



Preset & Measure Suite

Product presentation

2026-07-08

Presetting and quality measurement on a coordinate measuring machine suitable for the workshop

You manufacture – we measure

In order to ensure the quality of the workpieces, production steps must be reliably monitored.

However, measurement directly on the milling or eroding machine interrupts production and is often inaccurate during the warm-up phase.

Measuring on the CMM - Benefits:

- Shorter setup times
- Higher machine availability
- Shorter lead times
- Precise offset data directly to the machine tool
- Quality data immediately available
- Can be used from manual CMM to fully automated production cell with PC-DMIS

Result:

The utilization rate of the machining center increases significantly – and so does overall productivity.

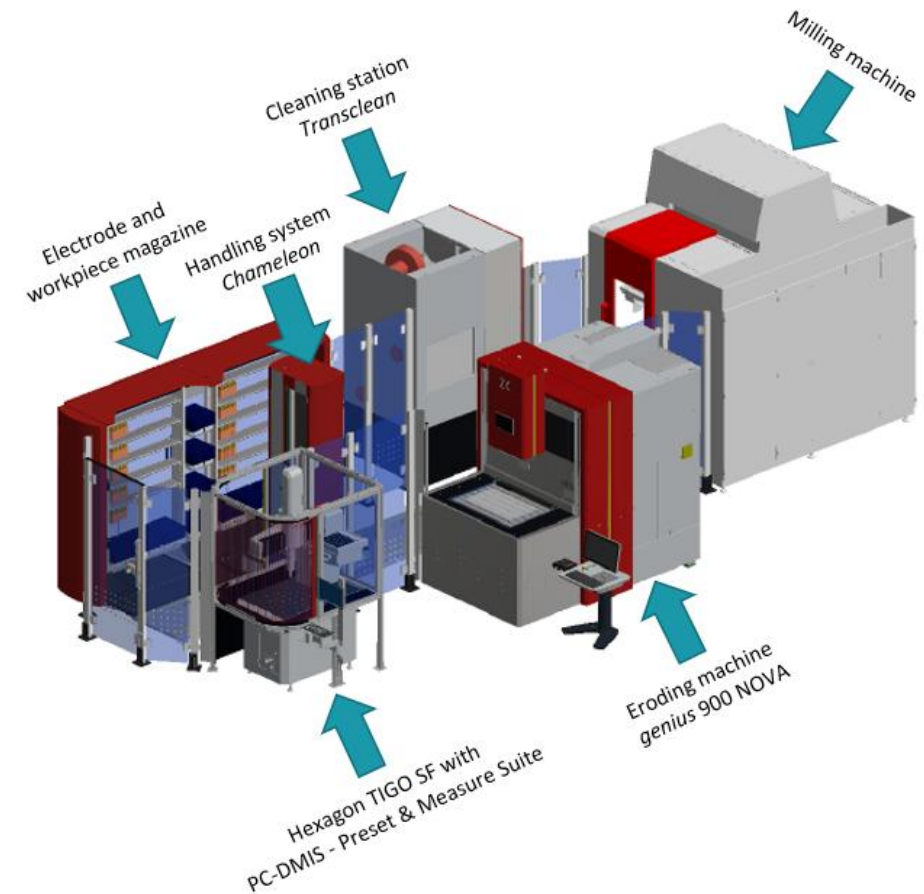
Fully automated eroding and/or milling

In a fully automated solution, the CMM, milling and/or EDM machines, as well as additional components, are integrated into a manufacturing cell.

A control system coordinates robot loading, tooling, and the interaction between the machining and measuring systems.

Benefits:

- Maximum productivity
- Maximum machine efficiency
- High accuracy & process stability
- 24/7 manufacturing operation.



Preset & Measure (Basic software)

Graphically supported user interface that guides the machine operator safely through the PC-DMIS measurement process - without prior metrology knowledge.

Included Functions:

- Probe qualification
- Qualification of zero-point clamping systems
- Offset data determination for electrodes and workpieces
- Quality inspection of electrode contours and workpieces
- Integrated plausibility checks to prevent errors

Measurement data can be managed and exported in various formats. Parameterized post processors enable adaptation to customer-specific machines.



