis Absolute Arms (and Absolute Positioner AP21, used with Laser Trackers). Shipped individually in its shipping box.

Includes
- Absolute Scanner AS1 with blue laser and SHINE technology
- RDS interface software
- Certified sphere artefact for accuracy checks
- Scanner certificate
- 24 month warranty*

Warning
ODU ethernet cable and ethernet gigabit adapter are not included.
Wireless scanning is only available when using the Wireless Pack CP-W.

	V1	V2P
8x12		
83-6		
85-6		
87-6		
83-7		
85-7	✓	
87-7		

H00030939



AS1 kit, V2P, Accessory, for RA8 V2P and V3P, 7 Axis
The Absolute Scanner AS1 for use with RA8 v2 and v3 7 axis Absolute Arms (and Absolute Positioner AP21, used with Laser Trackers). Shipped individually in its shipping box.

Includes
- Absolute Scanner AS1 with blue laser and SHINE technology
- RDS interface software
- Certified sphere artefact for accuracy checks
- 24 month warranty*
- Designed to IP54 standard for protection against dust and moisture when mounted on the arm

Warning
ODU ethernet cable and ethernet gigabit adapter are not included.
Wireless scanning is only available when using the Wireless Pack CP-W.

	V1	V2P	V3P
8x12			
83-6			
85-6			
87-6			
83-7			
85-7		✓	✓
87-7			

* The warranty of two (2) years is valid only if an arm service check is performed during the first year.

Absolute Scanner AS1-XL

H00041760



AS1-XL kit, V2P, Accessory, for RA8 V2P and V3P, 7 Axis
AS1-XL Laser Scanner for use with RA8 v2 and v3 7 axis Absolute Arms (and Absolute Positioner AP21, used with Laser Trackers). Shipped individually in its shipping box.

Includes
- Absolute scanner AS1-XL with blue laser and SHINE technology
- RDS interface software
- Certified sphere artefact for accuracy checks
- 24 month warranty
- Designed to IP54 standard for protection against dust and moisture when mounted on the arm

Warning
ODU ethernet cable and ethernet gigabit adapter are not included.
AS1-XL is not compatible with 2m 7 axis arms.
Wireless scanning is only available when using the Wireless Pack CP-W.

	V2P	V3P
8x12		
83-6 / 85-6 / 87-6		
83-7 / 85-7 / 87-7	✓	✓

H00041761



AS1-XL kit, Accessory, for RA8 V1, 7 Axis
AS1-XL Laser Scanner for use with RA8 v1 7 axis Absolute Arms (and Absolute Positioner AP21, used with Laser Trackers). Shipped individually in its shipping box.

Includes
- Absolute scanner AS1-XL with blue laser and SHINE technology
- RDS interface software
- Certified sphere artefact for accuracy checks
- 24 month warranty

Warning
The arm must be equipped with at least a CP1 or a CP-C.
Wireless scanning availability only with a CP-W.
Scanning on batteries without Wi-Fi only with a CP-B.
The scanner is not delivered with the “System Scanning Accuracy” report*.
ODU-Ethernet cable - 3m is not included.
Ethernet Gigabit adapter is not included.
AS1-XL not compatible with 2.0m Arm.

	V1
8x12	
83-6 / 85-6 / 87-6	
83-7 / 85-7 / 87-7	✓

* In the case of multiple scanners with one Arm, the first scanner must be purchased as Installed and the second one as Accessory. In that case all scanners will be aligned with the Arm and the System Scanning Certification (according to ISO 10360-8) will be supplied for each scanner.

RS5 and HP-L-8.9 Laser Scanners

H00007975



RS5 Kit, Accessory, for RA8, 7-Axis
General purpose laser scanner for the RA8 Absolute Arm 7-Axis.
Shipped individually in shipping box.

	V1	V2P	V3P
8x12			
83-6 / 85-6 / 87-6			
83-7 / 85-7 / 87-7	✓	✓	✓

Includes
- RS5 Laser Scanner
- RDS maintenance and interface software
- Certified scanning sphere, incl. certificate
- Scanner certificate
- 2-year warranty

Warning
Arm must be equipped with at least CP1 or CP-C.
Scanner not delivered with the "System Scanning Accuracy" ISO 10360-8 Annex-D report.
ODU-ethernet cable (3 m) not included.
Ethernet gigabit adaptor not included.
Wireless scanning available only with CP-W.
Not IP-protected.

H00007977



HP-L-8.9 Accessory Kit, for RA8, 6-Axis
Cost-effective laser scanner for the Absolute Arm 6-Axis.
Shipped individually in shipping box.

	V1	V2P	V3P
8x12	✓		
83-6 / 85-6 / 87-6	✓	✓	✓
83-7 / 85-7 / 87-7			

Includes
- HP-L-8.9 Laser Scanner
- Certified sphere for probing and scanning
- ODU-ethernet cable (3 m)
- Scanner certification
- RDS maintenance and interface software
- Travel case
- 1-year warranty

Warning
Arm must be equipped with at least CP1 or CP-C.
Scanner not delivered with "System Scanning Accuracy" ISO 10360-8 Annex-D report.
Wireless scanning not available with HP-L-8.9.
Not IP-protected.


AS1

Mounting solutions

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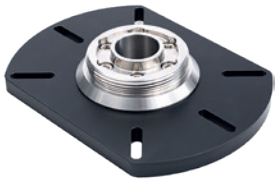
Standard bases 3.5”

All the standard bases for the Absolute Arm are designed for use with the Absolute Arm Mounting Ring

NCA7-5-21497 **Base Plate with Mounting Ring 3.5”**
Base mounting set that can be used to fix a base plate to the Absolute Arm so that it can stand freely on any flat and stable surface. Fully compatible with accuracy specifications and all Absolute Arm models.

Delivery contents
- Base plate (size: 170 x 235 x 15 mm)
- Mounting ring (ø 108 mm)
- 6 screws (SHCS, M8 x 1.25 x 25 SS)

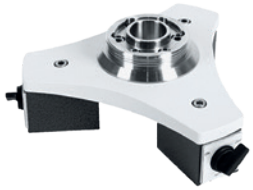
V1	opt 2
V2P	opt 2
V3P	opt 3 | 4



NCA7-5-19866 **Magnetic Base with Mounting Ring 3.5”**
Magnetic mounting adaptor for magnetically fixing any Absolute Arm system to magnetic surfaces. Works best on flat surfaces. Fully compatible with accuracy specifications and all Absolute Arm models.

Delivery contents
- Magnetic base plate (size: 238 x 271 x 112 mm)
- Set of three magnets (100 kg force / unit, size: 50 x 55 x 73 mm)
- Mounting ring (ø 108 mm)
- 3 screws (SHCS, M8 x 1.25 x 20 SS)
- 6 screws (SHCS, M8 x 1.25 x 25 SS)

V1	opt 2
V2P	opt 2
V3P	opt 3 | 4



H00008527 **Witte Vacuum Base with Mounting Ring 3.5”**
For mounting the arm on any flat surface without additional tools. For arms with a measurement up to and including 2.5 m. Weight 6.3 kg.

Delivery contents
- Mounting ring
- Storage and transport case
- Rechargeable battery and charger
- User manual

V1	opt 2
V2P	opt 2
V3P	opt 3 | 4



NCA-7-7-19225 **Circular Magnetic Base**
Magnetic circular base only.
For RA8 V1 and RA8 V2P the mounting ring 3.5” with screws (H00004220) is required. For RA8 V3P the mounting ring 4.5” with screws (H00048057) is required.

V1	opt 2
V2P	opt 2
V3P	opt 3 | 4



1. Not in standard delivery for 8x12 V3P models.
2. For 7x12; 8x12 V1; 8x12 V2P models a Kit mounting ring adapter 3.5” (H00012888) is required.
3. For RA8 V3P models, a Mounting ring adapter 3.5” to 4.5” (H00041163) is required.
4. For 8x12 V3P models, a Kit mouting ring adapter 4.5” (H00048085) is required.
5. In standard delivery for 8x12 only.
6. Option available for 7x12 and 8x12 only.

