

# Aster/30

suring machine



30 measuring machines



FRATELLI  
ROTONDI



## 3 D high precision measuring machines for the automatic or manual control of small and middle size pieces

The structure and the materials used in the construction of these machines permit to get high precision and working speeds, stability, reliability while the large range of programs is in position to comply with the most different and complex requirements.

### STRUCTURE - FEATURES

#### "C-frame" and "moving table" structure

Only this structure permits to get independent the function of the probe-head (axis Z) from the movement of the two other axes as to achieve a better precision and reliability even if is involved the control of pieces whose size exceeds the strokes length.

- working table, axes X Y Z slideways, bedplate in diabase (black granite)
- axis "Z" enbloc column in diabase (black granite)
- sliding of all axes through high precision air bearings
- micrometric movements and locks of all axes on manual machine
- movements through d.c. motors for CNC machines



### PROBES

- electronic probes: point-to-point, continuous scanning with contact or contactless
- NC controlled head on two axes (rotation and inclination)
- autochange system for probes or styli
- optic probes: projectors, microscopes, cameras

### MEASURING SYSTEM

High precision photoelectric scales and electronic scanning heads (contactless and wear-less measuring system)  
Resolution 0,0005/0,001 mm.

### VERSIONS

- **manual** with micrometric displacements
- **automatic** with axes displacements through d.c. motors driven by a CNC and joy-sticks in manual mode and in self-learning



# Measuring SOFTWARE

# ASTER/3D

asuring machine



The complexity of the pieces to be controlled and the modern industrial technologies, to meet the quality standard requirements call for the application of a state of art metrology through the use of measuring software that have introduced new methods against the traditional ones.

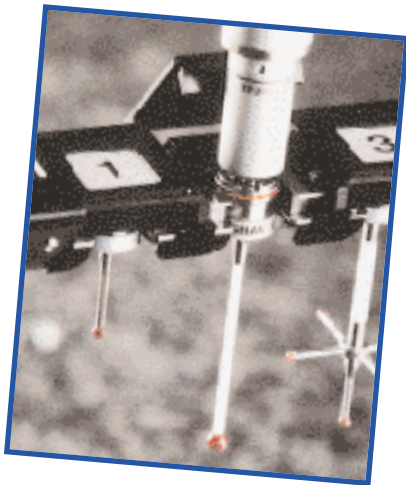
The various models of the measuring machine ASTER provided with software in environment WINDOWS, with high performances, are tested and certified, in the top class of merit, by International Institute of Metrology. Their utilization becomes very easy because involving the use of an

ergonomic and practical graphic interface and of some operator panels. This implies a shorter learning time by any operator. Whenever and against a simple request – considering their flexibility and modular structure – the units may be improved and enlarged as much as necessary in order to comply also with the changed requirements.

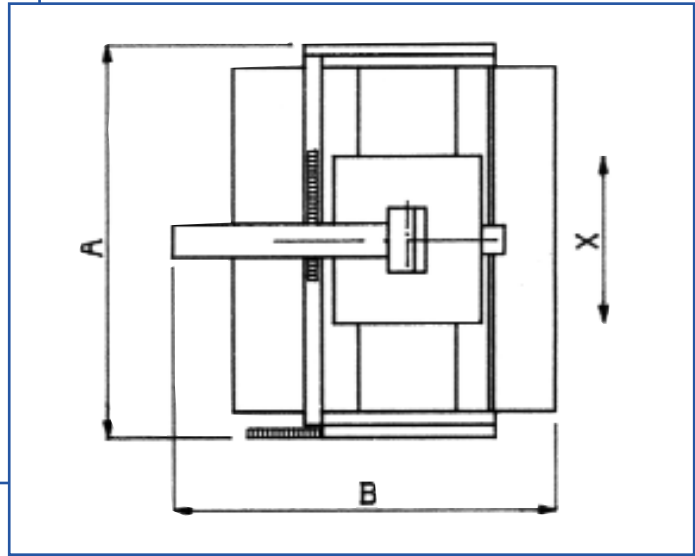
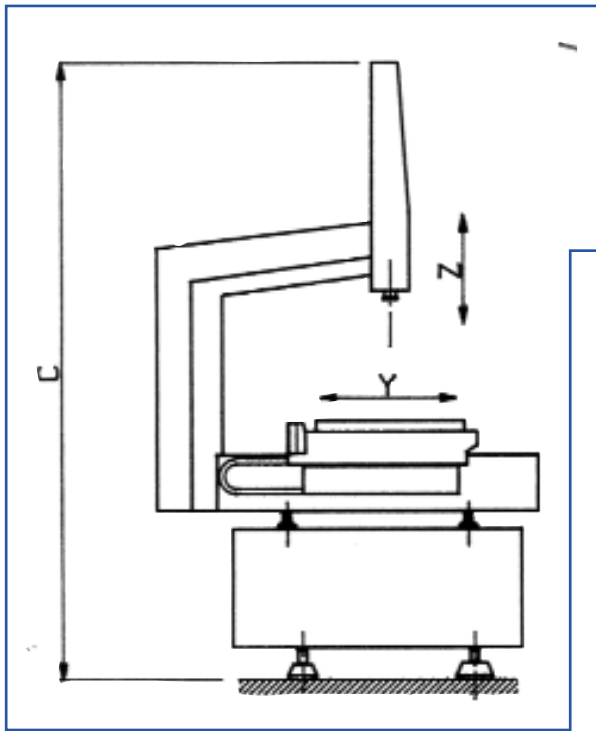
Besides they are constantly renovated and organized in a single system fully interactive from which can be selected:

- software for elements with defined geometry
- software for elements with undefined geometry
- software programs for elements defined by a mathematic model (CAD)
- software of digitalization
- software of statistics
- software for communication with the external sources
- software for compensation of the geometrical errors and of the environmental variables
- software for running in self-learning and off-line
- software of best-fit
- customized software
- and so on

The measuring machine ASTER –when operating with suitable contact, optic and laser probes becomes a station for the continuous digitalization of models.



# Aster "30"



MODEL	ASTER 400	ASTER 500	ASTER 650
X-Y-Z mm	400x350x300	500x400x300	650x550x500
TABLE mm	400x350	500x400	650x550
A x B x C mm	1150x1090x2120	1400x1190x2220	1700x1500x2500
Feeding pressure – bar Air consumption NL/min.	5 bar -100 NL/min.	5 bar -100 NL/min.	5 bar -120 NL/min.
* Volumetric accuracy $\mu\text{m}$ L=mm	2,8+3L/1000	2,8+3L/1000	2,8+3L/1000
Machine weight Kg.	360	600	1400
** Admitted weight Kg.	120	180	210

\* According to CMMA/ISO specification  
\*\* On request, for higher weights



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