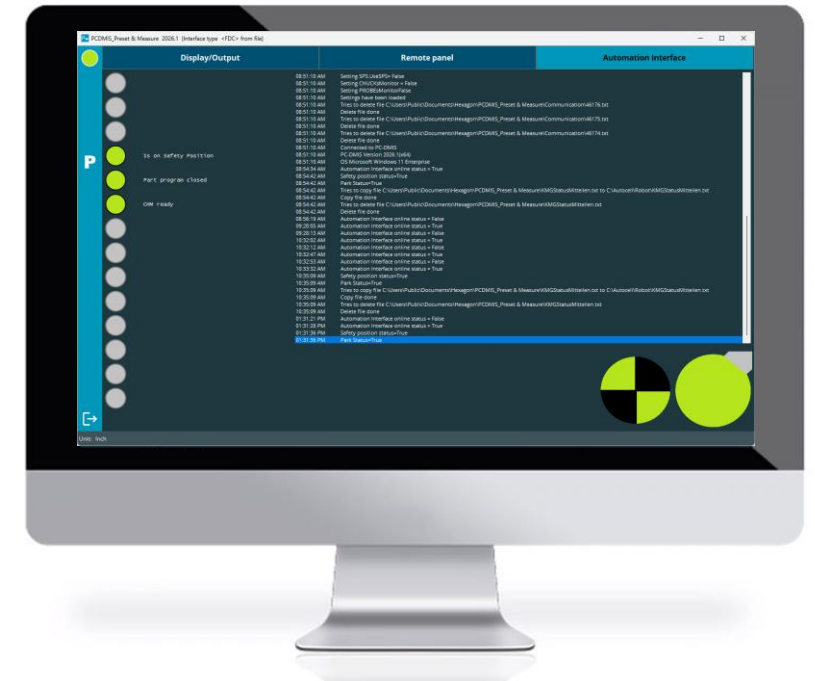
Preset & Measure Automation Interface (Option)

Interface to the control system of an automated production cell.

Supported systems:

- Zimmer & Kreim JOBmod CMM
- GF Machining Solutions WSM
- Röders RMSMain
- EROWA JMS 4.0 ProductionLine

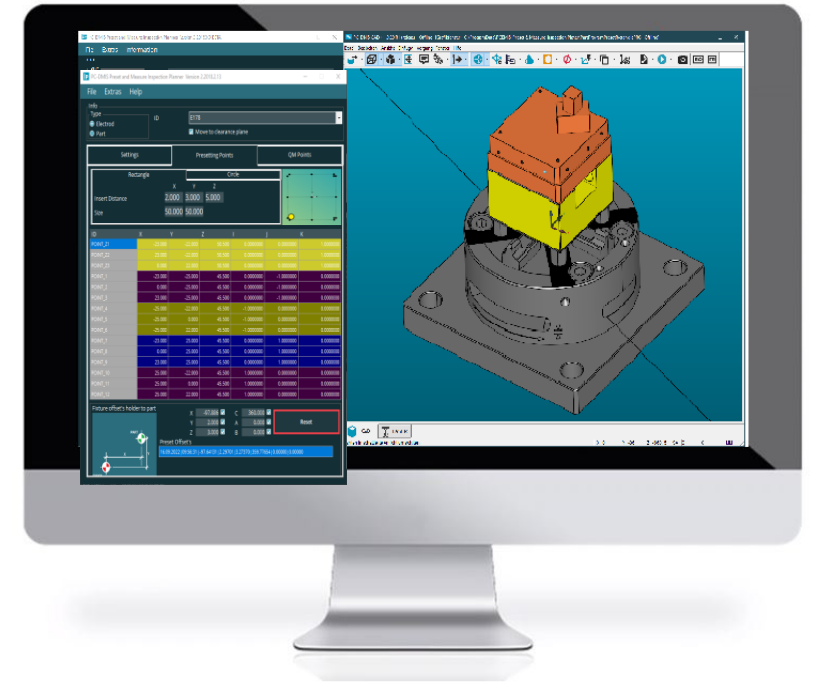
Further connections on request.



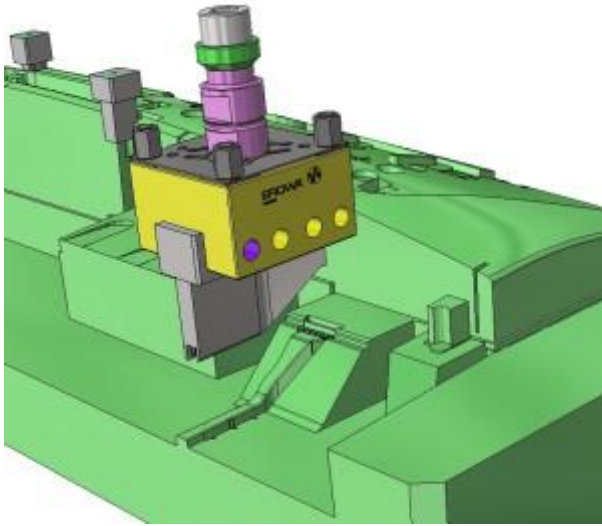
Module 3: Preset & Measure Inspection Planner

In combination with a PC-DMIS CAD Offline licence, measurement points can be defined directly on the CAD model. Probe configurations and probing parameters are set centrally.

The generated data file is automatically transferred to an executable measurement routine.