Bases 3.5”

H00004220

Mounting Ring 3.5”
Ring attachment that allows the Absolute Arm to be mounted to any surface using just 6 screws, with no additional base plate required.
Fully compatible with accuracy specifications and with all Absolute Arm models.

Delivery contents
- Mounting ring (ø 108 mm)
- All necessary mounting screws

V1	opt 2
V2P	opt 2
V3P	opt 3 | 4



H00012888

Kit Mounting Ring Adapter 3.5” for RA8x12
Allows the use of any standard mounting base or tripod with RA8 Absolute Arm Compact models.

Delivery contents
- Mounting interface
- Nut
- All necessary mounting screws

V1	
V2P	opt
V3P	



H00000896

Magnetic Anchors
Magnetic anchors for the use with the integrated base of Absolute Arm Compact models.

Delivery contents
-3 magnetic anchors

Remarks
Magnetic anchors are delivered as standard for all Absolute Arm Compact models

V1	opt 6
V2P	opt 6
V3P	✓5



H00001346

Magnetic Blocks and Anchors
Magnetic blocks and anchors for the use with the integrated base of Absolute Arm Compact models.

Includes
- 3 magnetic blocks (100 kg force/unit)
- 3 magnetic anchors
- All necessary mounting screws
- Short hexagon key

V1	opt 6
V2P	opt 6
V3P	opt 6



H00041163

Mounting Ring Adapter 3.5” to 4.5”
The mounting ring adapter 3.5” to 4.5” to transform any mounting base with mounting ring 3.5” to a compatible mounting base for RA8v3.

V1	
V2P	
V3P	opt



Standard bases 4.5”

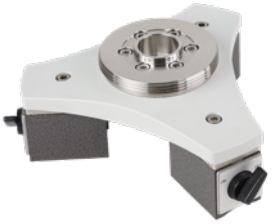
H00044995 **Base Plate with Mounting Ring 4.5”**
Mounting plate for Absolute Arms V3P with mounting ring 4.5”

V1	
V2P	
V3P	✓1 | 4



H00042182 **Magnetic Base with Mounting Ring 4.5”**
Magnetic base with mounting ring 4.5” on 3 magnetic blocks.

V1	
V2P	
V3P	opt 4



H00048033 **Witte Vacuum Base with Mounting Ring 4.5”**
To mount the arm on any flat surface without additional tools. Including Witte vacuum mount with a mounting ring 4.5”, storage and transport case, rechargeable battery and charger.
Not recommended for arms larger than 2.5m.

V1	
V2P	
V3P	opt 4



NCA7-7-19225 **Circular Magnetic Base**
Magnetic circular base only.
For RA8 V1 and RA8 V2P the mounting ring 3.5” with screws (H00004220) is required. For RA8 V3P the mounting ring 4.5” with screws (H00048057) is required.

V1	opt 2
V2P	opt 2
V3P	opt 3 | 4



1. Not in standard delivery for 8x12 V3P models.
2. For 7x12; 8x12 V1; 8x12 V2P models a Kit mounting ring adapter 3.5” (H00012888) is required.
3. For RA8 V3P models, a Mounting ring adapter 3.5” to 4.5” (H00041163) is required.
4. For 8x12 V3P models, a Kit mouting ring adapter 4.5” (H00048085) is required.
5. In standard delivery for 8x12 only.
6. Option available for 7x12 and 8x12 only.

Bases 4.5”

H00048057 **Mounting Ring 4.5” with Screws**
Includes a standard mounting ring 4,5”, 6 screws (M8x20) and a short Hexagon key.

V1	
V2P	
V3P	opt 4



H00048085 **Kit Mounting Ring Adapter 4.5” for RA8x12**
Allows to use any standard mounting base with the Compact Arm 8x12.

V1	
V2P	
V3P	opt



H00047098 **Mounting Hook Wrench**
Mounting hook wrench to tighten or untighten Arm base on mounting ring. Compatible for mounting ring 3.5”; mounting ring 4.5” and mounting ring adapter 3.5” to 4.5”.

V1	
V2P	
V3P	✓1



Tripods

Instrument stands for functionality and portability. Collapsible, tripod-type stands are available in a number of standard configurations. Stands with graphite upper legs have a low weight and give an advantage with respect to thermal stability. The height of the stand is adjusted by releasing quick-action levers and setting each telescoping leg to the desired length.

H00011491 **Hexagon Stand, Graphite Portable Adjustable** *(MGS2000SA)*
- Height adjustable 743-1403 mm
- Net weight: 18 kg
- Feet: 3 pad feet (32990) included

V1	✓*
V2P	✓*
V3P	✓**

H00011492 **Hexagon Stand, Graphite Portable Fixed** *(MGS2000SF)*
- Height adjustable 619-972 mm
- Net weight: 16 kg
- Feet: 3 pad feet (32990) included

V1	✓*
V2P	✓*
V3P	✓**



H00011493 **Hexagon Stand, Tetralock Portable - 400S-D**
- Materials: aluminium / stainless steel
- Height: adjustable 750-1190 mm
- Net weight: 11 kg
- Transport case: duffel-style canvas bag

V1	✓*
V2P	✓*
V3P	✓**



32990 **Brunson Pad Feet for Graphite Portable Stands**
- For H00011492 (MxS2000SF), H00011491 (MxS2000SA) and H00011493 (400S-D)
- 3 pieces



H00029348 **Universal Power Supply Holder Kit**
The Universal Power Supply Holder Kit is designed for use with any tripod. It holds the arm power pack and can be mounted on any tripod leg, so that the power pack is not on the ground.



576905 **Travel Case for Graphite Portable Stands**
Travel case for easy and safe transportation when shipping or packing requirements call for more protection, included carrying bag.
- For H00011491 and H00011492



576906 **Tripod Padded Bag**
Durable carrying bag for easy transport to and from the jobsite.
- For H00011491 and H00011492



* For 8x12 models a Kit Mounting ring adapter 3.5“ (H00012888) is required.
** For V3P models a Mounting ring adapter 3.5“ to 4.5“ (H00041163) is required. For 8x12 V3P models a Kit Mounting ring adapter 4.5“ (H00048085) is required.

Stands

Rigid heavy-duty metrology stands are perfect for 3D measurement applications that require a great deal of stability along with mobility around the workplace.

BRUN-21607 **Hexagon Stand, Model 230-F-24 Small**
- Height: fixed 610 mm
- Net weight: 77 kg

BRUN-21608 **Hexagon Stand, Model 230-F-36 Medium**
- Height: fixed 910 mm
- Net weight: 86 kg

BRUN-21609 **Hexagon Stand, Model 230-F-48 Large**
- Height: fixed 1220 mm
- Net weight: 104 kg

V1	✓*
V2P	✓*
V3P	✓**



BRUN-21604 **Hexagon Stand, Model 231 Small**
- Height: adjustable 710-1070 mm
- Net weight: 88 kg

V1	✓*
V2P	✓*
V3P	✓**

BRUN-21605 **Hexagon Stand, Model 230 Large**
- Height: adjustable 1090-1700 mm
- Net weight: 104 kg



32004-1 **Brunson Stand Extension 234-20**
- Height: 508 mm
- Includes spacer ring

V1	✓*
V2P	✓*
V3P	✓**



H00011499 **Hexagon Laptop Support Arm and Tray 230-231**
Black laptop support stand with adjustable laptop support tray, power cable management clips and 2 power supply mounting brackets.
- Materials: aluminium (frame), plastic (tray)
- Max. keyboard thickness/width: 44 mm / 394 mm
- Net weight: 5 kg
- Portable: yes
- Transport case: no

V1	✓*
V2P	✓*
V3P	✓**



Tables

Hexagon portable base stations provide the ideal workplace for your portable measuring arm. Available in a number of sizes and configurations, they have a rigid design and are fully rust proofed. Stable, lockable wheels and a convenient handle allows for easy movement and secure stowing. Lockable doors and drawers are designed to store frequently used inspection tools, accessories and other components safely. The M8 threaded top plate is magnetic, allowing the arm to be mounted directly. The 50-millimetre hole pitch ensures maximum flexibility and freedom in setting up the right fixture for every part. Each base station is equipped with a Swift-Fix Basic kit (pictured) as standard, enabling operators to correctly fixture parts of different shapes, sizes and complexity.



