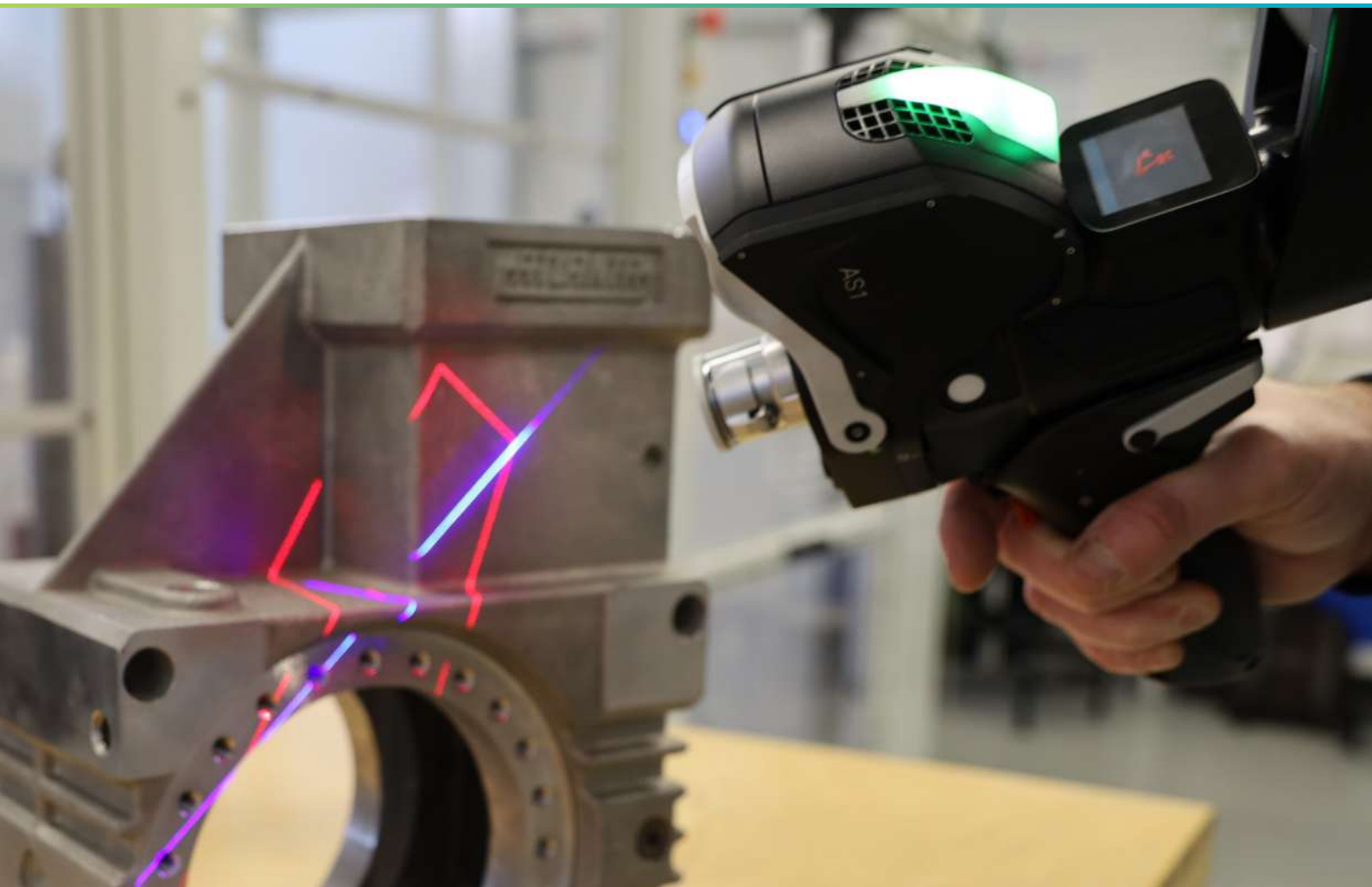


Absolute Arm systems and accessories

Version 2.4





Symbols

- ☑ : standard delivery
- ✓ : compatible with the item or accessory
- : incompatible with the item or accessory
- : mandatory accessory
- opt : optional accessory
- ⊗ : not in standard delivery

Definition

V2P: 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.



| 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.

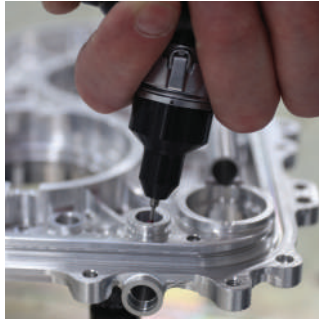
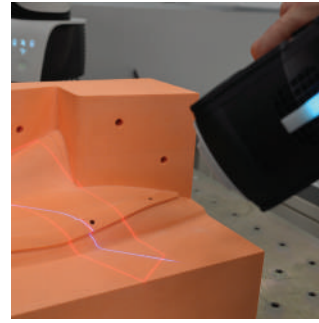
The images in this document are for reference only and are subject to change without notice. The colour, shape and weight of the products represented here may be different from those delivered.

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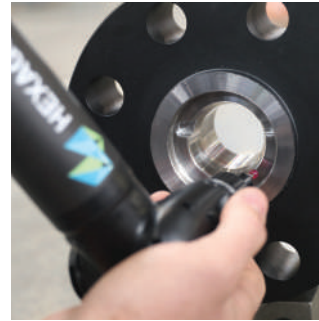




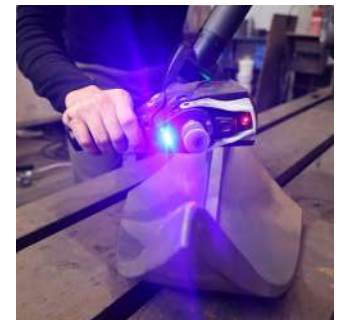
Applications	6
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Volume extensions	59
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Jig and fixture
Build and inspect
Tube and wire



Sheet metal
Mould and die
Shop floor



Gear measurement

On-machine
verification

Maintenance
and repair



CAD-to-part
Reverse engineering
Virtual assembly



Composite
inspection

In-process checks

Digitising



Absolute Arm systems

Overview	10
Absolute Arm 7-Axis 83, 85 and 87 series	13
Absolute Arm 6-Axis 83, 85 and 87 series	16
Absolute Arm Compact 83 and 85 series	19
Absolute Arm Tube 83 series	21



Accuracy

The Absolute Arm range offers probing accuracy as fine as only 6 microns and scanning system accuracy to within 43 microns.



Portability

Even the largest Absolute Arm weighs less than 11 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 ground-breaking RS-SQUARED Area Scanner brings ultra-fast structured light scanning to a portable measuring arm for the first time.



