

Preventive services – To prevent wear
on machine components

Geometrical control



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Perfectly repeatable machining results require a perfectly accurate starting point: flatness, squareness and parallelism. Even the slightest deviation can threaten the integrity of your Milling, EDM or Laser machining processes, resulting in wear on machine tool components like guides and ball screws.



- + Baseline testing to ensure maximum precision
- + Yields greatest respect for tolerances in parts production
- + Conducted according to ISO 230-1 specifications

As a component of our comprehensive preventive services, GF Machining Solutions Customer Services tests your machine geometries according to ISO 230-1 specifications.

Our expert service engineers use regularly calibrated tools to measure the precision geometries essential to the optimal performance of your GF Machining Solutions Milling, EDM and Laser machines. We provide you with a report detailing the results of our tests, as well as our technical experts' recommendations for optimizing geometrical precision of your equipment.

We recommend this preventive service in case of particular events (e.g., a collision or a machine that has been moved) or as certification support to prevent unexpected wear and to maintain your machine in optimal condition.

Examples of machine geometry measurements performed by our expert technicians:

- Flatness of the table
- Straightness of the axis
- Squareness between the axes
- Parallelism between axes
- Squareness between the elements (such as working spindle for Milling machines and upper head for wire EDM machines) and the table in different positions

More particularly, for Milling machines:

- Runout of internal taper of the working spindle
- Parallelism of the pallet surface and table plate surface in the X, Y and Z directions
- Axial runout of the pallet and table plate
- Parallelism between the pallet reference surface and the reference T slot of the table plate and X axis motion
- Squareness between the working spindle axis and the pallet and table plate surfaces