Swift-Fix Basic Kit

Available in two sizes, each with two configurations: two doors and one drawer or two large drawers. Maximum workload capacity of all configurations is 250 kg. Two-draw versions available with foam insert for Absolute Arm Compact models. Skeleton versions available with option of stable feet or lockable wheels. Dimensional indications (W x D x H) in mm.

GB0005-2014	**Version two doors, one drawer**	910 x 610 x 935	115 kg net
GB0005-2015	**Version two doors, one drawer**	1220 x 910 x 935	196 kg net
GB0005-2016	**Version two drawers**	910 x 610 x 935	115 kg net
GB0005-2017	**Version two drawers**	1220 x 910 x 935	196 kg net
GB0005-2024*	**Version two drawers** with foam insert for 8x12 arm	910 x 610 x 935	115 kg net
GB0005-2025*	**Version two drawers** with foam insert for 8x20 arm	1220 x 910 x 935	196 kg net
GB0005-2050*	**Version two drawers** with foam insert for 8x25 arm	1380 x 910 x 935	210 kg net
GB0005-2011	**Skeleton version on stable feet**	910 x 610 x 935	210 kg net
GB0005-2007	**Skeleton version on lockable wheels**	1820 x 610 x 935	180kg net
GB0005-2008	**Skeleton version on lockable wheels**	1830 x 910 x 935	250 kg net
GB0005-0026	**Ratchet Jackable castors (set of 4)** when ordered with a base station		
GB0005-0050	**Ratchet Jackable castors (set of 4)** when ordered with an upgrade		



Version two doors, one drawer



Version two drawers



Skeleton example



* Only available for V1 and V2P models.

GB0005-0045 **Laptop Tray and Monitor Mount**
Heavy duty aluminium laptop tray and monitor mount.

- Fully adjustable
- Laptop sizes from 12-17”
- Containing cable management system



H00002365 **Tube Inspection Table** 1854 x 1230 x 917 100 kg net
Table dedicated for tube inspection applications.

Compatible with
- Mounting ring
- Stands (NCA7-5-52794 and NCA 7-5-52795)
- M6 holes grid
- Only available for EMEA market



Raisers

Stable height extension for any arm. Particularly suitable for Absolute Arm tube inspection systems.

NCA7-5-52794 **Arm Raiser (250mm) with Mounting Ring 3.5”**
Multi-purpose stand, suitable for Absolute Arm tube stations as well as other high-accuracy arm applications.

V1	✓2
V2P	✓2
V3P	✓3 | 4



- Compatible with accuracy specifications
- Compatible with all sizes of arm
- Mounting Ring 3.5” included
- Height: 250 mm

NCA7-5-52795 **Arm Raiser (500mm) with Mounting Ring 3.5”**
Multi-purpose stand, suitable for Absolute Arm tube stations as well as other high-accuracy arm applications.

V1	✓
V2P	✓
V3P	✓3



- Compatible with accuracy specifications
- Compatible with all sizes of arm
- Mounting Ring 3.5” included
- Height: 500 mm

H00048063 **Arm Raiser (250mm) with Mounting Ring 4.5”**
Stand small (250 mm). Multi purpose stand, suitable for Tube stations but also for high accuracy arm application.
Includes: mounting ring 4.5”

V1	
V2P	
V3P	✓ 4



H00048070 **Arm Raiser (500mm) with Mounting Ring 4.5”**
Stand tall (500 mm). Multi purpose stand, suitable for Tube stations but also for high accuracy arm application.
Includes: mounting ring 4.5”
Not recommended for 8x12 models.

V1	
V2P	
V3P	✓




8
7

Artefacts and certifications

Verification bars 50

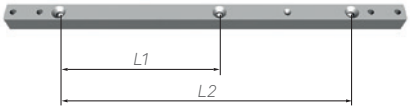
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Verification bars

Certified length bars are mainly used to verfiy the accuracy of portable measuring arms and to perform length checkouts. They can also be used to evaluate arm performance against ISO 10360-12, ASME B89.4.22 or VDI/VDE standards.



32377*

Certified Length Bar (short)
This length bar is recommended for 1.2 m Absolute Arm models.

Lengths
L1: 170 mm
L2: 310 mm

Delivery contents
- Certified length bar
- DIN ISO-17025 certificate


32377

32378*

Certified Length Bar (medium)
This length bar is recommended for 2.0-2.5 m Absolute Arm models.

Lengths
L1: 362 mm
L2: 712 mm

Delivery contents
- Certified length bar
- DIN ISO-17025 certificate


32378

32379*

Certified Length Bar (long)
This length bar is recommended for 3.0-4.5 m Absolute Arm models.

Lengths
L1: 514 mm
L2: 1016 mm

Delivery contents
- Certified length bar
- DIN ISO-17025 certificate


32379

* One included with all 85/87 Series arm packages, according to arm size.

Certified spheres

Certified spheres are used to calibrate all contact probes and laser scanners or to verify their accuracy.

NCA7-5-20653-01 **Certified Sphere – Probing (25.4 mm)**
- Included with 6-axis arms and 7-axis probing kit (H00030936)
- Sphere: ø 25.4 mm / hardeness 58 Rc
- Material: high-chrome high-carbon stainless steel
- Certificate and base plate included



H00000347 **Certified Sphere – Scanning and Probing (25.4 mm)**
- Recommended for scanning systems
- Already included with RS5 and AS1 kits
- Sphere: ø 25.4 mm
- Material: Tungsten carbide with matte finish
- Certificate and base plate included



H00041770 **Matt Sphere (90 mm)**
Certified sphere for checking Absolute Scanner AS1-XL.
Including stem, base plate and certificate.



Artefacts for tube probes

Calibrate tube probes and evaluate tube probe accuracy against certified tools.

8x12	✓
83-6 / 85-6 / 87-6	✓
83-7 / 85-7 / 87-7	✓

NCA7-2-21953-01 **Alignment Artefact for Tube Probe (ø 6.4 mm)**
Quarter-inch diameter T-bar for non-contact tube probe alignment.
- Recommended for NCP1 and NCP2
- Certificate included

NCA7-2-21953-02 **Alignment Artefact for Tube Probe (ø 12.7 mm)**
Half-inch diameter T-bar for non-contact tube probe alignment.
- Recommended for NCP3 and NCP4
- Certificate included

NCA7-2-21953-03 **Alignment Artefact for Tube Probe (ø 25.4 mm)**
One-inch diameter T-bar for non-contact tube probe alignment.
- Recommended for NCP5 and NCP6
- Certificate included

NCA7-2-21954-01 **Z Gage for Tube Certification (ø 8 mm)**
Gauge for non-contact tube probe verification and certification.
- Recommended for NCP1 and NCP2
- Certificate included

NCA7-2-21954-02 **Z Gage for Tube Certification (ø 20 mm)**
Gauge for non-contact tube probe verification and certification.
- Recommended for NCP3 and NCP4
- Certificate included

NCA7-2-21954-03 **Z Gage for Tube Certification (ø 40 mm)**
Gauge for non-contact tube probe verification and certification.
- Recommended for NCP5 and NCP6
- Certificate included





Optional certifications

H0000536

Certification – ISO 10360-12
Certification according to standard definition for tactile probing measurement with an articulated arm CMM.

8x12	☑
83-6 / 85-6 / 87-6	☑
83-7 / 85-7 / 87-7	☑

H00000658

Certification – ISO 10360-2
Optional probing certification.
Available only for 8x12 Absolute Arm Compact models.