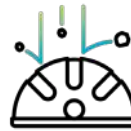
Repeatability

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 HxGN SFX | Asset Management 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, augmented with Bluetooth technology.

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.

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 of up to 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.



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.

RA8525-7

	I	
	-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

	Removable pistol grip	3 sizes hand grips	Nose cone	Absolute Scanner AS1	RS5 Laser Scanner	RS-SQUARED Area Scanner	Alignment sphere	Alignment plate
H00030936 - Probing kit V2P	☒	☒	☒				☒ *	
H00030938 - AS1 kit V2P	☒	☒	☒	☒			☒	
H00030937 - RS5 kit V2	☒	☒	☒		☒		☒	
H00038761 - RS-SQUARED kit V2	☒	☒	☒			☒		☒

*Certified chrome sphere for probing only.

[illegible]

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
- SFx Asset Management solution compatibility

H00030965	Absolute Arm 8320-7 2.0 m measurement volume
H00030966	Absolute Arm 8325-7 2.5 m measurement volume
H00030967	Absolute Arm 8330-7 3.0 m measurement volume
H00030968	Absolute Arm 8335-7 3.5 m measurement volume
H00030969	Absolute Arm 8340-7 4.0 m measurement volume
H00030970	Absolute Arm 8345-7 4.5 m measurement volume



Encoder	Absolute Encoders	☑
Movement and security	Zero-G Counterbalance SmartLock Home-Dock	☑
Display	OLED wrist display LED pictograms	☑
Haptic feedback	Wrist vibration	☑
Cables	3-metre ethernet cable Gigabit ethernet adaptor Power supply	☑
Mounting base	Standard base plate with 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	☑
Software	USB Standard Package: RDS driver and interface	☑
	User manuals	☑

Control Pack	Connector pack (CP-C)	○
	Wireless pack (CP-W)	○
	Battery Pack (CP-B)	○
Artefacts*	Verification bar	opt
	Certified sphere for probing / scanning	☑
7-Axis kit	7-Axis probing kit V2P, installed	○
	AS1 kit V2P, installed	○
	RS5 kit V2, installed	○
	RS-SQUARED kit V2, installed	○
Warranty	2 years**	☑
Certification	ISO 10360-12 (certification for articulated arms for tactile measurement)	☑
	ISO 10360-8 Annex D (certificate of combination for arm, laser scanner and area scanner)	-
Device connectivity	Bluetooth wireless interface for wireless accessories	☑
Hexagon SFx	Asset Management PRO-subscription included during warranty period**	☑

* 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 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
- SFx Asset Management solution compatibility

H00030975	Absolute Arm 8520-7 2.0 m measurement volume
H00030976	Absolute Arm 8525-7 2.5 m measurement volume
H00030977	Absolute Arm 8530-7 3.0 m measurement volume
H00030978	Absolute Arm 8535-7 3.5 m measurement volume
H00030979	Absolute Arm 8540-7 4.0 m measurement volume
H00030980	Absolute Arm 8545-7 4.5 m measurement volume

Encoder	Absolute Encoders	☑
Measurement and security	Zero-G Counterbalance SmartLock Home-Dock	☑
Display	OLED wrist display LED pictograms	☑
Haptic feedback	Wrist vibration	☑
Handling grips	SpinGrip* SpinKnob	☑
Cables	3-metre ethernet cable Gigabit ethernet adaptor Power supply	☑
Mounting base	Standard base plate with 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	☑
Software	USB Standard Package: RDS driver and interface	☑
	User manuals	☑

* Not available for 8520 models.

** 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.



Control Pack	Connector pack (CP-C)	○
	Wireless pack (CP-W)	○
	Battery Pack (CP-B)	○
Artefact**	Verification bar	☑
	Certified sphere for probing / scanning	☑
7-Axis kit	7-Axis probing kit, V2, installed	○
	AS1 kit, V2P, installed	○
	RS5 kit, V2, installed	○
	RS-SQUARED kit, V2, installed	○
Warranty	2 years***	☑
Certification	ISO 10360-12 (certification for articulated arms for tactile measurement)	☑
	ISO 10360-8 Annex D (certificate of combination for arm, laser scanner and area scanner)	-
Device connectivity	Bluetooth wireless interface for wireless accessories	☑
Hexagon SFx	Asset Management PRO-subscription included during warranty period***	☑

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
 - SFX Asset Management solution compatibility

H00030981	Absolute Arm 8725-7 2.5 m measurement volume
H00030982	Absolute Arm 8730-7 3.0 m measurement volume
H00030983	Absolute Arm 8735-7 3.5 m measurement volume
H00030984	Absolute Arm 8740-7 4.0 m measurement volume
H00030985	Absolute Arm 8745-7 4.5 m measurement volume



Encoder	Absolute Encoders	☑
Movement and security	Zero-G Counterbalance SmartLock Home-Dock	☑
Display	OLED wrist display LED pictograms	☑
Haptic feedback	Wrist vibration	☑
Handling grips	SpinGrip SpinKnob	☑
Cables	3-metre ethernet cable Gigabit ethernet adaptor Power supply	☑
Mounting base	Standard base plate with 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	☑
Software	USB Standard Package:	
	RDS driver and interface User manuals	☑ ☑

Control Pack	Connector pack (CP-C) Wireless pack (CP-W) Battery Pack (CP-B)	☑
Artefacts*	Verification bar	☑
	Certified sphere for probing / scanning	☑
7-Axis kit	7-Axis probing kit, V2P, installed	○
	AS1 kit, V2P, installed	○
	RS5 kit, V2, installed	○
	RS-SQUARED kit, V2, installed	○
Warranty	2 years**	☑
Certification	ISO 10360-12 (certification for articulated arms for tactile measurement)	☑
	ISO 10360-8 Annex D (certificate of combination for arm, laser scanner and area scanner)	-
Device connectivity	Bluetooth wireless interface for wireless accessories	☑
Hexagon Sfx	Asset Management PRO-subscription included during warranty period**	☑

* 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 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
 - SFX Asset Management solution compatibility

H00030945	Absolute Arm 8320-6 2.0 m measurement volume
H00030946	Absolute Arm 8325-6 2.5 m measurement volume
H00030947	Absolute Arm 8330-6 3.0 m measurement volume
H00030948	Absolute Arm 8335-6 3.5 m measurement volume
H00030949	Absolute Arm 8340-6 4.0 m measurement volume
H00030950	Absolute Arm 8345-6 4.5 m measurement volume



Encoder	Absolute Encoders	☒
Movement and security	Zero-G Counterbalance SmartLock Home-Dock	☒
Display	LED pictograms	☒
Haptic feedback	Wrist vibration	☒
Cables	3-metre ethernet cable Gigabit ethernet adaptor Power supply	☒
Mounting base	Standard base plate with 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	☒

