

Improvements for Romer Products

7th axis pistol grip
Sigma SC
Omega SC
R-Scan FX
Third party scanners



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Sigma SC-Omega SC

Product Information



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Romer SC

Improved
Quality



Romer SC

Third-party
scanners
compatible



Romer **SC**

High reliability
& superior
stability



Romer SC

Ideal
ergonomy
through
innovative
design



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Features and benefits

Improved
Quality



- **Feature**
New Plug-and-Measure TESA Swiss Probe
- **Benefit**
Robust connection for extreme rigidity.



High reliability
& superior
stability



- Using TESA multiwire connectors, the same type used on the TESASTAR-M motorized probe head, ROMER's longstanding automatic probe recognition feature is now coupled with a highly proven, robust kinematic joint connection.
- When a probe is changed during a work session, the "plug and measure" probes are automatically identified by the software without needing re-calibration.
- Probes can be calibrated on plant thanks to a user-friendly software interface.



Improved
Quality



- **Feature**

New higher-grade carbon fiber with special crossed orientation with Young's modulus three times higher than previous version

- **Benefit**

Romer arms are constructed from high-grade carbon fiber, which is inherently temperature stable. The construction duplicates and enhances the movement and reach of the human arm (shoulder, elbow and wrist) while keeping extreme rigidity and strength for enhanced measurements



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Improved
Quality



- **Feature**
Innovative Counterbalance with a carbon cradle.
- **Benefit**
New design gives safety and robust enhancements

High reliability
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- **Feature**
New 7th axis with pistol grip
with Tesa TKJ adaptor
- **Benefit**
 - Easy scanning for
difficult-to-reach areas.
 - Third-party scanners compatible.
 - Handle increases operator comfort and productivity.



Improved
Quality



Third-party
scanners
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High reliability
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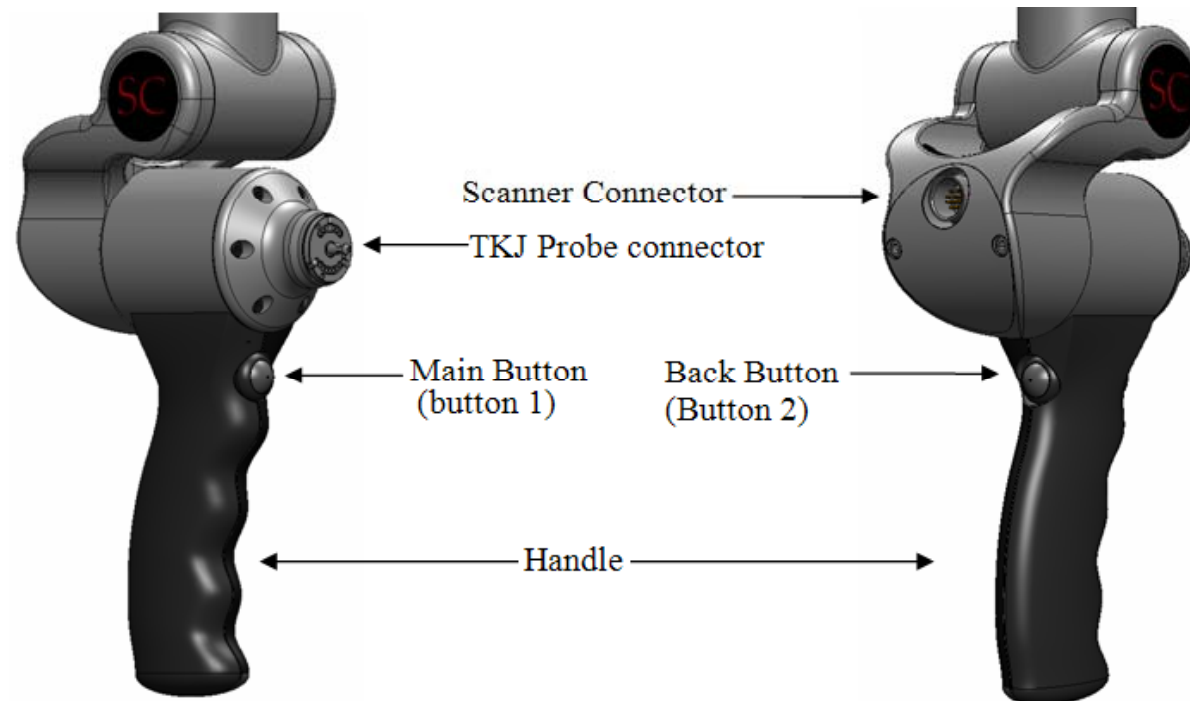