8x12	opt
83-6 / 85-6 / 87-6	-
83-7 / 85-7 / 87-7	-


LASER RADIATION DO NOT STARE INTO THE
BEAM OR VIEW DIRECTLY WITH OPTICAL
INSTRUMENTS. CLASS 3R LASER PRODUCT

Accessories for tube inspection

Non-contact tube probes 56

Tools 57

Software and bender links 59

Non-contact tube probes

Infrared non-contact probes for tube measurement are available in 6 sizes, allowing measurement of all kinds of tubes. A laser dot (class 2M) guides the user for precise placement.
Compatible with TubeShaper, GTube and Docs software.

	V1	V2P	V3P
8x12	✓	✓	✓
83-6 / 85-6 / 87-6	✓	✓	✓
83-7 / 85-7 / 87-7	✓	✓	✓

NCA7-2-21952-01 **NCP1 Non-Contact Tube Probe (12.5 mm)**

ø	*4-13 mm*
T-bar*	*ø 6.4 mm (ref NCA7-2-21953-01)*
Z Gage*	*ø 8 mm (ref NCA7-2-21954-01)*
IP	*not IP-protected*



NCA7-2-21952-02 **NCP2 Non-Contact Tube Probe (25 mm)**

ø	*6-20 mm*
T-bar*	*ø 6.4 mm (ref. NCA7-2-21953-01)*
Z Gage*	*ø 8 mm (ref. NCA7-2-21954-01)*
IP	*not IP-protected*



NCA7-2-21952-03 **NCP3 Non-Contact Tube Probe (50 mm)**

ø	*10-40 mm*
T-bar*	*ø 12.7 mm (ref. NCA7-2-21953-02)*
Z Gage*	*ø 20 mm (ref. NCA7-2-21954-02)*
IP	*not IP-protected*



NCA7-2-21952-04 **NCP4 Non-Contact Tube Probe (75 mm)**

ø	*12-65 mm*
T-bar*	*ø 12.7 mm (ref. NCA7-2-21953-02)*
Z Gage*	*ø 20 mm (ref. NCA7-2-21954-02)*
IP	*not IP-protected*



NCA7-2-21952-05 **NCP5 Non-Contact Tube Probe (100 mm)**

ø	*20-85 mm*
T-bar*	*ø 25.4 mm (ref. NCA7-2-21953-03)*
Z Gage*	*ø 40 mm (ref. NCA7-2-21954-03)*
IP	*not IP-protected*



NCA7-2-21952-06 **NCP6 Non-Contact Tube Probe (150 mm)**

ø	*30-130 mm*
Recommanded T-bar*	*ø 25.4 mm (ref. NCA7-2-21953-03)*
Recommanded Z Gage*	*ø 40 mm (ref. NCA7-2-21954-03)*
IP	*not IP-protected*



* Certified T-bar for alignment and certified Z Gage for verification not included.

Tools

EBD-12865

Tube Holder (ø 0-20 mm)
- Available in Europe, Middle East and Africa
- Weight: 17 kg



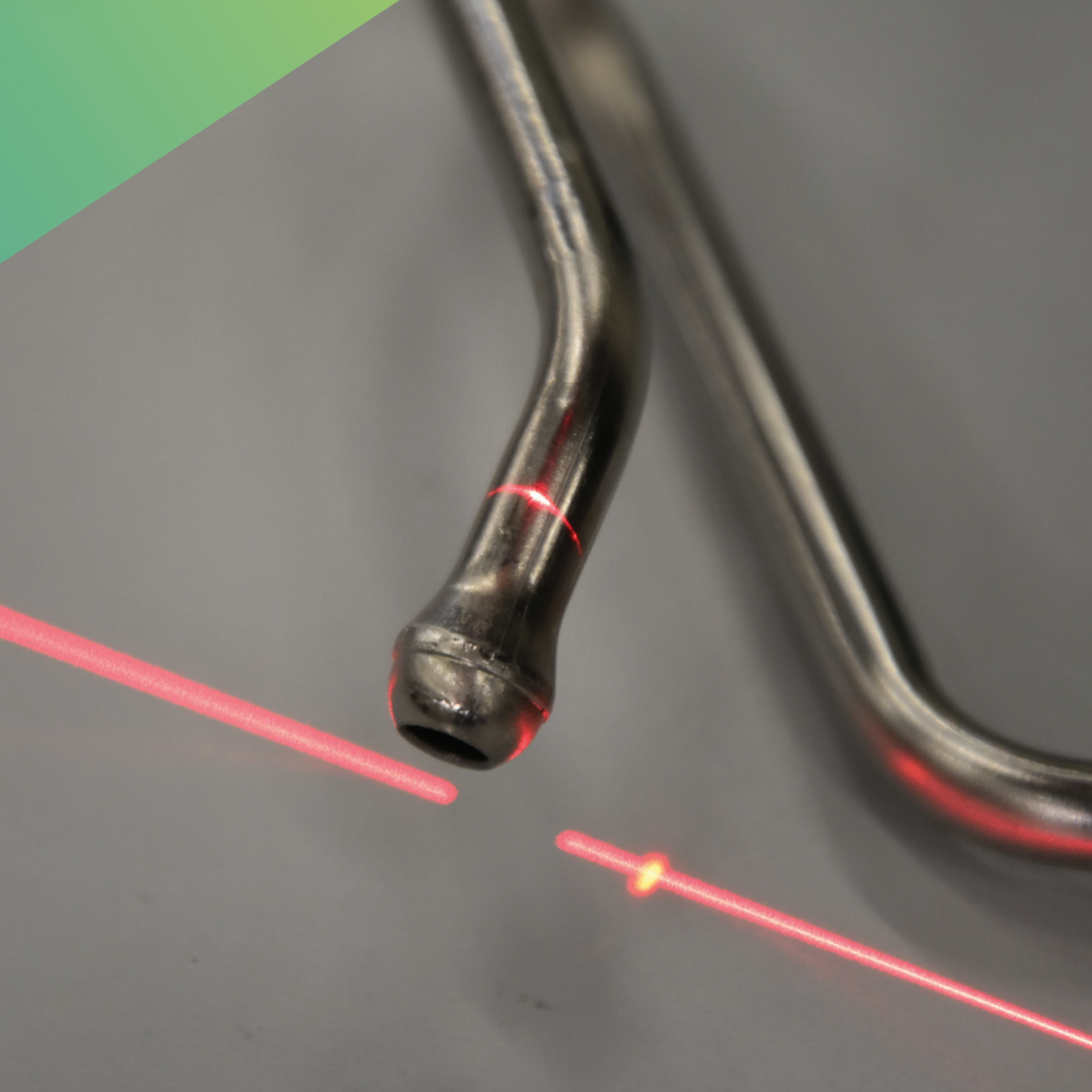
EBD-12866

Tube Holder (ø 20-70 mm)
- Available in Europe, Middle East and Africa
- Weight: 17 kg

EBD-20539-4

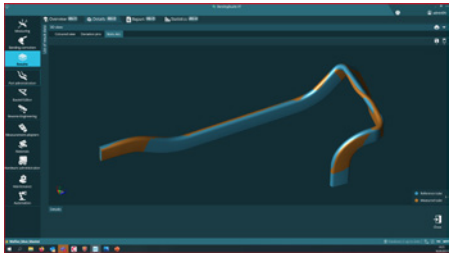
Tube Holder (ø 0-50 mm)
- Available in North America, China and Asia-Pacific
- Weight: 10 kg





Software and bender links

BendingStudio XT



BendingStudio XT links all data and processes involved in the manufacture of bended parts, from production and process planning to manufacturing and quality control.

It is the only tool to meet and combine these requirements with an emphasis on metrological processes. In combination with TubeInspect or Absolute Arm systems, BendingStudio XT offers efficient and customer-oriented solutions with a unique combination of speed, accuracy and flexibility.

For any part, different data is often required for the different stages on the way from the drawing to the tested product. This includes CAD data from design and bend programs and corrections for manufacturing, as well as test and inspection plans or measurement reports and analysis for quality control. But these records are not always 100 percent compatible.

BendingStudio XT is focused on bringing together all parallel data sets belonging to any particular part, allowing manufacturers to monitor, quantify, visualise and document all changes throughout the different process steps.

