



Optodyne, Inc.
1180 Mahalo Place
Rancho Dominguez, CA 90220

For further information contact:
Lily Wang
optodyne@aol.com
PH: 310-635-7481

For Immediate Release

MCV-500 laser calibration system for 3D Volumetric Positioning error measurement and Compensation

Once considered strictly a quality issue, calibration and compensation have been directly linked to cycle-time reduction. A CNC machine tool within tolerance can run higher feed rates and still maintain tolerances. Calibration allows online part inspection and preventive maintenance. 3D volumetric error compensation allows higher parts accuracy.

MCV-500 is an efficient and complete laser calibration package for the calibration and 3D volumetric error compensation of CNC machine tools, coordinate measure machines (CMM), and large 5-axis gantry type machines for the aerospace industry. Within the laser calibration industry, Optodyne says this system sets the bar for the most efficient calibration and compensating linear, straightness, squareness and angular errors. For example, Using the Patented Sequential step diagonal technique, the measurement time of 3D volumetric errors over a volume of 80" X 60" X 40" can be reduced to as little as three hours.

For machines using low end controllers, the measured 3D errors can be used to compensate the G-code to achieve higher part accuracy. For machines using high end controllers, such Fanuc 30i/31i/32i, Siemens 840D, etc. the measured 3D errors can be used to generate the compensation files and up load directly to the controller to achieve higher 3D volumetric positioning accuracy.

Photo caption: A photo of the machining center and the 3D volumetric positioning error measurement setup. (3DsetupOptodyne.jpg, 251 KB)