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- **Feature**

New 7th axis with pistol grip with Tesa TKJ adaptor



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Improved
Quality



- **Feature**
New domed stickers
- **Benefit**
 - Marketing effects.
 - Protects pistol grip against shocks.

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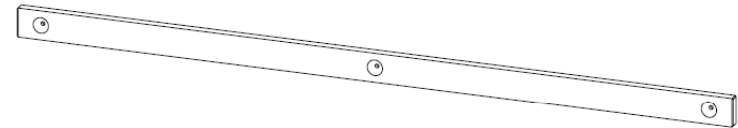
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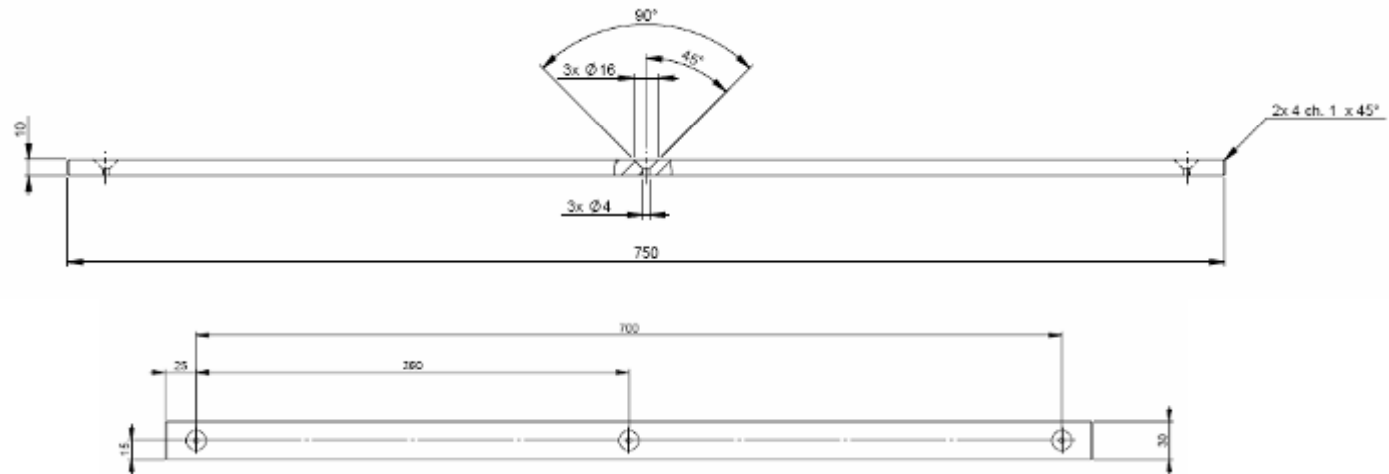
Improved
Quality



- **Feature**
New checking bar



- **Benefit**
 - Marketing effects. Not anymore bending effect. Checking bar has not anymore a cavity. Checking bar is a full block of aluminum with dedicated cones for checking process.



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Improved
Quality



- **Feature**
New packaging concept for Romer arms with 7th axis pistol grip and its accessories
- **Benefit**
Easy one-person transportation and packaging of the whole system.

Ideal
ergonomy
through
innovative
design



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Improved
Quality



Third-party
scanners
compatible



- **Feature**
R-Scan FX with TKJ adapter
- **Benefit**
 - Attractive entrance solution for Reverse Engineering and Surface Inspection.
 - R-Scan FX is the version of the R-Scan RX without the integrated 7th axis and thus ensures a higher reliability and connection joint stability.
 - R-Scan FX has better performance value than R-Scan RX

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Third-party
scanners
compatible



- **Feature**
Kréon Solano with TKJ adapter
- **Benefit**
 - Middle end solution for Reverse Engineering and Surface Inspection.
 - No required controller box



Third-party
scanners
compatible



- **Feature**
Kréon Zephyr KZ50 with TKJ adapter
- **Benefit**
High end solution for
Reverse Engineering
and Surface Inspection.