The platform is based on a simple and clearly structured handling concept featuring a variety of small tools to ease daily work in all areas of bended part manufacturing.

BendingStudio XT is compatible with both manual and automated inspection processes through the turnkey TubeInspect measurement cell hardware, as well as 3D laser scanner, tube probe and touch probe measurement using an Absolute Arm portable measuring arm system. BendingStudio XT is also compatible with the Absolute tracker ATS60 with Absolute Scanner AS1 and T-Probe.

Please refer to page 78/79 for further information about software packages.



Volume extension systems

GridLOK 62

Leap Frog Kit 63

GridLOK

GridLOK is an expanded measurement solution that allows the accuracy and convenience of the Absolute Arm to be applied to larger parts and systems otherwise beyond its reach.

	V1	V2P	V3P
8x12	✓	✓	✓
83-6 / 85-6 / 87-6	✓	✓	✓
83-7 / 85-7 / 87-7	✓	✓	✓

51460-XX

GridLOK Installation

- Please specify the grid size when you order the kit
- Grid pattern available from 4 by 6 m up to 60 by 60 m*
- Please consult your local Hexagon representative for further information and recommendations

11615

GridLOK stand-alone license

Dongle-protection to activate the use of GridLOK function.



* Specific measuring area can be evaluated on request.

Leap Frog Kit

A set of magnets used to align an Absolute Arm across multiple measurement stations when measuring larger parts.

	V1	V2P	V3P
8x12	✓	✓	✓
83-6 / 85-6 / 87-6	✓	✓	✓
83-7 / 85-7 / 87-7	✓	✓	✓

54479-01

Leap Frog kit
Delivered in storage box.

- 4x Magnets with cones
- 1x Short rod




CPW-0025-FA

Other accessories

Cables and adaptors 66
Control packs 66
Batteries 68
Dust covers 69
Installation USB 69

Cables and adaptors

H00017063

Gigabit Ethernet Adaptor
Ethernet to USB adaptor, for computer without available ethernet port.

	V1	V2P	V3P
8x12	✓	✓	✓
83-6 / 85-6 / 87-6	✓	✓	✓
83-7 / 85-7 / 87-7	✓	✓	✓



H00003263

ODU-Ethernet cable (3 m)
3-metre long Ethernet cable for arm-to-computer data transfer and scanner data transfer. For use with all RA8 Absolute Arm models.

	V1	V2P	V3P
8x12	✓	✓	✓
83-6 / 85-6 / 87-6	✓	✓	✓
83-7 / 85-7 / 87-7	✓	✓	✓



H00008521

ODU-Ethernet cable (5 m)
5-metre long Ethernet cable for arm-to-computer data transfer and scanner data transfer. For use with all RA8 Absolute Arm models.

	V1	V2P	V3P
8x12	✓	✓	✓
83-6 / 85-6 / 87-6	✓	✓	✓
83-7 / 85-7 / 87-7	✓	✓	✓



Control packs

Every advanced function an Absolute Arm performs is mediated through a control pack. From power, probing and scanning over a single cable connection to hot-swappable batteries and full-speed measurement-over-WiFi for unmatched portability, it all comes down to the control pack.

H00016653

CP-C, Accessory
Connector Pack (CP-C) shipped individually in shipping box.

	V1	V2P	V3P
8x12	✓	✓	✓
83-6 / 85-6 / 87-6	✓	✓	✓
83-7 / 85-7 / 87-7	✓	✓	✓

- Single Ethernet connection for all touch probes, tube probes and scanners (HP-L-8.9, AS1, AS1-XL, RS5)
- Connection over ethernet or USB (with adaptor)
- CP-C is certified to IP54 when mounted on the arm

Includes
- Connector Pack CP-C
- RDS maintenance and interface software
- ODU-Ethernet cable (3 m)
- Ethernet Gigabit adaptor



H00016654

CP-W, Accessory
Wireless Pack (CP-W) shipped individually in shipping box.

	V1	V2P	V3P
8x12	✓	✓	✓
83-6 / 85-6 / 87-6	✓	✓	✓
83-7 / 85-7 / 87-7	✓	✓	✓

- Single Ethernet connection for all touch probes, tube probes and scanners (HP-L-8.9, AS1, AS1-XL, RS5)
- Wireless connections for all touch probes, tube probes, AS1, AS1-XL, RS6, RS5 (HP-L-8.9 does not support wireless connections)
- One Ethernet to USB adapter, for computer without available ethernet port
- Battery operation available (with hot-swappable batteries)
- CP-W is certified to IP54 when mounted on the arm

Includes
- Wireless Pack CP-W
- RDS maintenance and interface software
- Two rechargeable batteries
- ODU-Ethernet cable (3 m)
- Ethernet gigabit adaptor

H00033889

CP-B, Accessory
Battery Pack (CP-B) shipped individually in its shipping box. Battery Pack for use with batteries and cable connection to the computer (no Wi-Fi).

	V1	V2P	V3P
8x12	✓	✓	✓
83-6 / 85-6 / 87-6	✓	✓	✓
83-7 / 85-7 / 87-7	✓	✓	✓

- Single Ethernet connection for all touch probes, tube probes and scanners (HP-L-8.9, AS1, AS1-XL, RS5)
- One Ethernet to USB adapter, for computer without available ethernet port
- Battery operation available (with hot-swappable batteries)
- CP-B is certified to IP54 when mounted on the arm

Includes
- Battery Pack CP-B
- RDS maintenance and interface software
- Two re-chargeable batteries
- ODU-Ethernet cable (3 m)
- Ethernet Gigabit adapter

Batteries

NCA7-6-50108	**Li-ion Battery** Internal Lithium-ion battery. A second battery can be hot-swapped with the battery installed in the control pack to allow constant powered wireless usage with no downtime. For all Absolute Arm Series 8 models equipped with a Wireless Pack CP-W, Control Pack 2 or Control Pack 3.



CH5000E	**Charger for Li-ion Battery (EU)** External quick charger for Lithium-ion battery.
CH5000U	**Charger for Li-ion battery (UK)** External quick charger for Lithium-ion battery.
CH5000A	**Charger for Li-ion battery (US)** External quick charger for Lithium-ion battery.



Dust covers

Protection against dust is available for all Absolute Arm models and sizes. Designed to fit the arm when in the rest position.

H00006817 **Dust Cover – Hexagon branded (750 mm)**
For Absolute Arm size 1.2 m

8x12	☑
83-6 / 85-6 / 87-6	
83-7 / 85-7 / 87-7	

H00006816-01 **Dust Cover – Hexagon branded (1080 mm)**
For Absolute Arm size 1.5-2 m

8x12	
83-6 / 85-6 / 87-6	☑
83-7 / 85-7 / 87-7	☑

H00006816-02 **Dust Cover – Hexagon branded (1280 mm)**
For Absolute Arm size 2.5-3 m

8x12	
83-6 / 85-6 / 87-6	☑
83-7 / 85-7 / 87-7	☑

H00006816-03 **Dust Cover – Hexagon branded (1640 mm)**
For Absolute Arm size 3.5-4.5 m

8x12	
83-6 / 85-6 / 87-6	☑
83-7 / 85-7 / 87-7	☑



Installation USB package

H00007157 **USB Package Absolute Arm**
Installation USB memory stick, including RDS installation files and all user manuals.

8x12	☑
83-6 / 85-6 / 87-6	☑
83-7 / 85-7 / 87-7	☑


AS1

Application software

PC-DMIS Portable 72

Inspire 74

SpatialAnalyzer 75

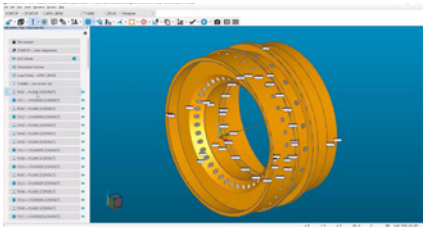
QUINDOS 76

VISI Reverse 77

BendingStudio XT 78

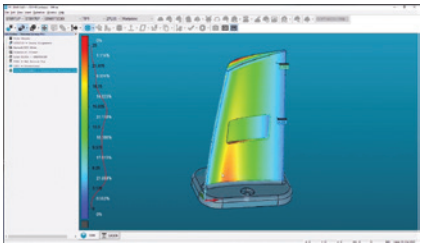
PC-DMIS Portable

Portable measurement devices have changed the way operations are monitored, making it possible to take measurements and analyse the results directly where parts are made and assembled. PC-DMIS Portable provides the tools needed to more effectively monitor operations and identify minor issues before they turn into costly problems.



