

THE FACTORY AUTOMATION COMPANY

FANUC

ROBODRILL-LINK*i*

The easy way to monitor your ROBODRILL machines

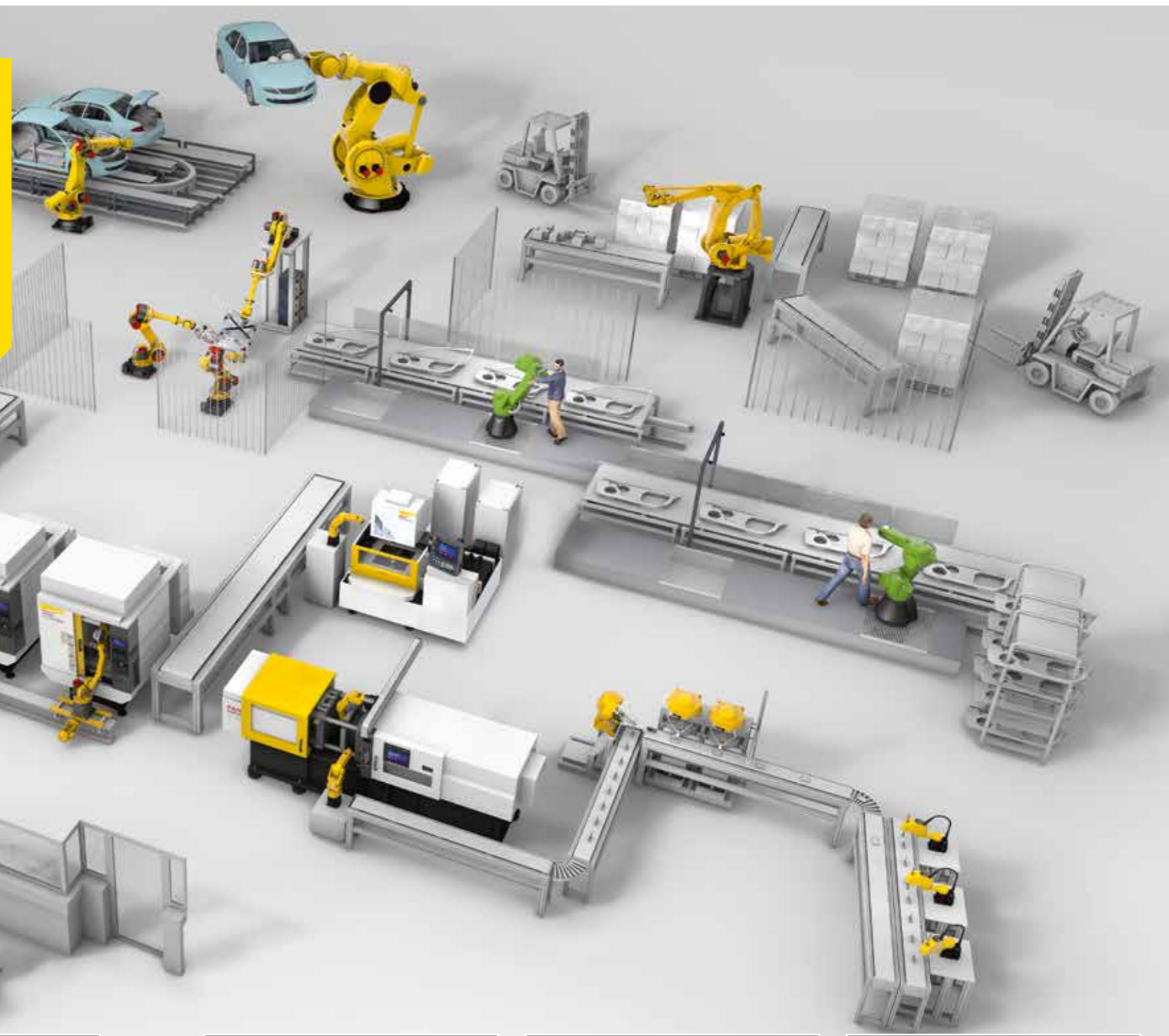
Operation management software running on standard PCs.
Collect data and monitor the status of your factory's ROBODRILL machines and other equipment.



ROBODRILL-LINK*i*

ROBODRILL-LINK*i* is a PC software that connects FANUC ROBODRILL machines, robots and peripheral devices in the factory. Data can be collected and visualised to provide more information about manufacturing process and historical data.

Not only machines equipped with FANUC CNC or FANUC robots can be connected, but also machines or robots from other manufacturers as well as PLCs or sensors. ROBODRILL-LINK*i* software is one of the first steps to utilise IoT functions of manufacturing machines and devices. Based on data collected and presented in ROBODRILL-LINK*i* customers can improve their productivity and processes.