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Third-party
scanners
compatible



- **Feature**
Perception V5 with TKJ adapter
- **Benefit**
High end solution for
Reverse Engineering
and Surface Inspection.



Product placement

- Sigma SC
- Omega SC

	Compatible with all Romer arms	Sigma SC <small>Romer Sigma with 7th axis</small>	Omega SC <small>Romer Omega with 7th axis</small>
Perceptron V4	😊		✓
Perceptron V5	😊	✓	
Kreon Solano	😊	✓	
Kreon Zephyr	😊	✓	
R-scan Fx	😊		✓

✓ : recommended configuration



> **System accuracy**



Performance specification (contact)

Model (7 axis)	Single Point Articulation (mm)		Volumetric Maximum Deviation (mm)		Weight (kg)	
	Omega	Sigma	Omega	Sigma	Omega	Sigma
2018						
2022						
2025	+/- 0.058	+/- 0.040	+/- 0.078	+/- 0.055	6.5	6.2
2030	Under process					
2032						
2036	Under process					
2040	Under process					
2046						
2052						



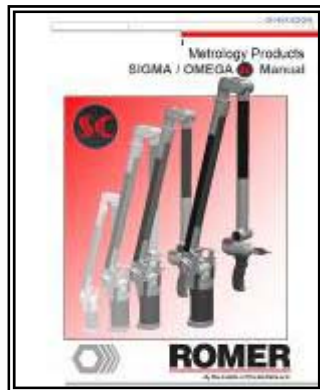
Scanners Performance specification

	ROMER			KREON		PERCEPTRON	
	R-Scan RX	R-Scan FX	G-Scan RX	Solano	Zephyr	V4	V5
Points/Line	640	640	640	480	480	768	1536
Line rate (Hz)	20	30	30	85	60	30	60
<i>TOTAL</i>	12800	19200	19200	40800	28800	23040	92160
Line Length (mm)	110	110	110	100	50	70	140
Accuracy (µm)	70	55	44	50	12	24	24
Weight (g)	600	550	500	360	360	340	438



Manual

Benefit



- Easier understanding for installing the Arm, Software and accessories.
- More professional
- Covering most common software installation (Romosoft, PCDMIS, PWI, PolyWorks, 3DReshaper ...)
- Precaution of use and safety
- Hexagon Entities and Resellers main contacts Worldwide



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> **Packaging**



Travel Case for Romer SC 2025

Packaging



Key-Features:

- Dimensions: 1170x490x200 mm
- Weight (empty): 6 kg
- Weight (equipped): ~17kg
- 2 wheels
- 4 locks
- 2 handles



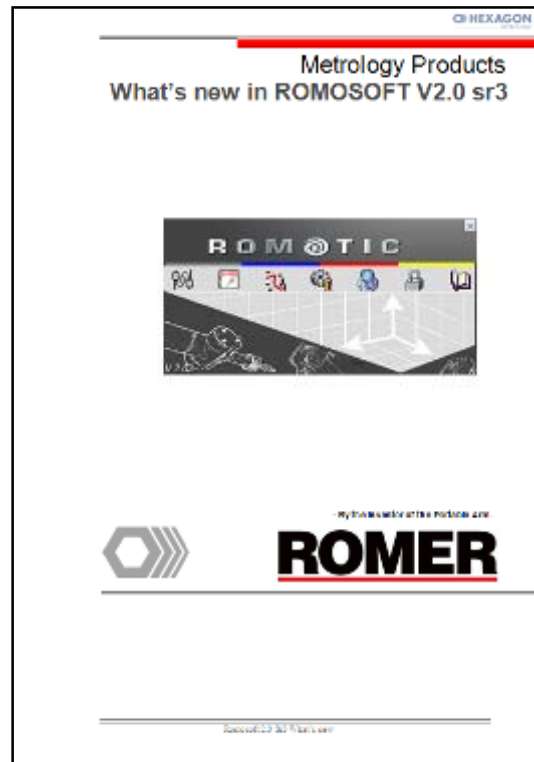
> **Software**

- Romosoft V2SR3
- PCDMIS Reshaper
- PolyWorks
- Geomagic

...



