AxiCheck PLAN YOUR MAINTENANCE



Description

Parallelism and centre of rotation are essential requirements for the correct operation of a machine tool with rotary axes.

AxiCheck is Marposs software for Windows PC with a graphical interface that allows you to check, measure and optimise the performance of rotary axes.

Thanks to its fast analysis and accuracy, AxiCheck monitors the health of the machine, directly contributing to the improvement of the production process, and the operator can identify and correct errors that affect the precision and geometry of parts. Axicheck is therefore synonymous with high productivity on both large-scale and small-scale production with high added value.

Precision and accuracy of the data processed by AxiCheck are guaranteed by high-performance Marposs probes, which are also stored both for predictive maintenance and to generate graphs and reports for clear and intuitive interpretation.

Advantages

- Machine error detection;
- Increase of production capacity
- Reduction of the production of scrap parts and rework of the part
- Visualisation of error evolution, with alarms thresholds for maintenance planning
- Detection of parallelism errors of the rotary axes and centers of rotation of the machine



Essential is the use of a calibration sphere rotated along the axes of the machine tool. By measuring the centre of the sphere, AxiCheck is able to analyse the operating state of the machine itself and make any necessary corrections.



5 Axis Machine

Complex machining operations require 5-axis machine tools. Among the types of these machines are those with 4th and 5th axes on a table, for which the inspection and compensation of parallelism and centre of rotation errors is indispensable for correct operation. For such machines, kinematics plays a key role since undesirable and uncontrollable dynamic phenomena affect the accuracy of the entire machining process. Axicheck shows by means of graphs and tables both the inspection and any compensation to be made to the A/B and C axes: corrections to the centres of rotation can be manual or automatic.

Axicheck makes it possible to evaluate the performance of the machine over its life cycle, optimising time and production, and reducing the cost of machined parts.





Graphical representation of the B-axis results

Graphical representation of the C-axis results



Pivot Points can be automatically corrected



Parameter related to mechanical axis condition are displayed and recorded to track the history of the machine's state of health.



Key points of AxiCheck:

- · Continuous monitoring of machine tool performance
- · Production of data necessary to compensate linearity or circularity errors of the axes
- Historical of the evolution of geometric errors of the machine
- Graphic visualisation of the status of linear and rotary axes
- · Warning and alarm messages if the measurement is out of tolerance
- User-friendly interface



Codes

| C092G1F03A | Fanuc Axicheck |
|------------|----------------|
| C092G2F03A | Siemens 840D |
| C092GNF03A | Mitsubishi |



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