



TOMELLERI ENGINEERING

Hi-End Articulated Arms Technology

Measurements Arms

The arms are certified with the Standard ISO 10360-2 or the new ISO10360-12, depending on the customer necessities. This to allow the Arm's verification and the annual calibration at the customer premises by the exclusive TOMELLERI procedures



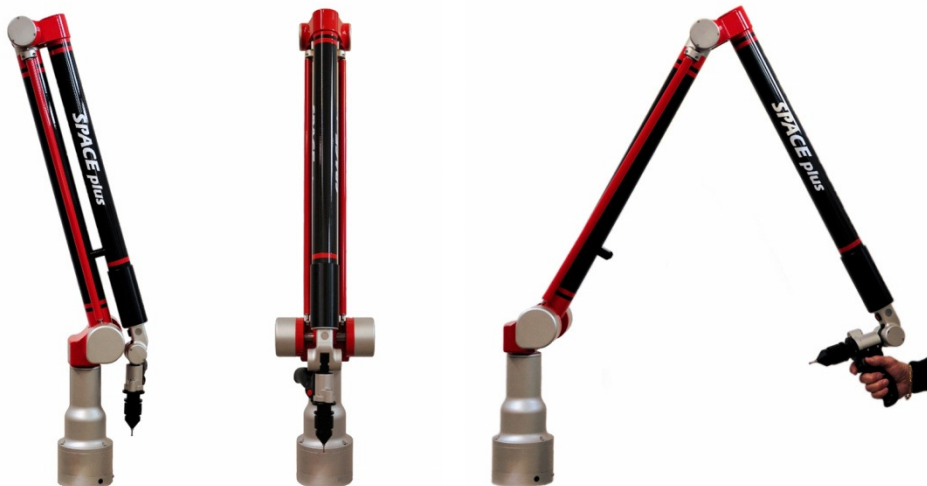
SPACE and SPACE Plus

The SPACE and SPACE Plus lines come from the pluriennial experience of TOMELLERI ENGINEERING in the production of Articulated Measuring Arms for metrology since 1984.

Available from 1,8 up to 4 m diameter, in 6 or 7 axes configuration, they are the perfect equipment for either touch or laser inspection and for reverse-engineering, with the highest standards in terms of reliability and accuracy. They are also suitable also for pipe inspection with laser fork and a dedicated software.

Customization is a key word. Besides offering the widest range in the market, the specific requests of the customer have the priority. From this year TOMELLERI ENGINEERING introduces in the market the revolutionary Target Calibration, a process that allows to increase the precision beyond the state of art of the Portable Measuring Arms.

Our new arms are the top for reliability, accuracy, and flexibility in usage.





EXPLORER

EXPLORER results from the great experience in large volume metrology of TOMELLERI ENGINEERING, the unique portable arm available worldwide with a measuring range from 5 to 9 m diameter.

This line is the perfect equipment for touch probe inspection of large parts, whenever you need to “explore” big parts with great flexibility. Whenever you need to measure a large volume, or to inspect a large piece, you need the best in terms of technology and mechanics.

Smooth handling without compromise. The EXPLORER is made of Aluminum and Carbon Fiber, to reduce the weight as much as possible. The counterbalance is made on the specific unit time by time, to get the best result on the accuracy. Furthermore it is equipped, as the SPACE Plus line, with the electro-magnetic brake on the second axis, to allow the operator to lock the arm at required height and use it safely and comfortably.

The size count, but also the compatibility. The configurations available are those of the SPACE and SPACE Plus models, in 6 axes for probing and 7 axes for the usage with Laser Scanner.

New 2019 - MERCURY



A brand new design that captures the eye, with mass counterbalance for the ergonomics. To inspect an object has never been so easy.

The MERCURY line is light and accessible, to enable the end user to quickly take confidence with the Arm and get the best result from the beginning.

It keeps the compatibility with all the probing inspection software available for the other TOMELLERI Arms, but aims to the highest level of accuracy. There are no much things to say, the numbers talks on their own:

	MPE_p^1 (mm)	MPE_e^2 (mm)
MERCURY 1300	0,008	$0,005 + L \setminus 50 < 0,015$
MERCURY 1800	0,008	$0,005 + L \setminus 40 < 0,018$

1. Maximum Permissible Error, probing

2. Maximum Permissible Error, length measurement

Accessories



HARD PROBE

The mechanical probe is the standard touch probe, available with different sphere diameter. Points can be taken touching the part and pushing the button on board the probe body. The smallest usable probe diameter is 1mm to guarantee the point accuracy, the maximum length suggested is 100mm. Any of the Renishaw standard M4 stylus is applicable.



TOUCH TRIGGER (Renishaw™ LP2) PROBE

The touch trigger probe acquires points applying the minimum force on the measured part. Is a very precise, quick and comfortable in use, acquires points only touching the surface, without triggering buttons. Available with many different stylus length and sphere diameters. The model offered is produced by Renishaw™ (model LP2 kit)



FLOATING PROBE

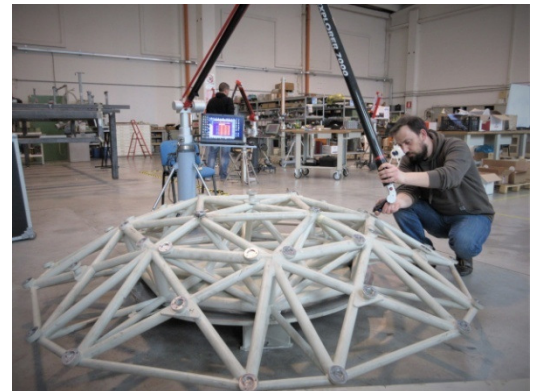
Is the revolutionary new concept probe designed by TOMELLERI ENGINEERING. It is a rigid mechanical probe suspended on a spring driven by an aluminum ring that triggers the probe with a simple touch. The integrated force control avoid to apply uncontrolled load on the part, improving accuracy and repeatability. The control ring is isolated from the probe stylus to avoid thermal impact from the hands of the user.

MOBILE TRIPODS

Stable and practical, is the ideal accessory to move easily and quickly the SPACE arm. The handwheel at the base allows you to quickly switch the retractile wheels from measurement position to mobile position, and vice versa in a gradual way without shocks.

The tripod is adjustable in height (range 900-1400mm) and the weight of the tripod column is balanced by a gas spring. A side handle allows for vertical and horizontal movement of the tripod. A removable and rotary shelf allows positioning of the laptop next to the measuring arm.





ALL the TOMELLERI Arms are MADE in ITALY