NEW Romosoft V2SR3



Main evolutions concern

- the integration of Armspecs V3 (Sr2)
- the 68 Shelbows calibration script (Sr2)
- the type of Gscan Rx2 calibration files TSAI (Sr2)
- the compatibility for RDS (Sr3)
- the management of Sigma and Omega SC (Sr3)
- the 100 Shelbows calibration script for Sigma and Omega SC (Sr3).



Software

SW Scanners	PCDMIS-Reshaper	Geomagic	PolyWorks	Metrolog XG	PowerInspect
Romer	✓		✓		Under process
Perceptron	✓		✓		
Kreon	✓	✓	✓	✓	Under process



> **New Accessories**





NCA7-05-19349

TESA Probe, 15mm steel 50mm length, female assembly

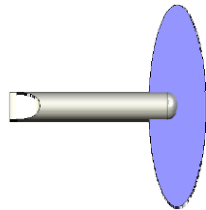
The 15mm steel TESA Probe is in standard delivery.



NCA7-05-19351

TESA Probe, 6mm ruby 50mm length, female assembly

The 6mm ruby TESA Probe is in standard delivery.



NCA7-05-50169

TKJ Probe Key



Tesa probes for Sigma SC/Omega SC are not compatible with Multi Gage.
Tesa probes for Sigma SC/Omega SC are TKJ female assembly and Tesa probes for Multi Gage are TKJ male assembly.





Mounting Systems

- Optional mounting:

NCA7-07-19225 Romer circular magnetic base

The Romer Circular Magnetic base is designed for a better Arm holding. The strength setup can be adjusted progressively thanks to a lever. Two integrated handles are designed to slide easily the system on the working area, when the locking device is in off position.

- Body in aluminum, anodized in glossy black.
- Neodymium concept.
- Locking device adjustable up to 4700N (On SAE 1020 steel)
- 100% symmetrical design.
- Two integrated handles.
- Gravured Romer brand name label at the front side.
- Brunson adaptor compatible.

- Exterior diameter/with handles (mm): 150/198
- Height (mm): 75
- Net weight (lb/kg): 13.2/ 6



