Reliable CMM for the Metrology Lab or Production Floor

Wide Range of Manual and DCC Sizes
Powerful GEOMET Software from HELMEL
Inspect, Scan, Digitize, Reverse Engineer
Intrinsically Accurate and Repeatable
Affordable, and economical to own
Easy to learn and use
One company with total responsibility
Service, Support, Updates since 1973

HELMEML
made in usa
by America’s CMM Builder
Linear Accuracy:
Performance per ASME B89.4.1a-1998.

Volumetric Accuracy:
Number X Y Z W L H

Resolution:

SPECIFICATIONS:
Model Travels Overall
Number X Y Z W L H

225-162 20° 25° 16° 40° 50° 85°
500mm 750mm 400mm 1000mm 1270mm 2160mm

232-202 25° 30° 20° 46° 55° 97°
625mm 750mm 500mm 1170mm 1400mm 2465mm

430-202 30° 40° 20° 51° 70° 97°
750mm 1000mm 625mm 1295mm 1780mm 2485mm

430-252 30° 40° 20° 51° 70° 107°
750mm 1000mm 625mm 1295mm 1780mm 2720mm

630-252 30° 60° 25° 51° 70° 107°
750mm 1500mm 625mm 1295mm 2290mm 2720mm

640-252 40° 60° 25° 61° 96° 107°
1000mm 1500mm 625mm 1500mm 2440mm 2720mm

840-252 40° 80° 25° 61° 118° 107°
1000mm 2000mm 625mm 1500mm 3000mm 2720mm

850-252 50° 80° 25° 71° 118° 108°
1250mm 2000mm 625mm 1800mm 3000mm 2745mm

1808

Helmel DNA:

Since 1973, a common genetic thread has run through all Helmel CMMs reflecting a philosophy and culture of sound mechanical designs, properly constructed, and coupled with leading probe systems and software that is powerful, efficient, and simple. Our objective is to provide customers with a durable and long lasting precision CMM that is affordable, economical to operate, easy to learn and use, and delivers decades of value and return on investment. It is an added bonus that Helmel is a stable company who will promptly provide knowledgeable service and support.

All Helmel Coordinate Measuring Machines have mechanical bearing systems characterized by strong bearing ratios, design emphasis on balance, attention to the center of moving mass, and optimized drive locations on powered machines. Our CMMs are constructed with Intrinsic Mechanical Accuracy – IMA: they are physically straight, flat, square, and true, with precision derived from the structure, not from software error mapping. That is our Credo.

Turn off error mapping on any competitive machine and you reveal a poor underlying product, for which you pay a dear price. Mapping is done to reduce production costs, but it will cost you more each time you need calibration. Error correction files are hidden behind password protection only the OEM can access, binding you to their higher priced services for years. A Helmel CMM employs scale correction factors only, and ours are open and accessible files.

We are a vertically integrated manufacturer with all key processes in-house: concepts, prototyping, mechanical and electrical design, machining, grinding, welding, painting, electronic and controller assembly, motion control and GEOMET metrology software development, system build, calibration and test, installation, training, and ongoing service and support. Helmel takes total responsibility for our products. We are still servicing Helmel products that are 40 years old.

Helmel's GEOMET® CMM Software System has been an industry leader since the early 1980’s. Like our machines, there has been a continuity of concepts, and a fundamental goodness in ease and efficiency, that runs through the decades. A user of early HP Basic Geomet would have little difficulty to walk up and use the later DOS versions, or today’s Windows versions, because the operating principles have not changed. The user interface, though vastly updated with graphical and Windows functionality, remains recognizable through our parallel iconic keyboard keylabel interface trademarked “Keystroke Magic™”. Users inevitably gravitate to this ultimately efficient interaction with Geomet.

Intrinsic Mechanical Accuracy is standard in every Microstar. Performance is delivered without 3D error correction software.

The Standard MICROSTAR System includes:
- Dual beam bridge design
- Bearings, ways, drives (DCC systems) and scales are covered or guarded
- Precision bearings on hardened & ground ways
- Non-contact optical steel scales mounted on steel
- Granite base
- 3/8-16 clamping inserts
- Machine cabinet (open PC rack for manual systems)
- Rugged 3-axis joystick (DCC only)
- Latest computer hardware
- LCD monitor
- Pull-out keyboard with GEOMET keyboard keylabels
- GEOMET 101+ DCC software
- GEOMET Junior+ (manual systems)
- Training part and manual
- 1" calibration sphere
- 1 Year Warranty and Software Service Contract (except Junior)

Contact Helmel for the full range of options, accessories, and training.
1-800-BEST-CMM (1-800-237-8266)

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