

Aeros S



The AEROS S Series is distinguished by its medium to large Gantry CMMs, celebrated for their exceptional structural stability and adaptability. This series is designed to meet the diverse needs of measurement applications, offering versatility through a broad range of sizes and customizable configurations.

Central to the AEROS S design is the incorporation of a light aluminum alloy Z-axis spindle and a "Single Read" scale system on the X-axis, ensuring both precision and durability.

Specification

The AEROS S CMM Series is available in 40 standard models, accommodating a wide array of industrial measurement needs with YZ-axes sections: 15.13 / 20.13 / 20.15 / 20.20 / 25.15 / 25.18 / 25.20 / 30.20 / 30.25. These models feature accuracy starting from $4.3+5.0L/1000$, with a maximum 3D speed of 530 mm/sec and acceleration of up to 800 mm/sec^2 .

Technical Highlights

Optimal mechanical rigidity is achieved through generous dimensioning of the distance between the air bearings.

The Y-axis cross-beam features a high rigidity with a proprietary steel tubular frame design, enhancing structural integrity.

A Z-spindle made from extruded aluminum alloy provides rigidity while minimizing the moment of inertia for improved dynamics.

X-axis beams are crafted from stabilized steel with a wide transverse section and a support system designed for linear expansion without inducing deformations.

The guideways of the X / Y axes are finished with finely ground (0.4mm roughness) high resistance epoxide resin for smooth movement.

A "Dual Reader" measurement system with high-resolution linear transducers ($0.1 \mu\text{m}$) on the longitudinal X-axis offers enhanced precision.

An optional "Dual Drive" system is available for longitudinal X-axis movement, providing added reliability and performance (optional up to $Y=2500$, standard for $Y=3000$).

A multi-sensor system automatically compensates for errors due to thermal expansion, ensuring consistent accuracy across all conditions.