ROY-PRO-MAN-A	**PC-DMIS PRO MAN PORTABLE DEVICE** Includes LMS license + all Portable interface (ROY-I-PORTABLE) + best in class GD&T and updates for 1 year
ROY-PROBE	**PC-DMIS CAD++ PROBING ON PORTABLE DEVICE** Includes LMS license + all Portable interface (ROY-I-PORTABLE) + best in class GD&T + IGES / DXF / DWG /STEP203 / STEP 214 / VDAFS / XYZIJK / DES and DMISI/O translators and updates for 1 year
ROY-SCANMESH	**PC-DMIS CAD++ PROBING AND SCANNING WITH PORTABLE DEVICE** Includes LMS license + all Portable interfaces (ROY-I-PORTABLE) + Hexagon Scanning Probe Interface + Scanning Auto Features + Full COP support + XACT GD&T, IGES / DXF / DWG / STEP203 / STEP 214 / VDAFS / XYZIJK / DES and DMISI/O translators + STL Mesh Creation and Inspection and updates for 1 year.
ROY-UP-300	**UPGRADE PC-DMIS CAD++ PROBING TO PC-DMIS CAD++ SCANNING WITH MESH** Allows existing customers with a valid SMA to upgrade from PC-DMIS CAD++ Probing to PC-DMIS CAD++ Scanning.

PC-DMIS Portable



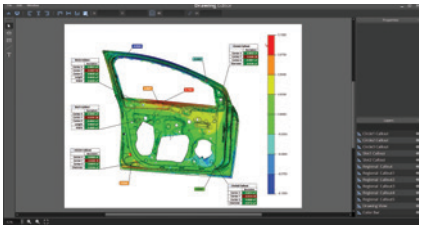
ROY-SMA-PRO-MAN	**Annual SMA for PC-DMIS PRO MAN ON A PORTABLE DEVICE** Annual Software Maintenance Agreement (SMA) after year 1.
ROY-SMA-PROBE-I-A	**Annual SMA for PC-DMIS CAD++ PROBING WITH PORTABLE DEVICE** Annual Software Maintenance Agreement (SMA) after year 1.
ROY-SMA-MESH-I-A	**Annual SMA for PC-DMIS CAD++ PROBING AND SCANNING WITH PORTABLE DEVICE** Annual Software Maintenance Agreement (SMA) after year 1.

Inspire

User-friendly measurement software for portable probing and scanning

Inspire is the next generation inspection software for all portable probing and scanning devices. It makes measurement simple and the complex possible. With one simple interface, Inspire works with any portable measuring arm or laser tracker for probing and scanning applications. Intuitive and easy to use, Inspire software is a comprehensive solution that makes measurement simple, saves time, and ultimately improves productivity.

Inspire capabilities
- Measure
- Align
- Assemble/Build
- Analyse
- Report
- Scan and Probe
- Mesh
- Instrument networking
- Advanced Scripting
- CAD Import



Single Seat License includes all hardware interfaces and supports Polygonal mesh data (STL), CAD entities (IGES, STEP, STL, CATIA, X_T, OBJ, VRML), for SPC analysis (DFQ for Q-DAS software), and for Reporting (pdf, Excel, xps). Training classes available at additional cost and updates for 1 year. Inspire provided with license code.

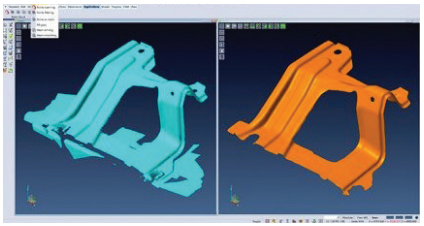
SA2-INS-PRB	**Inspire probing**
SA1-INS-1	**Inspire (probing & scanning)**
SA2-INS-PRB-UPGD	**Upgrade Inspire Probing to Inspire**
	Maintenance
SA2-INS-SMA PRB	**SMA for Inspire Probing**
SA2-INS-SMA-1	**SMA for Inspire (probing & scanning)**

SpatialAnalyzer®

Powerful and traceable measurement and analysis software

SpatialAnalyzer® (SA) is a powerful, traceable and easy to use metrology and analysis software package, tailored for Hexagon`s Manufacturing Intelligence portable CMM family.

SA offers a vast number of benefits, including:
- Intuitive, state of the art graphical environment
- Interfaces to all Hexagon Manufacturing Intelligence portable CMMs
- All common CAD exchange and native formats
- Advanced analysis and processing and unique alignment techniques
- Easy multiple-instrument station bundling
- True GD&T and feature checks
- Numerous reporting options such as:
  Polygonal mesh data (STL), CAD entities (IGES, STEP, STL, X_T, OBJ, VRML),
  for SPC analysis (DFQ for Q-DAS software) and for Reporting (pdf, Excel, HTML, doc)
- Measurement uncertainty calculation
- Unified Spatial Metrology Network to achieve the ideal instrument network
- Integrated Modern Scripting Language to automate complete workflows
- Multiple language support
- Free SA Viewer to share SA job files easily



SpatialAnalyzer® makes metrology easy.

SA PRO	**SA Professional**
SA UL	**SA Ultimate**
	Maintenance
SA PRO EXT	**SMA for SA Professional**
SA UL EXT	**SMA for SA Ultimate**

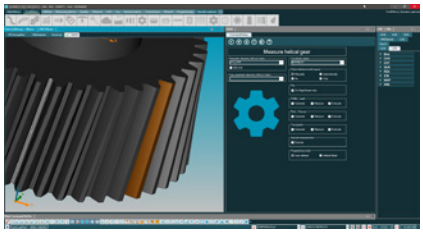
QUINDOS

MTW-510-QPG-001

Gear Software Package for Portable Products

- Quindos Basic (incl. CAD basic for scannable portable devices)
- Gear (measurement of straight or helical (cylindrical) gears
- Unknown Gear (inspection of straight and helical, external and internal gears or gears segment with unknown parameters)

Attention: When using the Absolute Arm for larger applications, an extension of the measuring volume may be required. Note that the required length must be adapted to the gear size.

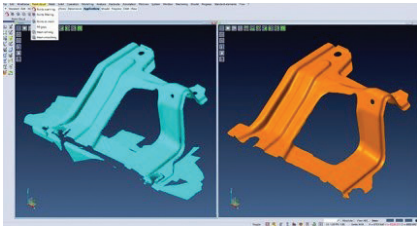


VISI Reverse

VS-B10A

Cloud to Mesh
Allows imported scan data (from file or directly from a Hexagon scanner) to be converted into a refined mesh (noise reduction, filtering, smoothing, topology detection, realignment). Mesh data can then be used as is or as a reference model for curves extraction. Direct interface to Absolute Arm included.

Attention: Other prerequisite module(s) (VS-B03B / VS-S020) required. Please consult your local Hexagon representative for a complete overview and compatibility information.



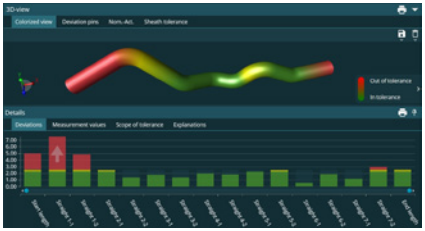
VS-B10B

Mesh to Surface
Allows mesh models to be converted automatically or semi-automatically to analytical surfaces.
Attention: Other prerequisite module(s) (VS-B10A) required. Please consult your local Hexagon representative for a complete overview and compatibility information.