Software	USB Standard Package: RDS driver and interface User manuals	☒
		☒
Control Pack	Connector pack (CP-C)	☐
	Wireless pack (CP-W)	☐
	Battery Pack (CP-B)	☐
Artefact*	Verification bar	opt ☒
	Certified sphere for probing	☒
Warranty	2 years**	☒
Certification	ISO 10360-12 (certification for articulated arms for tactile measurement)	☒
Device connectivity	Bluetooth wireless interface for wireless accessories	☒
Hexagon SFX	Asset Management PRO-subscription included during warranty period**	☒

* 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 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
- Sfx Asset Management solution compatibility

H00030952	Absolute Arm 8520-6 2.0 m measurement volume
H00030953	Absolute Arm 8525-6 2.5 m measurement volume
H00030954	Absolute Arm 8530-6 3.0 m measurement volume
H00030955	Absolute Arm 8535-6 3.5 m measurement volume
H00030956	Absolute Arm 8540-6 4.0 m measurement volume
H00030957	Absolute Arm 8545-6 4.5 m measurement volume



Encoder	Absolute Encoders	☑
Movement and security	Zero-G Counterbalance SmartLock Home-Dock	☑
Display	LED pictograms	☑
Haptic feedback	Wrist vibration	☑
Handling grips	SpinGrip* SpinKnob	☑
Cables	3-metre ethernet cable Gigabit ethernet adaptor Power supply	☑
Mounting base	Standard base plate with 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	☑

Software	USB Standard Package: RDS driver and interface 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***	☑
Certification	ISO 10360-12 (certification for articulated arms for tactile measurement)	☑
Device connectivity	Bluetooth wireless interface for wireless accessories	☑
Hexagon Sfx	Asset Management PRO-subscription included during warranty period***	☑

* Not available for 8520 models.

** 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 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
- Sfx Asset Management solution compatibility

H00030958	Absolute Arm 8725-6 2.5 m measurement volume
H00030959	Absolute Arm 8730-6 3.0 m measurement volume
H00030960	Absolute Arm 8735-6 3.5 m measurement volume
H00030961	Absolute Arm 8740-6 4.0 m measurement volume
H00030962	Absolute Arm 8745-6 4.5 m measurement volume



Encoder	Absolute Encoders	☑
Movement and security	Zero-G Counterbalance SmartLock Home-Dock	☑
Display	LED pictograms	☑
Haptic feedback	Wrist vibration	☑
Handling grips	SpinGrip SpinKnob	☑
Cables	3-metre ethernet cable Gigabit ethernet adaptor Power supply	☑
Mounting base	Standard base plate with 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	☑

Software	USB Standard Package: RDS driver and interface 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**	☑
Certification	ISO 10360-12 (certification for articulated arms for tactile measurement)	☑
Device connectivity	Bluetooth wireless interface for wireless accessories	☑
Hexagon Sfx	Asset Management PRO-subscription included during warranty period**	☑

* 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 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
 - SFX Asset Management solution compatibility

- H00030944

Absolute Arm 8312-6
1.2 m measurement volume
- H00030951

Absolute Arm 8512-6
1.2 m measurement volume



Encoder	Absolute Encoders	☑
Haptic feedback	Wrist vibration	☑
Display	LED pictograms	☑
Handling grips	SpinKnob*	☑
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	☑
Software	USB Standard Package:	
	RDS driver and interface	☑
	User manuals	☑

Control Pack	Connector pack (CP-C)	○
	Wireless pack (CP-W)	○
	Battery Pack (CP-B)	○
Artefact**	Verification bar (83 series)	opt
	Verification bar (85 series)	☑
	Certified sphere for probing	☑
Warranty	2 years***	☑
Certification	ISO 10360-12 (certification for articulated arms for tactile measurement)	☑
	ISO 10360-02 (certification for use in conjunction with a full-size CMM)	opt
Device connectivity	Bluetooth wireless interface for wireless accessories	☑
Hexagon SFX	Asset Management PRO-subscription included during warranty period***	☑

* 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
 - SFX Asset Management solution compatibility

- H00030963

Absolute Arm 8325 T
2.5 m measurement volume
- H00030964

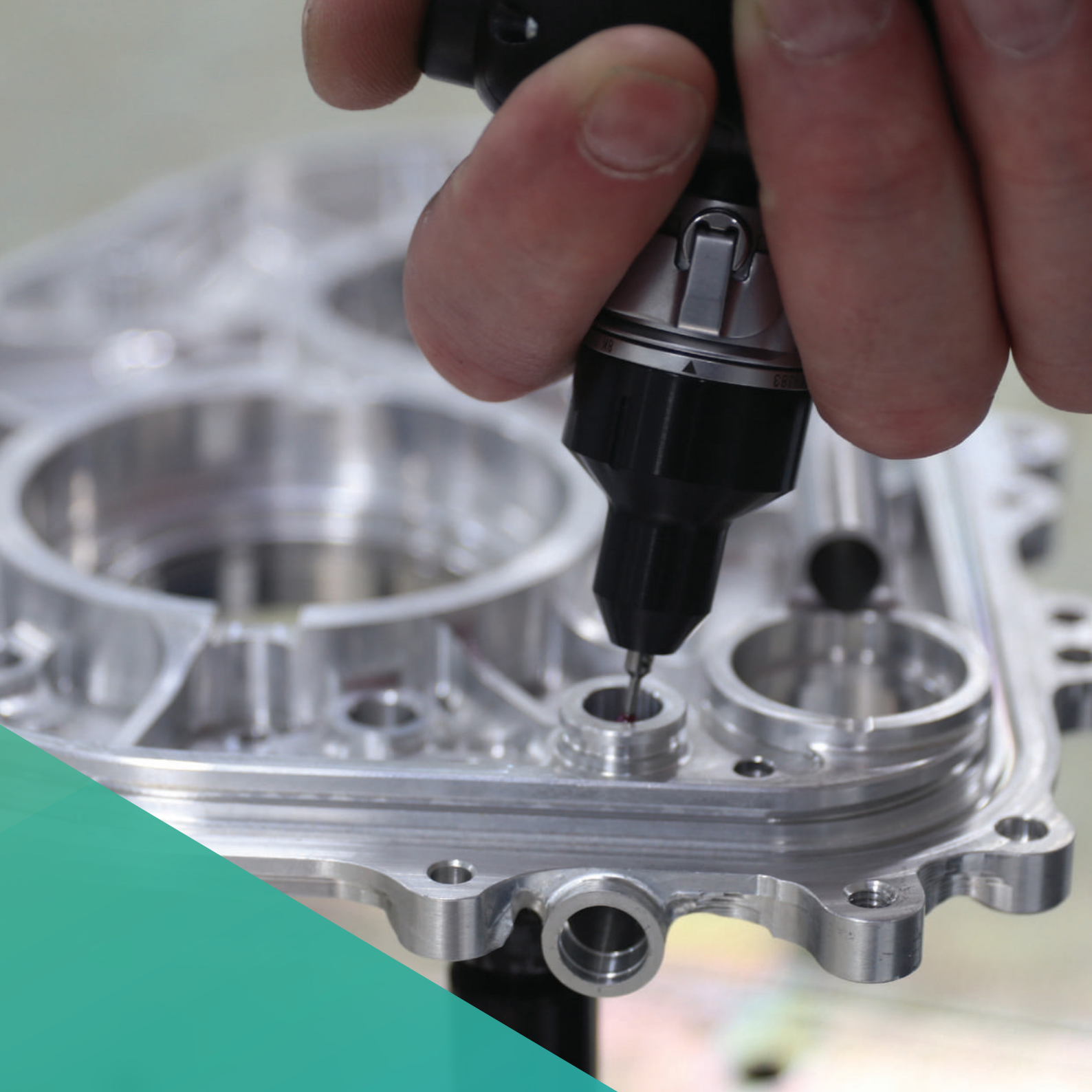
Absolute Arm 8330 T
3.0 m measurement volume



