

## **Premier XT**

XT type is high accuracy "Semi-Gantry" CMMs and built with an 'integral' high precision granite table and does not require a foundation. Clever "Semi-Gantry" design allows for easy loading and unloading of parts and good visibility of measurement process from all angles. Ideal if you don't want expensive foundation work and/or plan to move the machine to a different location after initial installation.

Features high precision granite Master and Secondary Beams and air bearings on all axes.

Stainless steel air bearing ways on X axis, precision lapped granite air bearing ways on Y axis, and carbon fiber coated air bearing ways on Z axis.

Pneumatic counter balance and innovative self-tracking backlash free "Koala" drive system (Y axis) guarantee precise control of machine move.

100% air bearings on all axes. All axes are kinematic, with spring loading for safety protection in the event of a collision. High accuracy non-contact Renishaw digital measuring scales and twin scale technology for increased measurement accuracy of the machine.

### ***Standard safety features including:***

- Multiple emergency stop facility
- Z-axis failsafe brake
- Friction drives on all axes
- Kinematic design
- Machine Autostop
- Integrated probe protection
- Collision protection
- Safety interlocks
- Fail-safe pressure detectors ensure the machine will only operate when correct air pressure is available.

Full 21-parameter error map plus a second Y2 scale parameter for increased accuracy.

### **Measuring Strokes:**

|     |               |         |
|-----|---------------|---------|
| (X) | Bridge Axis   | 1750 mm |
| (Y) | Table Axis    | 2000 mm |
| (Z) | Vertical Axis | 1500 mm |

Measurement accuracy based on 20 degrees +/- 1 degree

The measuring accuracy is in compliance to CMMA specification.

Volumetric Accuracy  $M = 7.0 + L/175$  ( $\mu\text{m}$ )

|                             |                            |
|-----------------------------|----------------------------|
| Max. Acceleration (3D move) | 1000 mm/sec <sup>2</sup>   |
| Max. Speed (3D move)        | 250 mm/sec                 |
| Max. Measuring Speed        | 40 mm/sec                  |
| Resolution                  | 0.0001mm                   |
| Power Supply                | 110 or 240v – 50/60 Hz     |
| Electrical Consumption      | 1.5 kW Maximum             |
| Air Consumption             | 20 litres/min @ 5.5 bar    |
| Tolerable Temperature       | 10° to 40° C               |
| Tolerable Humidity          | 60% +/- 30% Non condensing |
| Colour of Machine           | Cream / Charcoal           |