BendingStudio XT

The complete platform for bending data and processes

BendingStudio XT links all data and processes related to the production of bent parts, from design and process planning to manufacturing and quality control.



130690 **BendingStudio XT STANDARD**
Compatible with :
- TubeInspect, Absolute Arm with Tube Probe and AS1 laser scanner.
- Absolute Tracker ATS60 with Absolute Scanner AS1 and T-Probe.

130692 **BendingStudio XT PREMIUM**
Compatible with:
- TubeInspect and Absolute Arm with Tube Probe and AS1 laser scanner.
- Absolute Tracker ATS60 with Absolute Scanner AS1 and T-Probe.

111561 **BendingStudio XT AUTOMATION**
Compatible with:
- TubeInspect P8.2 HRC and P16.2 HRC.
- Absolute Tracker ATS60 with Absolute Scanner AS1 and T-Probe.

See what is included in each package in the table on page 79.

		Standard	Premium	Automation
Measurement systems	• TubeInspect P8.2, P16.2 • TubeInspect P8.2 HRC and P16.2 HRC • Absolute Arm with TubeProbe • Absolute Arm with AS1 • Absolute Tracker ATS60 with Absolute Scanner AS1 and T-Probe.	☑ ☑ ☑ ☑ ☑	☑ ☑ ☑ ☑ ☑	- ☑ - - ☑
Basic functions	Part database; user management; settings for display levels; measurement of tubes and wires, parts with rotationally symmetric formed ends; calculation of bending data (LRA/PBR, XYZ); nominal-to-actual comparison; tolerance envelope inspection (optical gauge); functional dimensions; reverse engineering; measurement jobs; flexible configurable measurement reports	☑	☑	☑
Deflection compensation	Deflection correction for elastic tubes caused by gravity (e.g. long thin tubes or rubber tubes); material data base; not applicable for freeform tubes	☑	☑	☑
Branch	Measurement of branched tube geometries: allows testing of both individual tubes and assembled part; function requires at least one bend for each individual tube; only applicable for cylindrical cross sections	opt	☑	☑
CAD-WIZARD	IMPORT and EXPORT of IGES and STEP files: import by automatic or interactive selection of straight and bended segments of tube components, calculation of bending elements (XYZ/LRA) to prepare a bending program, export of tube geometry in IGES and STEP format	opt	☑	☑
Bevel cut	Functionalities for measurement of parts with bevel cut ends	-	☑	☑
CAD-adaptors	Measurement function to determine position and direction of features such as mounted holders or attachments; evaluation is done by analysing image or scan data and comparing with reference generated from CAD data	-	opt[1)]	☑
Diameter changes	Measure positions of diameter changes along the tube	-	☑[2)]	☑
Profile	Measurement of classic and freeform bent parts with rectangular and oval cross-sections; includes calculation of bending data	-	opt[2)]	☑
Bender interface STANDARD	Calculation of bending correction data; virtual gauge simulation tool; open bender interface Note: uploading of correction data must be enabled on the bender	☑	☑	☑
Bender interface FREEFORM	Calculation of bending correction data including: bending radii; virtual gauge simulation tool; open bender interface Note: uploading of correction data must be enabled on the bender	-	☑	-
Offline licence	Licence for offline data processing without measuring system	opt	opt	opt
Floating licence	Licence for offline data processing without measuring system; network licence for one user	opt	opt	opt
Database server	Simplified BendingStudio XT licence for the administration of the BendingStudio XT parts database on a separate server/computer	opt	opt	opt

All BendingStudio XT packages include a 12-month SMA

☑ included - not included opt. optional

[1)] Function only available when using Absolute Arm with AS1/RS5 scanner or TubeInspect HRC models.

[2)] Function only available when using Absolute Arm with scanner or TubeInspect models.



Warranty and maintenance

Warranty plan renewals 82

Warranty plan conditions 83

Warranty period per article type 84

Customer Care Packages 86

Service and support 88

Warranty plan renewals

H00011149-01*	**1 Year Arm Warranty Extension** Renewal of standard manufacturer's warranty plan for Absolute Arm range for 1 year.
H00011149-02*	**2 Years Arm Warranty Extension** Renewal of standard manufacturer's warranty plan for Absolute Arm range for 2 years.
H00011149-03*	**3 Years Arm Warranty Extension** Renewal of standard manufacturer's warranty plan for Absolute Arm range for 3 years.
H00011150-01*	**1 Year RS5 Warranty Extension** Renewal of standard manufacturer warranty plan for RS5 Laser Scanner for 1 year.
H00011150-02*	**2 Years RS5 Warranty Extension** Renewal of standard manufacturer warranty plan for RS5 Laser Scanner for 2 years.
H00011150-03*	**3 Years RS5 Warranty Extension** Renewal of standard manufacturer warranty plan for RS5 Laser Scanner for 3 years.
RS6-ASx-HW-1Y-WRTY*	**1 Year RS6-ASx-Warranty Extension** Renewal of standard manufacturer warranty plan for RS6; AS1 and AS1-XL Laser Scanner for 1 year.
RS6-ASx-HW-2Y-WRTY*	**2 Years RS6-ASx-Warranty Extension** Renewal of standard manufacturer warranty plan for RS6; AS1 and AS1-XL Laser Scanner for 2 years.
RS6-ASx-HW-3Y-WRTY*	**3 Years RS6-ASx-Warranty Extension** Renewal of standard manufacturer warranty plan for RS6; AS1 and AS1-XL Laser Scanner for 3 years.

* Can be added as an option before the first 24 months of standard warranty have expired. IP54 usage conditions must be respected with RA8 V2P and RA8 V3P arms. Refer to user manual to ensure IP54 rules and accessories conformity. Warranty void if IP54 conditions are not respected.

Warranty plan conditions

Standard manufacturer warranty plan

Hexagon's portable measuring arm factories provide a 2-year manufacturer warranty for Hexagon arms and scanners (excluding the HP-L-8.9 laser scanner). Warranty period begins at the customer delivery date or 3 months after the factory delivery to the local Hexagon representative. Standard factory warranty plan renewals have the following terms:

1. Repair of manufacturing defects on the following components: arm, encoders, encoder board, electronic boards, probe, scanner optics and light source (excluding HP-L-8.9) and all other arm parts.
2. IP54 usage conditions must be respected with RA8 V2P and RA8 V3P ams. Refer to the user manual to ensure IP54 rules and accessories conformity. Warranty void if IP54 conditions are not respected.
3. The warranty of two (2) years is valid only if an arm service check is performed during the first year. This is a paid service that must be purchased by the customer at some time between the arm delivery and the due date, meaning maximum one (1) year after the instrument delivery.
4. Unlimited telephone and email technical support during the warranty period.
5. Under normal usage, the carbon-graphite tubes have a lifetime warranty.
6. Customer assumes all shipping costs.

Renewal of standard manufacturer warranty plan

Hexagon's portable measuring arm factories offer 1, 2, or 3-year renewals for the standard factory warranty plan. To be eligible for renewal, the warranty plan renewal must be ordered with the instrument or ordered before the existing warranty plan expires. Standard factory warranty plan renewals have the following terms:

1. Replacement or repair, at Hexagon portable measuring arm factory’s discretion, free of charge, of any component or parts of the instrument which upon examination are found defective in workmanship or material.
2. Any required repairs not covered by the warranty plan renewal cost extra.
3. The instrument must be returned to the factory or an authorised and certified Hexagon service centre if a repair, compensation or certification needs to be performed.
4. For the renewals of the warranty, the instrument must be compensated in a certified service centre, in the first instance no later than 15 months after delivery. The following compensations are then required to take place every 12 months according to the warranty plan renewal.
5. Customer assumes all shipping costs.

Warranty period per article type

Article description	24 months warranty	Warranty extensions available
RA8 arm (Compensation and certification excluded)	☑	☑
Absolute Scanner AS1	☑	☑
RS5 Laser Scanner	☑	☑
Absolute Scanner AS1-XL	☑	☑
Pistol grip	☑	
SE adapter plate	☑	
Nose cone	☑	
Arm case including closing latches and wheels	☑	
Accessory case	☑	
Control packs	☑	
Batteries	☑ or 300 charges and discharges	
Bar and spheres artefacts (Certification not concerned)	☑	
Magnetic base	☑	
Base plate	☑	

Other accessories have 12 months warranty.