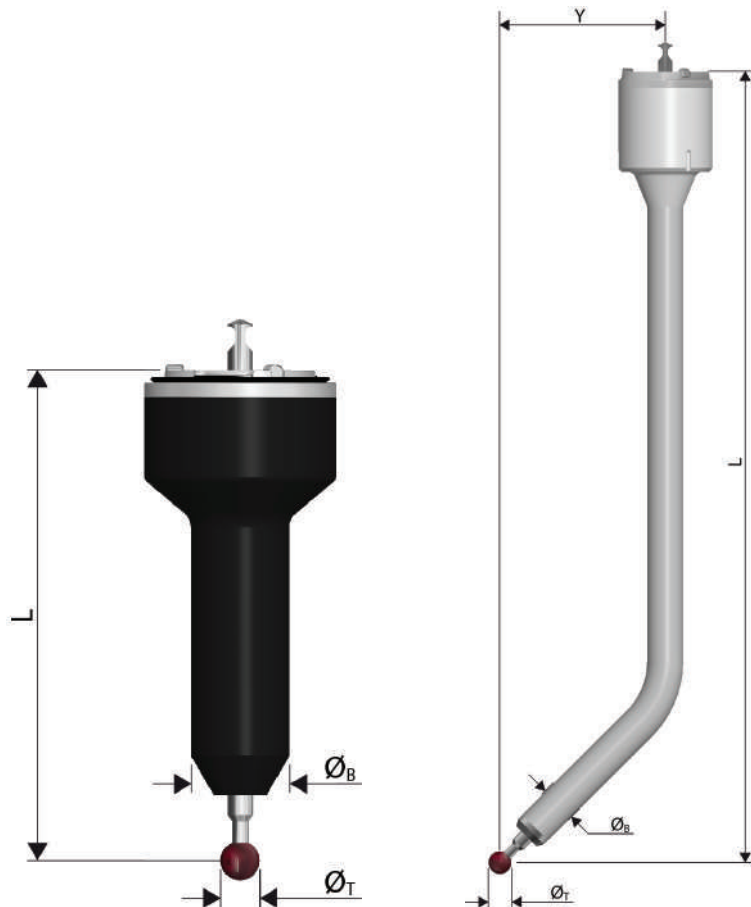
Encoder	Absolute Encoders	☑
Movement and security	Zero-G Counterbalance SmartLock Home-Dock	☑
Haptic feedback	Wrist vibration	☑
Cables	3-metre ethernet cable Gigabit ethernet adaptor Power supply	☑
Mounting base	Standard base plate with mounting ring	☑
Probes	TKJ L 50 – ø 15-mm stainless steel	☑
	TKJ 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	☑
Software	USB Standard Package:	
	RDS driver and interface User manuals	☑ ☑

Control Pack	Connector pack (CP-C)	○
	Wireless pack (CP-W)	○
	Battery Pack (CP-B)	○
Artefact*	Verification bar	opt
	Certified sphere for probing	☑
Warranty	2 years**	☑
Certification	ISO 10360-12 (certification for articulated arms for tactile measurement)	☑
Device connectivity	Bluetooth wireless interface for wireless accessories	☑
Hexagon SFX	Asset Management PRO-subscription included during warranty period***	☑

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



Probes and scanners



TKJ aluminium-body contact probes 24

TKJ carbon-body contact probes 25

TKJ angled contact probes 29

TKJ contact probe kits 30

TKJ special probes 31

TKJ touch trigger probes 32

M3 styli 33

Non-contact tube probes 34

Scanners 35

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.

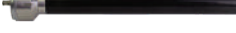
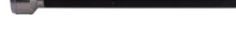
8x12	✓
83-6 / 85-6 / 87-6	✓
83-7 / 85-7 / 87-7	✓

		<i>IP</i>	<i>L</i>	<i>Body</i>	$\varnothing_B$	<i>Tip type</i>	<i>Tip material</i>	$\varnothing_T$	
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	$\varnothing_B$	Tip type	Tip material	$\varnothing_T$	
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.

		IP	L	Y	Body	Tip type	Tip material	Ø _r
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

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



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 (Aluminium / L=50 mm)**
Individual solid aluminum probe shaft, length 50 millimetres, not IP-protected.
For use with all Absolute Arm models with a TESA kinematic joint connector.



54388-100B **Probe Body (Aluminium / L=100 mm)**
Individual solid aluminum probe shaft, length 100 millimetres.
For use with all Absolute Arm models with a TESA kinematic joint connector.



54135 **Probe Kit – Short body (Aluminium)**
Short-body probe set consisting of 5 aluminium 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 (Aluminium)	Length	50 mm / 60 mm / 70 mm / 85 mm / 100 mm
Tips (Synth. ruby)	∅	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 (Aluminium)**
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)	∅	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.

