

Azimuth

FROM STRENGTH TO STRENGTH

As CMMs get larger, it is not simply a case of scaling up the design of smaller models. Stiffness of the structure is critical, but weight must also be kept to a minimum. The Azimuth CMM is not only Aberlink's largest in their range of CMM products, but it is the culmination of over thirty years experience and excellence in the design and manufacture of innovative metrology equipment incorporating the very latest materials technology.

The revolutionary bridge of the Azimuth incorporates aluminium honeycomb sheets developed for use in formula one and the aerospace industry. The remarkable stiffness to weight ratio that this provides gives the Azimuth an edge in both performance and speed. For a machine of this size, the Azimuth is not only fast, but extremely accurate.

The drive systems designed for the Azimuth offer simplicity and reliability and the novel system used on the Y axis ensures that there is no degradation of performance across the full range of machine sizes offered up to 3m.

A big machine should also be able to measure a heavy component, this is another area where Aberlink has applied innovative thinking. Rather than simply increasing the depth of the granite table, which adds huge cost and weight to the machine, we offer a specially designed load plate to sit on the granite base. This plate can accept up to a six tonne load which will then be transmitted directly through the feet of the machine bench directly to the floor, meaning no loss of metrology performance.

Key Features:

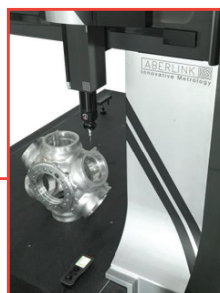
- Capable of measuring parts up to 6000kg in weight
- Fitted with 0.0001mm linear encoders for superior accuracy
- Unique self-contained drive system ensures excellent performance over the entire measuring volume
- Choice of Y axis sizes ranging from 2000mm to 3000mm
- Supplied with the CMM touch screen joystick as standard
- **Free software upgrades** - no maintenance fees or contracts

Common Probe Options:

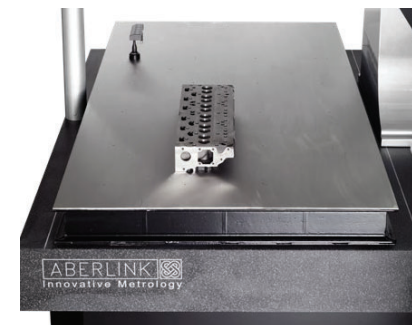
- PH10T (w/TP20, TP200)
- PH10M (w/SP25)
- PH6M (w/SP25)

Machine Options:

- Load plate for loads up to 6 tonnes
- Auto Temperature Compensation
- CCD Camera System
- Collimated Back Light Option
- Dual Monitor
- Fixture Kit

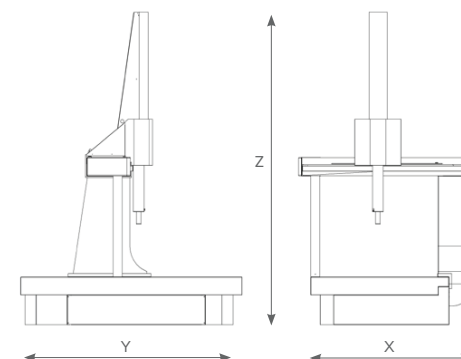


State of the art design ensures maximum stiffness for both greater speed and higher accuracy



Technical Information:

Axis Travel (mm)	X 1200 Y 2000, 3000 Z 1000
Overall Size (mm)	X 1940 Y 3000, 4000 Z 3595
Volumetric Accuracy:	TP20 (2.9 + L/250) μm * TP200 (2.8 + L/250) μm * SP25M (2.6 + L/250) μm *
Scale Resolution:	0.1 μm
Optimum Temp Range:	18 - 22°C **
Operational Temp Range:	5 - 45°C
Table:	Granite
Table Load Capacity:	1500kg as standard. Options up to 6000kg
Max. Velocity Vector:	600mm/sec
Max. Acceleration Vector:	600mm/sec ²
Air Consumption:	65 l/min (1.8 cfm)
Required Air Pressure:	5 bar (72 psi)



*Maximum Permissible Error MPE_v according to ISO 10360-2, 2009 within the thermal limits defined for optimum temperature range.

**Installation environment thermal limits:
Rate of change <1°C/hr and <2°C/24hr | Temperature gradient <1°C/m

