

OCON F

Tool monitoring. Software-only solution for GE Fanuc control systems



Benefits at a glance:

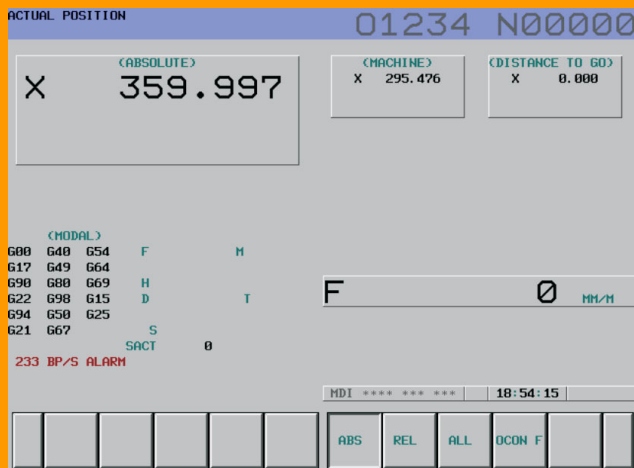
- Software-only solution for Fanuc control systems
- Missing tool detection of rotating shaft tools
- Call via NC commands
- Sensor-free process
- No sensitive sensors in the machine working area
- Only a few operator actions required
- Also suitable for GE Fanuc compact controls (16i, 18i, 21i)
- Distance and time-based monitoring
- No configuration necessary in the PMC
- Ideal for retrofitting

OCON F tool monitoring

Software-only solution for GE Fanuc control systems

Function

OCON F is a monitoring software program based on a C-Executor program, which is installed in the GE Fanuc control system. For monitoring purposes the torque data of the spindle or feed drives in the driver controls are measured for a specific point of time or distance and evaluated.



Involvement into the Fanuc user interface

VISUALISIERUNG OCON F		ARTIS GMBH		Date of comp May 30 2006 11:38:53	
KANAL 1			KANAL 2		
FEHLT WERT	0	FEHLT WERT	0	FEHLT WERT	0
FEHLT GRENZE	77	FEHLT GRENZE	1	FEHLT GRENZE	1
NULLUNGSWERT	0	NULLUNGSWERT	0	NULLUNGSWERT	0
AKTUELLER WERT	3	AKTUELLER WERT	0	AKTUELLER WERT	0
PN	1	PN	0	PN	0
TN	2	TN	0	TN	0
BN	10	BN	0	BN	0
ID	0	ID	1	ID	1
0		0		0	
0		0		0	

Buttons: MANUAL START, PARAM-KANAL1, SYSTEM, LOGIN, MANUAL STOP, RESET-ALARM, PARAM-KANAL2, LERNEN EIN, LERNEN AUS, ZURÜCK

Simple parameter page

Benefits

Avoidance of consequential damage and production faults when tools break.

Production faults resulting from unnoticed tool breakage may occur when incompletely machined parts reach downstream machining stations or even the user. OCON F helps avoid secondary damage resulting from production faults.

Tool monitoring in series production

OCON F machine tool monitoring is particularly suitable for use in mass production. For this the processes must be easily reproducible, i.e. fluctuations in dimensions and hardness must lie within the normal tolerance range and the spindle speed must be reached before machining commences.

In such cases shaft tools with a diameter of 3 mm and upwards in steel can be monitored for 'missing'.

In-process monitoring

In-process monitoring has the advantage over post-process monitoring (as in optical or mechanical systems) that the monitoring process requires less time.

Control requirements

- GE Fanuc controls 16i, 160i, 18i, 180i, 21i, 210i
- No other C-Executor application
- Standard system software
- Free PCMCIA slot in the NC for OCON-F flashcard
- PMC CPU > 00 e.g. PMC CPU: 01

Scope of delivery

Operator manual with examples

CD with C-Executor program, example NC programs and documentation

PCMCIA flashcard with OCON F program