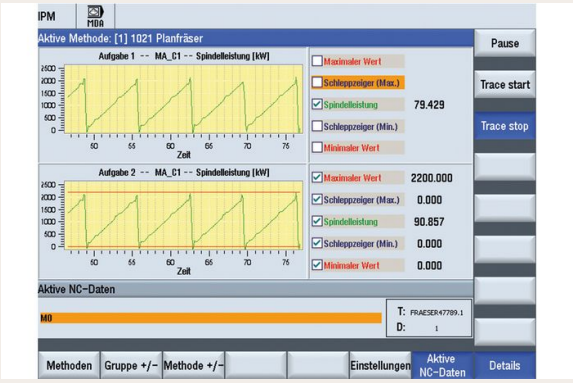
Integrated Tool Monitoring (IPM)

Availability | Digitalization



Series

H | F | C | MCH | MCH-C | MCi

Control

SIEMENS Solutionline | SIEMENS Powerline

In unmanned shift operation, but also in normal production routines involving operators, automatic tool monitoring not only prevents expensive damage, but also unnecessary spoilage.

Characteristics

_ Monitoring of tool breakage and overload during the machining process

_ Evaluation of process signals from the digital drives, no additional sensors required

_ Assignment of various monitoring processes (e.g. fixed limit, travelling threshold) and responses per tool

_ Complete integration of basic monitoring in the Sinumerik 840D user interface, incl. machine preparation

Benefits

_ More process reliability: complete monitoring and data for each tool current at all times

_ Fewer unplanned failures, fewer downtimes: proactive and controlled tool replacement

_ Lower costs: no expensive response to tool breakage and machine protected against overload

Requirements

_ SIEMENS Powerline

_ SIEMENS Solutionline

_ Tools with the appropriate power and torque input, i.e. drilling from a depth of approx. 6-8 mm depending on the main spindle type and the machining process