

NC software solution for tool monitoring

PRO **SIN** F

NEW!

- detection of missing holes or drills for drilling operations
- protects machine and tool from static overload
- ideal for machining centers and drilling machines employed in the mass production of metal components (e.g. in the automotive industry) as well as for manufacturing of small batches (only one workpiece is needed for learning)
- excellent retrofitting capabilities
- good value, because no separate hardware must be purchased
- no additional sensors
- for all hardware platforms of the FANUC 0i D, 16i, 18i, 21i, 30i, 31i, 32i, 160i, 180i, 210i, 300i, 310i, 320i control systems*
- absolutely minimal scope of operator actions via FANUC operating unit
- fast installation

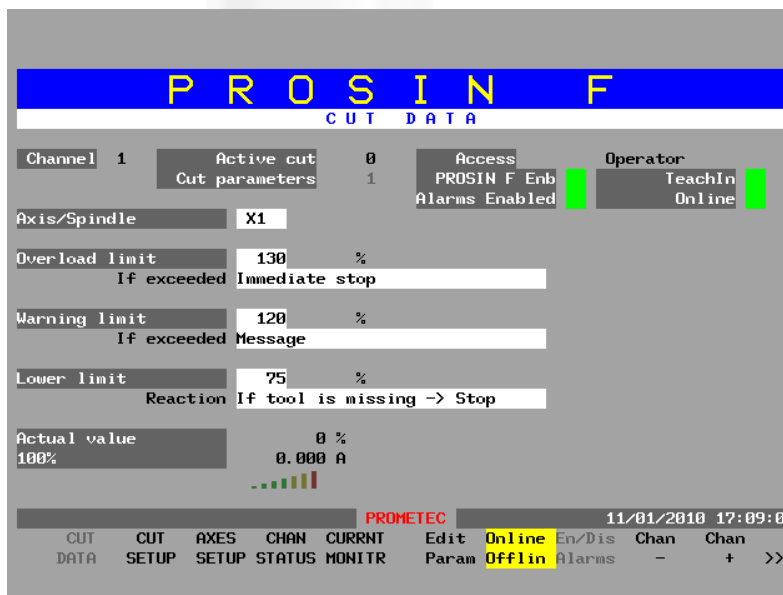
*for small batches AND
for mass production*

~~additional hardware~~

~~extra sensors~~

All you need: PROMETEC
PROSIN-F software and
some FANUC options

***over 850 systems
already in use on
SIEMENS controls**



Clearly arranged multiple personalized screens for easy operation: operating status, cut number and monitoring parameters

Operation with FANUC softkeys and number block

Learning of comparison values by a push of a button

Variants: for up to four independent or synchronous spindles as well as multiple channels/paths

also available as version PROSIN^{PLUS} (including automatic work piece management and work value monitoring) for SIEMENS SINUMERIK

The FANUC options that must be enabled in the different CNC families are:

Option	Code on FS 16i	Code on FS30i
Macro executer + C-language executer	A02B-0281-J734	A02B-0303-J734
C-language executer additional SRAM ¹	A02B-0281-J736	A02B-0303-J736
Custom software size 2MB	A02B-0283-J738/2M	A02B-0303-J738#2M
Interruption type custom macro	A02B-0281-J874	A02B-0303-J874
Second feedrate override	A02B-0281-J810	A02B-0303-J810

Keep in mind that several or all of these options possibly are already enabled on your control.

¹The "C-language executer additional SRAM" option should be enabled depending on the PROSIN-F database size (number of cuts).

Economic alternative

Machine tool OEMs are always looking for ways to improve their existing series of machines. One of these improvements for example is objective and repeatable detection of overload situations and of dull, broken or missing drilling tools like fluted drills, thread cutters, reamers, etc.

PROSIN-F enables tool monitoring by reading the electrical current values of the digital drives: e.g., if a tool breaks, the current value for the corresponding drive will change, with the current increasing for a dull tool. Additionally PROSIN-F protects machine and tool holder from static overload, wrong NC parameter input, or faulty clamping of the work pieces.

PROSIN-F utilises the load sensor signals from the main and feed drives and analyses these signals in accordance with overload, prewarning, and missing limits for each drilling cut. Up to 120 cuts per work piece are available.

With PROSIN-F, drills can be monitored for breakage when used with steel, cast iron or aluminum.

Clearly arranged interface

A special monitor screen is provided to configure the monitoring settings for the NC program operations, with this screen integrated into the standard user interface of the CNC. This screen allows you to enter and optimize the settings for the cuts to be monitored on one or more tools, and to display the actually measured values.

This tool monitoring package is of particular interest for mass production of metal parts, such as in the automotive supplier industry as well as for smaller engineering batches where quality needs to be increased while at the same time reducing costs. A further benefit lies in how easy it is to retrofit existing machines, whose functionality can be expanded in very short time.

Germany (Headquarters) PROMETEC GmbH Jülicher Str. 338 52070 Aachen Phone: +49 241 16609-0 Fax: +49 241 16609-50 prometec-de@prometec.com	USA PROMETEC Inc. 47711 Clipper Street Suite 200 Plymouth, MI 48170 Phone: +1 (734) 455 0100 Fax: +1 (734) 451 4654 prometec-us@prometec.com	England PROMETEC Ltd. 41 Church Street Birmingham West Midlands B3 2RT Phone: +44 7971 475134 prometec-uk@prometec.com	Italy PROMETEC S.r.l. Viale Ticino, 54 21026 Gavirate (VA) Phone: +39 0332-1950049 Fax: +39 0332-744952 prometec-it@prometec.com	Eastern Europe PROMETEC Bratislava Šustekova 12 SK 851 04 Bratislava Slovakia Phone: +42 1263 531211 Fax: +42 1263 531212 prometec-sk@prometec.com	India PROMETEC GmbH India Branch Office #1066, 15th Cross, 25th Main Bangashankari-2nd stage Bangalore-560 070 Phone: +91 (0)80 2671 2220 Fax: +91 (0)80 2671 2199 prometec-in@prometec.com	Korea PROMETEC GmbH Korea Branch Office #C-607, SK-Technopark 60 Haan-ro Gyeonggi-do Gwangmyeong-si, 423-795 South Korea prometec-ko@prometec.com
--	--	---	---	--	---	---