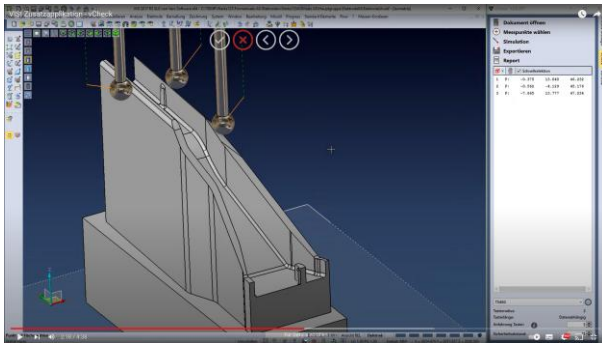


Support of the entire electrode process



VISI Elektrode

VISI Elektrode enables the user to automatically extract the geometry of detailed areas of the model that are to be produced by eroding from the component. A blank is automatically defined for the extracted geometry, the dimensions of which can be changed as required.

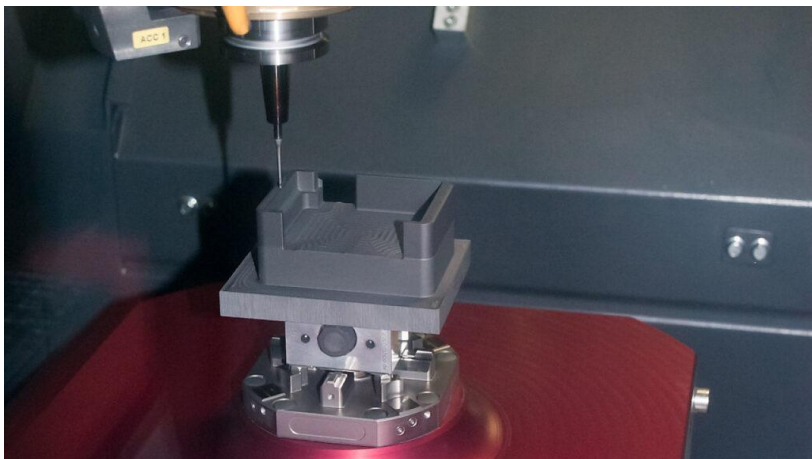


VISI additional applications - vCheck

vCheck combines the powerful CAD / CAM software VISI with the quality measurement. The measuring points can be generated directly in VISI and exported to a test plan file for PC-DMIS Preset & Measure. After the measurement has been carried out, the measurement results are fed back into the electrode management. This is the integrated solution for our VISI customers.

<https://youtu.be/yDDifVXAool>

Support of the entire electrode process



VISI Electrode Machining

VISI Electrode Machining automates the generation of NC programs for milling electrodes.

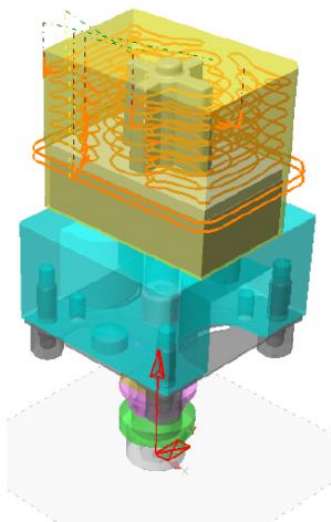
The new VISI Electrode Machining module automates electrode processing. The information relevant for the processing of an electrode previously defined in the Electrode Manager is used for the automatic generation of the processing project.

The process at a glance

The following functions are carried out automatically by VISI Electrode Machining:

- Workpiece production
- Raw part production
- Definition of obstacles
- Generation of the machining project
- Generation of the toolpaths

The new module VISI Electrode Machining offers a high level of automation of the electrode process in modern mold making and thus also a correspondingly large time saving.



FAQ

What are offset data in sinker EDM, and how are they determined?

Offset data in sinker EDM describe the center and height offsets (X, Y, Z) as well as the rotational angle (C) of an electrode relative to the zero-point clamping system. These values are transferred directly to the EDM machine as correction parameters.

"Accurate acquisition of these data prevents costly errors during the EDM process."

Why measure when the electrode is milled directly on the holder?

Tool wear and thermal influences can cause errors - the measurement detects and compensates for them.

Is a CMM useful?

Yes. Hourly rates are low, productivity increases, offset data and contours are precise.

FAQ

Can the measurement be performed directly on the milling machine?

Cleaning and cooling are required between machining and measurement. Thermal influences would otherwise distort the measurement results.

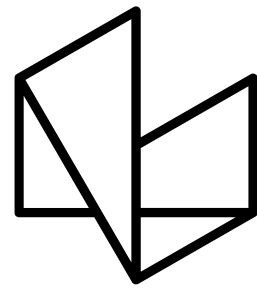
Isn't a CMM too complicated to use?

Preset & Measure was specifically designed for ease of use. After a short introduction, machine operators can use the solution independently.

Have we piqued your interest?

Download the software and request a non-binding demo license.

[Link to download](#)



HEXAGON