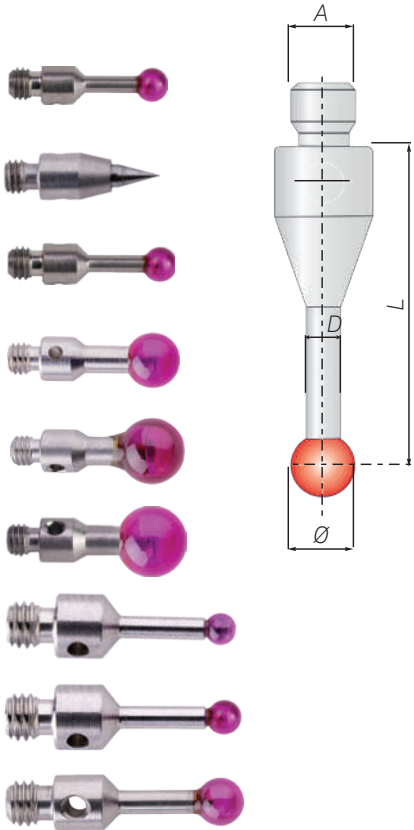


M3 styli

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	✓

		∅	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 and RS-SQUARED Area Scanner

H00027250



AS1 Kit, Accessory, for RA8 V1, 7-Axis

The Absolute Scanner AS1 is the flagship 3D scanning sensor for Absolute Arm 7-Axis systems and Absolute Tracker AT960. Shipped individually in shipping box.

Includes

- Absolute Scanner AS1
- 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 "System Scanning Accuracy" ISO 10360-8 Annex-D report.
ODU-ethernet cable (3 m) not included.
Gigabit ethernet adaptor not included.
Wireless scanning available only with CP-W.

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

H00030939



AS1 Kit, Accessory, for RA8 V2P, 7 Axis

Scanner unit, IP, compatible with 7 axis Absolute Arm and Absolute Positioner AP21 (for use with laser trackers). Shipped individually in its shipping box.

Includes

- Absolute Scanner AS1
- RDS maintenance and interface software
- Certified sphere for probing and scanning
- Scanner certificate
- 2-year 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.

	V1	V2P
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.

H00013263



RS-SQUARED kit, Accessory, for RA8, 7-Axis
Ground-breaking white light scanner for RA8 Absolute Arm 7-Axis models. Shipped individually in shipping box.

Includes

- RS-SQUARED Area Scanner
- RDS maintenance and interface software
- Rest cradle
- Artefact plate for alignment and calibration, incl. certificate
- Certificates
- Travel case and strap
- 2-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.
ODU-ethernet cable (3 m) not included.
Ethernet gigabit adaptor not included.
Wireless scanning available only with CP-W.
RS-SQUARED can not be used with any 2-metre arm models.

	V1	V2P
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.

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.

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



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.

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.

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





AS1

Mounting solutions

Standard bases	40
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Raisers	45

Standard bases

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

NCA7-5-21497

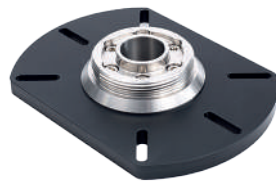
Base Plate with Mounting Ring

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)

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



NCA7-5-19866

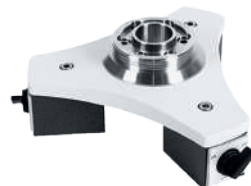
Magnetic Base with Mounting Ring

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)

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



H00008527

Witte Vacuum Mount Base

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

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



NCA-7-7-19225

Circular Magnetic Base

Magnetic circular base only, please order the mounting ring H00004220

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



* For 8x12 models a Mounting Ring Adaptor (H00012888) is required.

Bases

H00004220

Mounting Ring

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

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



H00012888

Mounting Ring Adaptor Kit

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

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



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



H00001346**

Magnetic Blocks and Anchors Kit

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



* For 8x12 models a Mounting Ring Adaptor (H00012888) is required.
** Option available only for 8x12 models.

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

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

H00011492 **Hexagon Stand, Graphite Portable Fixed**
(MGS2000SF)

- Height adjustable 619-972 mm
- Net weight: 16 kg
- Feet: 3 pad feet (32990) included

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

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

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

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 Mounting Ring Adaptor (H00012888) 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.

- H00011496

Hexagon Stand, Model 230-F-24 Small
 - Height: fixed 610 mm
 - Net weight: 77 kg
- H00011497

Hexagon Stand, Model 230-F-36 Medium
 - Height: fixed 910 mm
 - Net weight: 86 kg
- H00011498

Hexagon Stand, Model 230-F-48 Large
 - Height: fixed 1220 mm
 - Net weight: 104 kg
- H00011494

Hexagon Stand, Model 231 Small
 - Height: adjustable 710-1070 mm
 - Net weight: 88 kg
- H00011495

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
- 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

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



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



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



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



* For 8x12 models a Mounting Ring Adaptor (H00012888) is required.

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	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	1220 x 910 x 935	196 kg net
GB0005-2011	Skeleton version on stable feet	1380 x 910 x 935	210 kg net
GB0005-2007	Skeleton version on lockable wheels	910 x 610 x 935	250 kg net
GB0005-2008	Skeleton version on lockable wheels	1820 x 610 x 935	250 kg net
GB0005-0026	Ratchet Jackable castors (set of 4) when ordered with a base station	1830 x 910 x 935	250 kg net
GB0005-0050	Ratchet Jackable castors (set of 4) when ordered with an upgrade		



Version two doors, one drawer



Version two drawers



Skeleton example



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
Table dedicated for tube inspection applications.

1854 x 1230 x 917 100 kg net

- Compatible with*
- Mounting ring
 - Stands (NCA7-5-52794 and NCA 7-5-52795)
 - M6 holes grid



Raisers

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

NCA7-5-52794 Arm Raiser – 250 mm
Multi-purpose stand, suitable for Absolute Arm tube stations as well as other high-accuracy arm applications.

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



NCA7-5-52795 Arm Raiser – 500 mm
Multi-purpose stand, suitable for Absolute Arm tube stations as well as other high-accuracy arm applications.

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





TEAM

Artefacts and certifications

Verification bars 48

Certified spheres 49

Artefacts for tube probes 50

Optional certifications 51

Verification bars

Certified length bars are mainly used to verify 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

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

32379*

Certified Length Bar (long)

This length bar is recommended for 3.0-4.5 m Absolute Arm models.

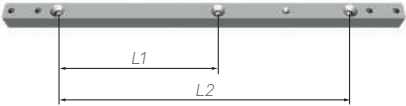
Lengths

L1: 514 mm

L2: 1016 mm

Delivery contents

- Certified length bar
- DIN ISO-17025 certificate



32377



32378



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)
 - Already included with 6-axis and SE arms
 - Sphere: $\varnothing$ 25.4 mm / hardness 58 Rc
 - Material: high-chrome high-carbon stainless steel
 - Certificate and base plate included

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



- H00000347

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

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



- H00016402

Certified Sphere for RS-SQUARED Area Scanner (75 mm)
 - Certified sphere for checking RS-SQUARED Area Scanner
 - Sphere: $\varnothing$ 75 mm
 - Material: Aluminium alloy with coating finish
 - Certificate and base plate included

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



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 **Calibration 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 **Calibration 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 **Calibration 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 Probe (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 Probe (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 Probe (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	☒

H00000621 **Certification – B89.4.22**
Available only for RA7 models. Includes certification only (without recalibration).