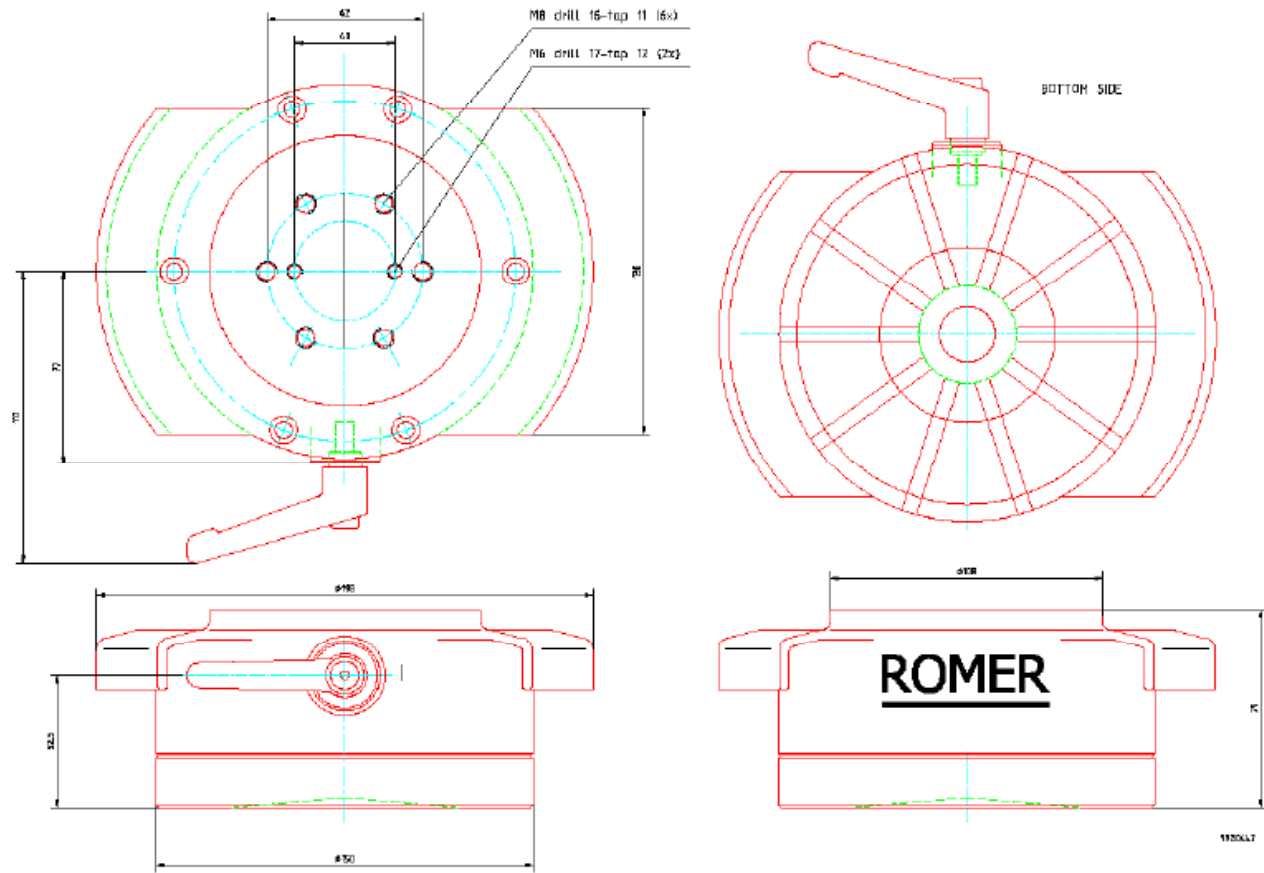
The Romer circular magnetic base cannot be used without a 120° mounting adaptor (2000-02-00035) or a Brunson screw mounting adaptor (NAC7-07-19221)



Mounting Systems

NCA7-07-19225

Romer circular magnetic base





Mounting Systems

- Optional mounting:

NCA7-07-19221

Brunson screw mounting adapter



Example:



Romer circular magnetic base and a 120° mounting adapter (2000-02-00035)



Romer circular magnetic base and a Brunson screw mounting adapter (NAC7-07-19221)



Romer SC: Probes

NCA7-05-19352 TESA Probe, 3mm ruby 50mm length, female assembly

The 3mm ruby TESA Probe is an option.



Tesa probes for Sigma SC/Omega SC are not compatible with Multi Gage.
Tesa probes for Sigma SC/Omega SC are TKJ female and Tesa probes for Multi Gage are TKJ male.

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> **Phase-in**



Phase-in Articles

Phase-in

Part No.	Description
EAA-19758	2025 Sigma SC
EAA-19759	2030 Sigma SC
EAA-19760	2036 Sigma SC
EAA-19761	2040 Sigma SC
EAC-19762	2025 Omega SC
EAC-19763	2030 Omega SC
EAC-19764	2036 Omega SC
EAC-19765	2040 Omega SC
EAC-19766	Omega 3DRES SC
EAA-19767	Sigma 3DRES SC Solano
EHC-19774	R-Scan FX scanner with TKJ female adapter
EHC-19768	Solano scanner with TKJ female adapter
EHC-19769	Zephyr KZ50 scanner with TKJ female adapter
EHC-19770	Perceptron V4 scanner with TKJ female adapter
EHC-19771	Perceptron V5 scanner with TKJ female adapter



Order delivery

	September	October	November
7th axis pistol grip with Tesa swiss probe	✓	✓	✓
Higher-grade carbon fiber (E*3)	✓	✓	✓
Counterbalance with carbon cradle	✓	✓	✓
Suitcase for 7th axis	✓	✓	✓
New checking bar		✓	✓
R-Scan FX			✓
Perceptron V4/V5			✓
Kreon Solano/Zephyr	✓	✓	✓





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