World-class service made simple

Customer Care Packages



Owners of Hexagon products featured in this catalogue have the opportunity to invest in a Customer Care Package – a standardised after-sale service package designed to ensure equipment remains in top condition and can be relied upon for accurate measurement results.

- Maintenance and warranty plans that ensure top equipment availability
- Trouble-free usage and minimal downtime.
- Preferred hotline access at no additional cost
- Access to professional advice whenever it's needed

Customer Care Packages include a selection of the following benefits, depending on the tier chosen.

- Planned annual service
- Hardware support
- Annual maintenance and recertification
- Remote assistance
- Repair parts and labour
- Customised local benefits
- Software maintenance

For complete details of the benefits of each level of Customer Care Package, please contact a local Hexagon representative.

Absolute Arm Customer Care Packages

	Platinum*	Gold*	Silver*	Bronze*
Planned annual service	☑	☑	☑	☑
Customer hardware support	☑	☑	☑	☑
Annual maintenance and recertification	☑	☑	☑	-
Remote connected assistance	☑	☑	-	-
Repair parts and labour	☑	-	-	-
Local customised benefits	☑	☑	☑	☑

All packages below can be added as an option before the first 12 months of standard warranty have expired.

H00029362	Bronze Customer Care Package
H00029363	Silver Customer Care Package
H00029364	Gold Customer Care Package
H00029365	Platinum Customer Care Package
H00028796	Upgrade Bronze to Platinum Customer Care Package
H00030198	Year 3 Platinum CCP
H00030199	Year 3 and 4 Platinum CCP
H00030200	Year 3, 4 and 5 Platinum CCP
H00038455	Upgrade Bronze to Gold Customer Care Package
H00038454	Upgrade Bronze to Silver Customer Care Package
H00038456	Upgrade Silver to Platinum Customer Care Package
H00038457	Upgrade Silver to Gold Customer Care Package
H00035190	Customer Care Package Upgrade Scanning Arm
H00035191	Platinum Customer Care Package Year 1
H00038452	Gold Customer Care Package Year 1
H00038453	Silver Customer Care Package Year 1
H00035192	Bronze Customer Care Package Year 2

* For further information about Bronze, Silver, Gold and Platinum service contracts, please contact a local Hexagon representative.

World-class products to rely on

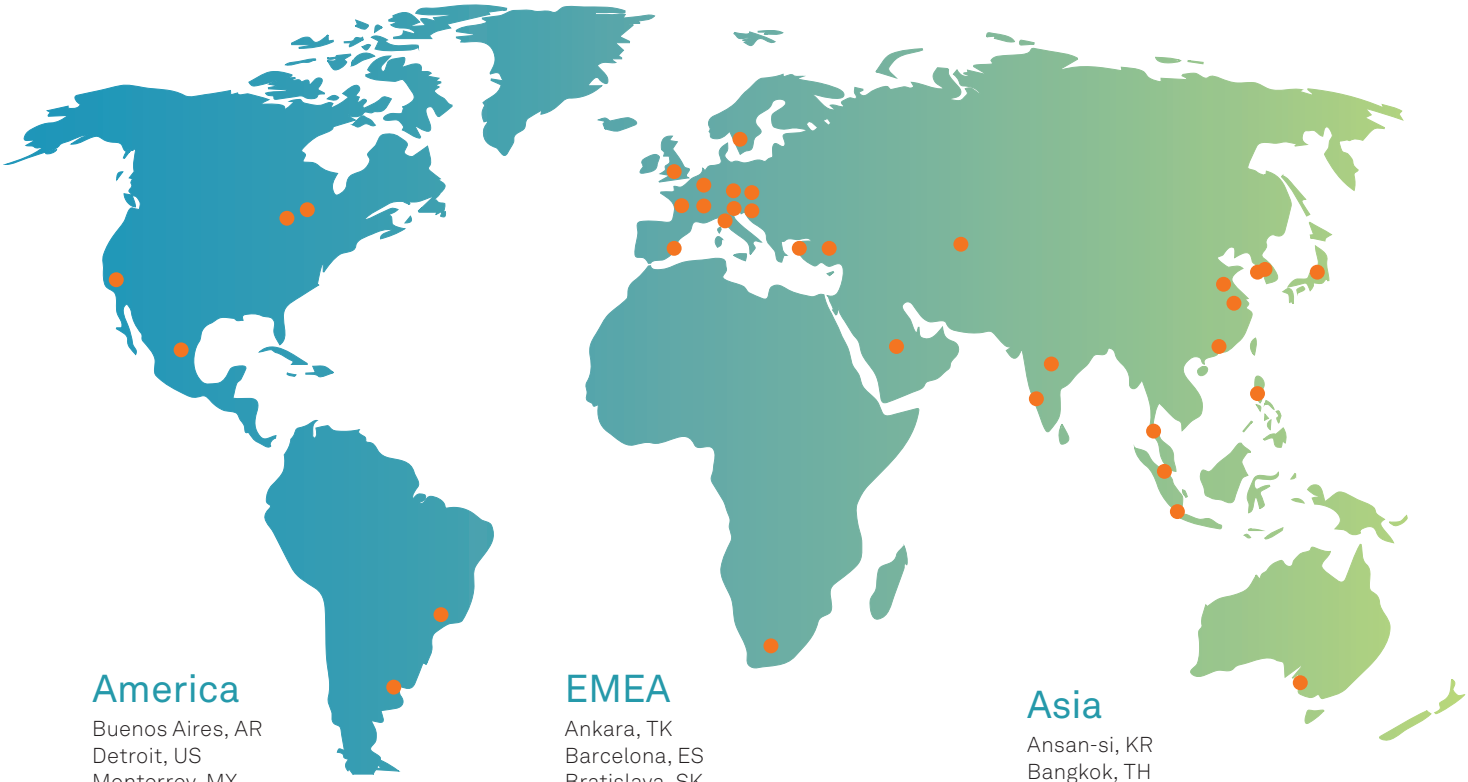
Drawing on decades of research and development experience, metrology technology from Hexagon's Manufacturing Intelligence division is built on a long history of outperforming technological innovation. Deriving quality from experience to drive productivity is what keeps Hexagon in front and able to deliver first-class solutions for industries around the world.

Along with the assurance of ten years of serviceability, owners of Hexagon portable and large-volume systems benefit from a 24-month factory warranty as standard – our guarantee that our technology will always meet the needs of our users.

World-class support delivered locally

The international presence of Hexagon guarantees comprehensive aftersales support and services across the globe. With the largest dedicated service team of any metrology equipment manufacturer and an emphasis on locally delivered solutions, Hexagon is unmatched from service, repair, certification and calibration through operator training and software maintenance and upgrades.

There are now 35 Absolute Arm service centres worldwide, all of which are able to offer full ISO certification facilities along with a complete array of other support and maintenance services.



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Detroit, US
Monterrey, MX
Oakville, CA
Oceanside, US
São Paulo, BR

EMEA

Ankara, TK
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Bratislava, SK
Budapest, HU
Bursa, TK
Eskilstuna, SE
Johannesburg, ZA
Kladno, CZ
Krakow, PL
Milton Keynes, UK
Montoire, FR
Orbassano, IT
Prague, CZ
Wetzlar, DE

Asia

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Bangkok, TH
Jakarta, ID
Manila, PH
Melbourne, AU
Nagoya, JP
Noida, IN
Pune, IN
Qingdao, CN
Seoul, KR
Shenzhen, CN
Singapore, SIN
Suzhou, CN
Riyadh, SA
Tashkent, UZ



Hexagon is a global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications.

Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Manufacturing Intelligence division provides solutions that use data from design and engineering, production and metrology to make manufacturing smarter.

Learn more about Hexagon (Nasdaq Stockholm: HEXA B) at hexagon.com and follow us @HexagonAB.

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