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	-

NCA7-4-52504 **Certification – VDI/VDE**
Available only for RA7 models. Probing certification according to standard definition.



CAUTION: RADIATION HAZARD
DO NOT STAND IN THE BEAM
DURING EXPOSURE
DO NOT TOUCH THE PATIENT OR THE
C-ARM DURING EXPOSURE

Accessories for tube inspection

Non-contact tube probes 54

Tools 55

Software and bender links 57

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
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)

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



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

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



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

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



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

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



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

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



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

∅	30-130 mm
Recommended T-bar*	∅ 25.4 mm (ref. NCA7-2-21953-03)
Recommended Z Gage*	∅ 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, Africa and South America
- Weight: 17 kg



EBD-12866

Tube Holder (ø 20-70 mm)

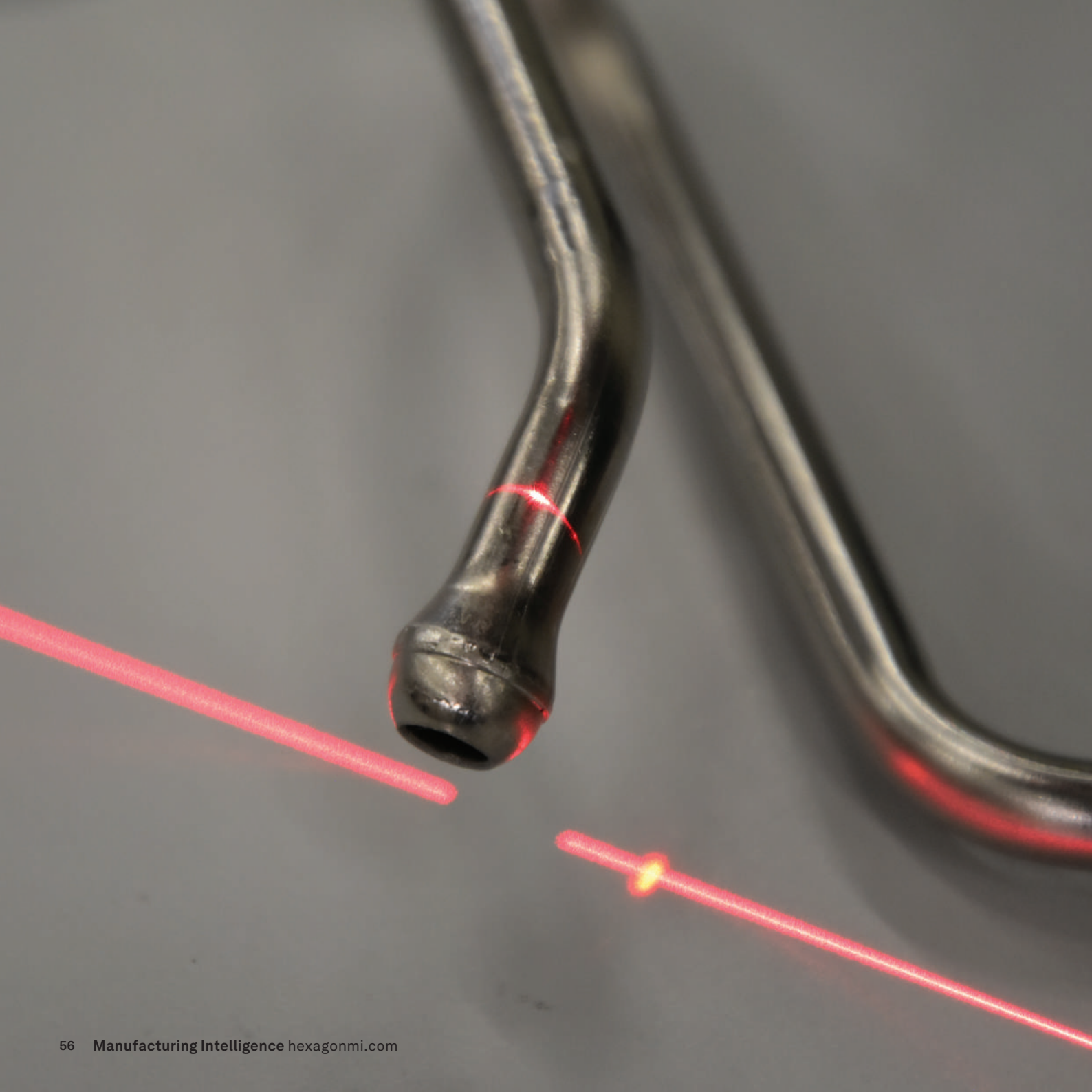
- Available in Europe, Middle East, Africa and South America
- Weight: 17 kg

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.

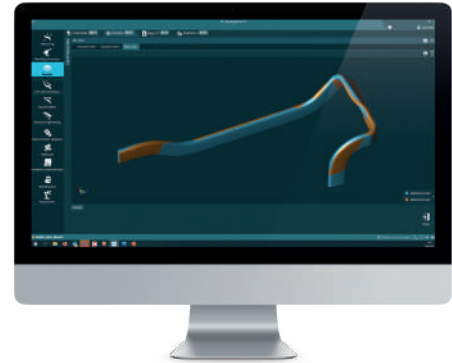
It is the only tool to meet and combine these requirements with an emphasis on metrological processes. In combination with TubeInspect or Absolute Arm systems, BendingStudio XT offers efficient and customer-oriented solutions with a unique combination of speed, accuracy and flexibility.

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.



Monitor not included.

Please refer to page 76/77 for further information about software packages,



Volume extension systems

GridLOK

60

Leap Frog Kit

61

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
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
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





Other accessories

Cables and adaptors	64
Control packs	64
Batteries	66
Dust covers	67
Installation USB	67

Cables and adaptors

H00017063 Gigabit Ethernet Adaptor
Ethernet to USB adaptor, for users who prefer a USB connection to Ethernet.

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

- Single cable connection for all touch probes, tube probes and scanners (HP-L-8.9, HP-C-V3D, AS1, RS5 and RS-SQUARED)
- Connection over ethernet or USB (with adaptor)

Includes

- Connector Pack CP-C
- RDS maintenance and interface software
- ODU-Ethernet cable (3 m)
- Ethernet Gigabit adaptor
- CP-C is certified to IP54 when mounted on the arm.

