

# JAMES PRECISION ENGINEERING PTE LTD

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## Microstar 1M series - When you need day in, day out reliability for your large part inspection.

Hemel DNA: Since 1973, a common genetic thread has run through all Hemel 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 Hemel is a stable company who will promptly provide knowledgeable service and support.

All Hemel Coordinate Measuring Machines have bearing systems characterized by strong bearing ratios, design emphasis on balance, attention to the center of moving mass, and optimized drive locations. Our CMMs are constructed with Intrinsic Mechanical Accuracy – IMA: they are physically straight, flat, square, and true, with precision derived from the structure. In most cases the introduction and expense of error mapping is not required. When applied, however, it is built on top of a sound and physically accurate structure<sup>1</sup>.

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 because error correction files are hidden behind password protection only the OEM can access, binding you to their higher priced services for years. All calibration files on Hemel CMMs are open and accessible.

The design of our 1M Series incorporates a hybrid bearing system, with a combination of mechanical and air bearings, each utilized to take advantage of optimum performance characteristics.

An optional Renishaw UCC2 Controller can be ordered to enhance capabilities turning the Microstar into a very powerful scanning system.

Model Number	X	Y	Z
640-402	1015mm (40")	1525mm (60")	1015mm (40")
840-402	1015mm (40")	2030mm (80")	1015mm (40")
1040-404	1015mm (40")	2540mm (100")	1015mm (40")
1240-402	1015mm (40")	3050mm (120")	1015mm (40")
650-402	1270mm (50")	1525mm (60")	1015mm (40")
850-402	1270mm (50")	2030mm (80")	1015mm (40")
1050-402	1270mm (50")	2540mm (100")	1015mm (40")
1250-402	1270mm (50")	3050mm (120")	1015mm (40")
660-402	1525mm (60")	1525mm (60")	1015mm (40")
860-402	1525mm (60")	2030mm (80")	1015mm (40")
1060-402	1525mm (60")	2540mm (100")	1015mm (40")
1260-402	1525mm (60")	3050mm (120")	1015mm (40")



- Dual beam bridge design
- Precision bearings on hardened and ground ways
- Non-contact optical steel scales mounted on steel structure
- Granite base
- Wired for Renishaw Touch Trigger Probes
- Rugged 3-axis joystick
- Flat panel LCD monitor
- Magic™ keylabels
- Training part and manual
- 1 Year Warranty

- Bearings, ways, drives and scales are covered
- Air bearing on outboard leg
- .5µm (.000020") Resolution
- 3/8-16 clamping inserts
- Separate Electronic/Computer Cabinet
- Latest computer hardware
- Pull-out keyboard with GEOMET Keystroke
- GEOMET 101 DCC software
- 1" (25.4mm) calibration sphere
- On-line access to software upgrades

### Options:

- Renishaw Probe Systems TP-ES, MH20, RTP20, and PH20
- Renishaw Motorized Probe PH10T with TP20 or TP200 probes
- Renishaw Stylus Change Racks
- Geomet 301
- Prolink QC-Calc SPC Software
- Clamp Kit
- Vibration isolating pads
- Turnkey Systems ave Hemel provide complete fixture design/build and part programming for your projects. We can deliver you new CMM ready to run.
- Integrate your Hemel CMM into a cell or production line with our I/O Option to communicate with automation and provide output for process control