Warning: Not compatible with HP-L-20.8 Laser Scanner



H00016654

CP-W, Accessory

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

- Single cable connection for all touch probes, tube probes and scanners (HP-L-8.9, HP-C-V3D, AS1, RS5 and RS-SQUARED)
- Wireless connections for all touch probes, tube probes, AS1, RS5 and RS-SQUARED. (HP-L-8.9 and HP-C-V3D do not support wireless connections)
- Connection over ethernet or USB (with adaptor)
- Battery operation (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

Warning: Not compatible with HP-L-20.8 Laser Scanner

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

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).

- Single Ethernet connection for all touch probes, tube probes and scanners (HP-L-8.9, HP-C-V3D, AS1, RS6, RS5 and RS-SQUARED)
- One Ethernet to USB adapter, for users who prefer a USB connection to Ethernet
- 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

Note: CP-B is certified to IP54 when mounted on the arm

Warning: Not compatible with HP-L-20.8 Laser Scanner

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

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.



H00007922 **RS-SQUARED Warming Plug**
Permits advanced warmup and/or maintenance of operational temperature of RS-SQUARED Area Scanner while using Absolute Arm with other sensors.



Includes

- Warming plug
- Power supply

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

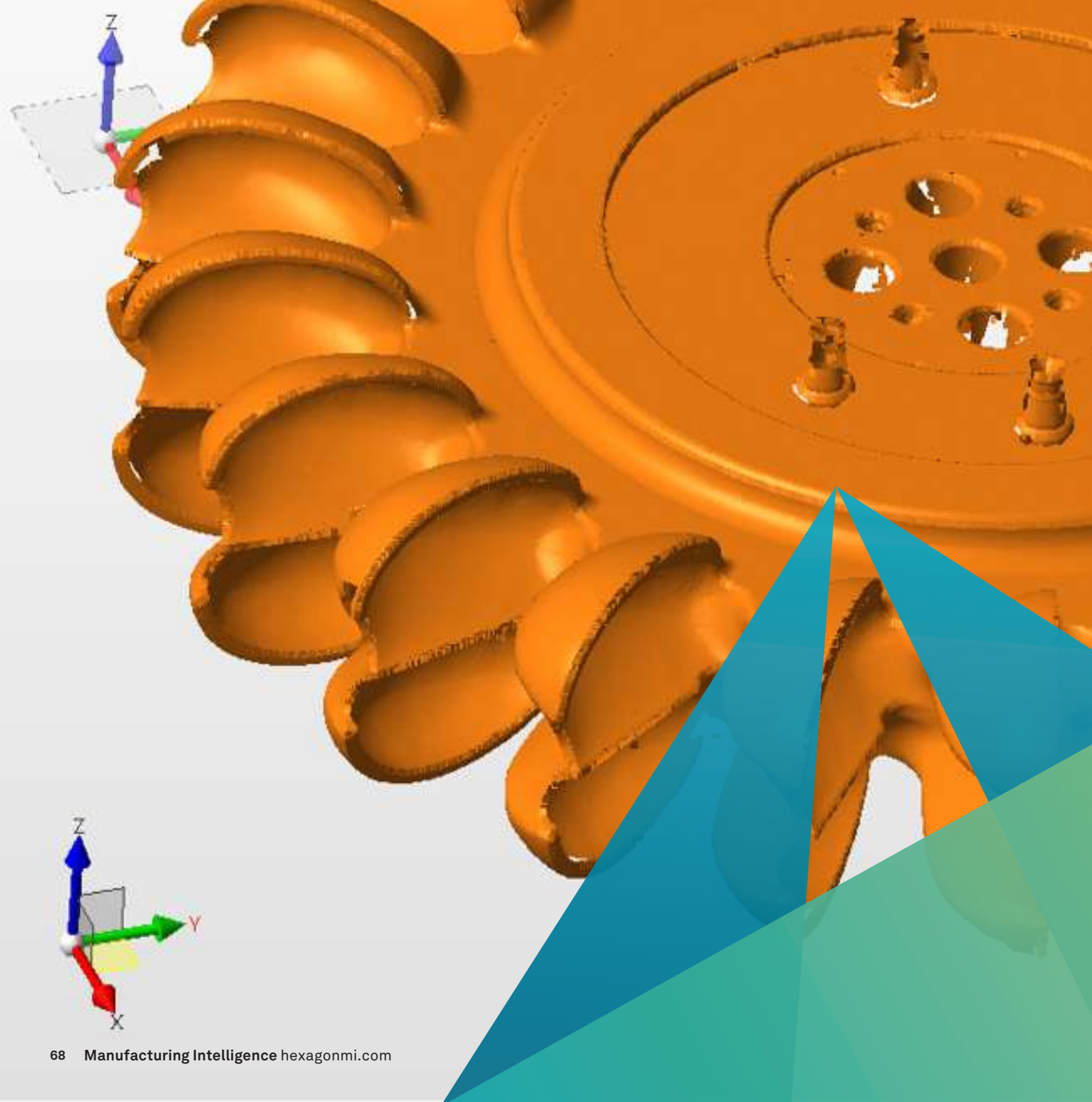
8x12	
83-6 / 85-6 / 87-6	☒
83-7 / 85-7 / 87-7	☒



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	☒



Application software

PC-DMIS Portable	70
Inspire	72
SpatialAnalyzer	73
QUINDOS	74
VISI Reverse	75
BendingStudio	76

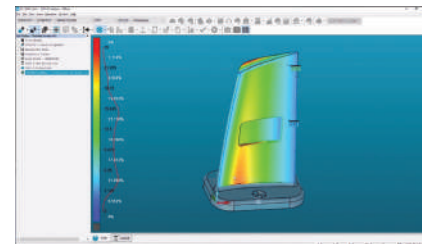
PC-DMIS Portable



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 DMIS/I/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 DMIS/I/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

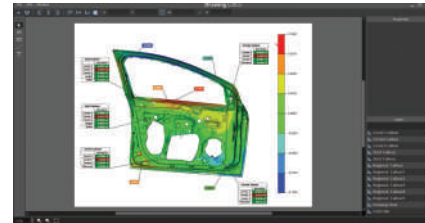


User-friendly measurement software for portable probing and scanning

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 Licence 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 licence code.

576741

Inspire - Single Seat Licence

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.



Monitor not included.

SA PRO	SA Professional
SA UL	SA Ultimate
	Upgrades
576737	Upgrade from SA PRO to SA UL
	Maintenance
SA PRO EXT	SMA for SA Professional
SA UL EXT	SMA for SA Ultimate

QUINDOS

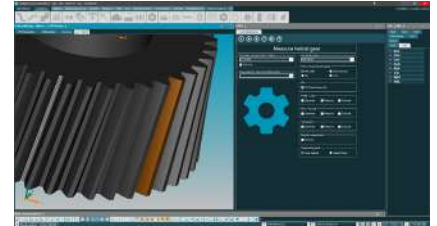


MTW-510-QPG-001

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

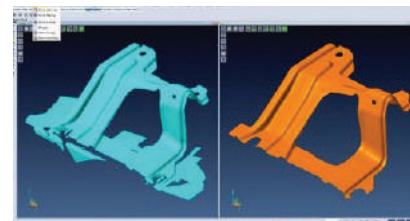


VS-B10A

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 and Absolute Arm with Tube Probe and AS1/RS5 laser scanner.
130692	BendingStudio XT PREMIUM Compatible with TubeInspect and Absolute Arm with Tube Probe and AS1/RS5 laser scanner.
111561	BendingStudio XT AUTOMATION Compatible with TubeInspect P8.2 HRC and P16.2 HRC.



See what is included in each package in the table on page 77.

		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/RS5	☒ ☒ ☒ ☒	☒ ☒ ☒ ☒	☐ ☐ ☐ ☐
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

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Customer Care Packages

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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 and AS1 Laser Scanner for 1 year.
RS6-ASx-HW-2Y-WRTY*	2 Years RS6-ASx-Warranty Extension Renewal of standard manufacturer warranty plan for RS6 and AS1 Laser Scanner for 2 years.
RS6-ASx-HW-3Y-WRTY*	3 Years RS6-ASx-Warranty Extension Renewal of standard manufacturer warranty plan for RS6 and AS1 Laser Scanner for 3 years.
H00018289-01*	1 Year Area Scanner Warranty Extension Renewal of standard manufacturer warranty plan for RS-SQUARED Area Scanner for 1 year.
H00018289-02*	2 Years Area Scanner Warranty Extension Renewal of standard manufacturer warranty plan for RS-SQUARED Area Scanner for 2 years.
H00018289-03*	3 Years Area Scanner Warranty Extension Renewal of standard manufacturer warranty plan for RS-SQUARED Area 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 V2 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 and HP-L-20.8 laser scanners). 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 HP-L-20.8) and all other arm parts.
2. IP54 usage conditions must be respected with RA8 V2 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, calibration or certification needs to be performed.
4. For the renewals of the warranty, the instrument must be calibrated in a certified service centre, in the first instance no later than 15 months after delivery. The following calibrations are then required to take place every 12 months according to the warranty plan renewal.
5. Customer assumes all shipping costs.

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

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

World-class products to rely on

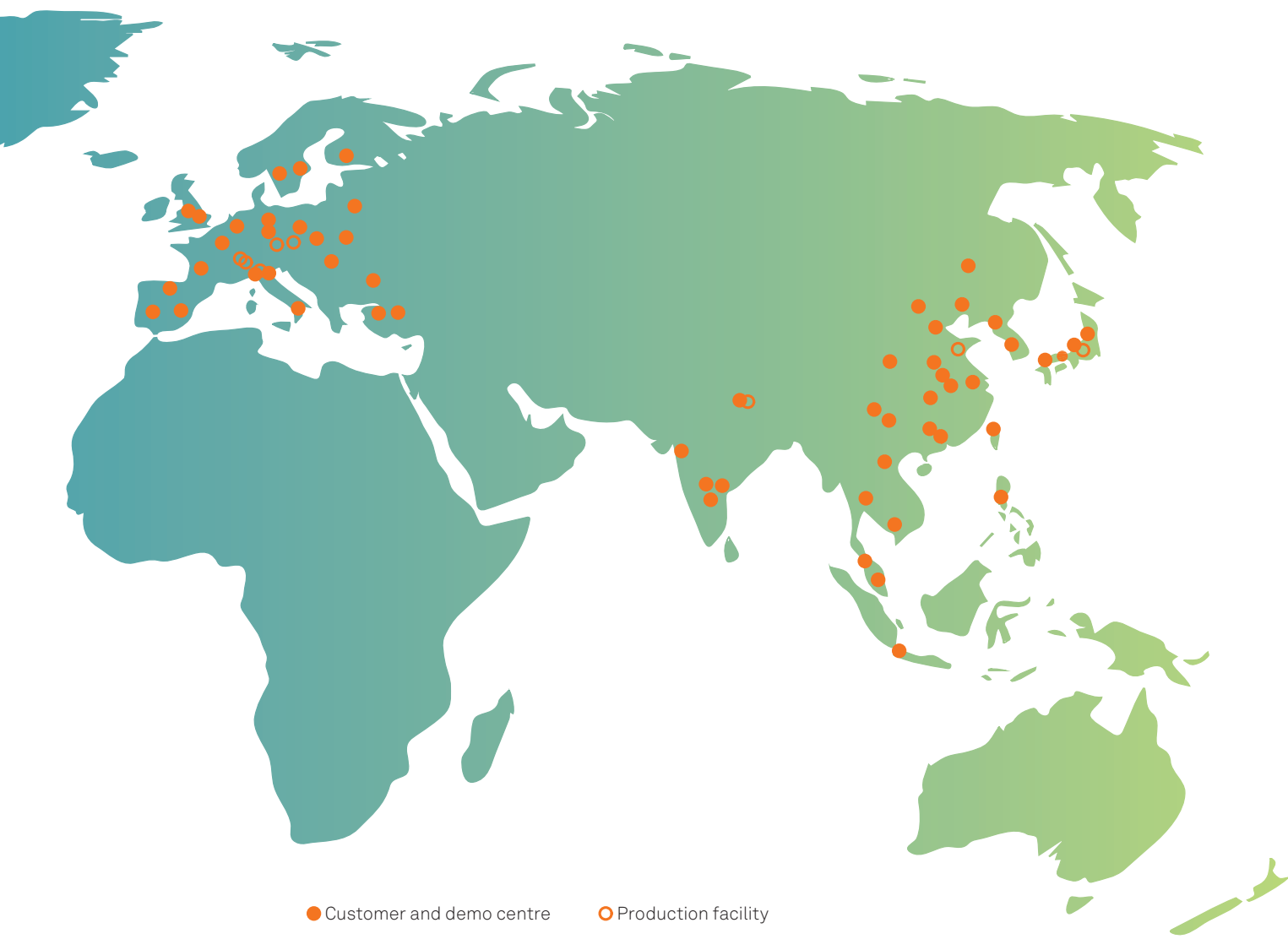
Drawing on decades of research and development experience, metrology technology from Hexagon's Manufacturing Intelligence division is built on a long history of outperforming technological innovation. Deriving quality from experience to drive productivity is what keeps Hexagon in front and able to deliver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







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. For more information, visit hexagonmi.com.

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