ROBODRILL-LINK*i* benefits:

- Improve productivity due to detailed machine data
- Improve uptime by periodic maintenance info
- Visibility on tool life information for increased uptime
- Save time by automatic custom regular reports
- Have a backup for CNC system and programs



STATUS



PERFORMANCE



OPTIMISATION

Easy connectivity

ROBODRILL-LINK*i* makes it easy to access and transfer data from factory equipment such as ROBODRILL machines, machine tools with CNCs, robots and PLCs over a network. ROBODRILL-LINK*i* allows you to also connect third-party equipment via OPC UA and MTConnect.

Quick and easy setup and configuration

ROBODRILL-LINK*i* is easy to set up and has a scalable system architecture. The data acquisition is managed by a dedicated Collector PC software, whereas the data is stored on a Server PC software. The Server PC also provides a web-based user interface for data access and visualisation that can be accessed from any PC or tablet on the network with a browser. For small systems with only few devices, Collector PC software and Server PC software can run on a single standard personal computer. Up to 100 devices can be handled by one ROBODRILL-LINK*i* server. The production results of large systems with more than 100 devices can be combined with the ROBODRILL-LINK*i* Integration Server.

Production monitoring

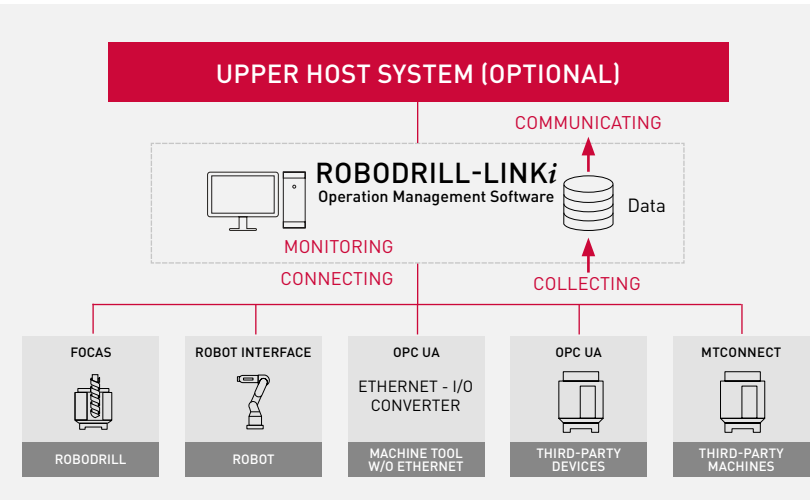
ROBODRILL-LINK*i* enables you to monitor live the state of the whole factory at a glance. Recognise abnormal states of the equipment such as alarms quickly, allowing you to start countermeasures immediately.

Performance overview

ROBODRILL-LINK*i* allows you to review the operational results on machine level. You can review the production results and compare them against the production plan. You also can check machine utilisation and find machines that are underutilised. This enables you to optimise the factory's resource planning.

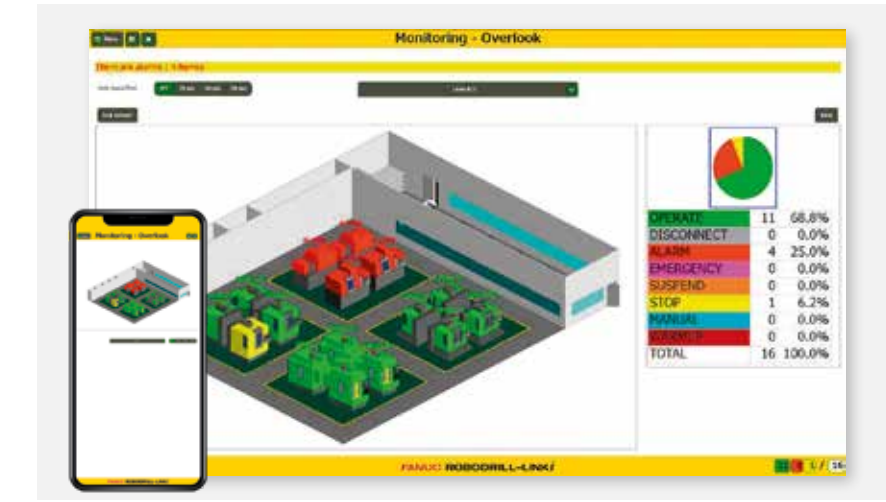
Diagnostics

With ROBODRILL-LINK*i*, it is possible to view various diagnostic data such as tool life information, alarm history, program history, signal history and macro value history. With this, you are able to identify bottlenecks and optimise the production process. ROBODRILL-LINK*i* also enables you to schedule automatically generated reports in CSV file format. The report templates can be customised to suit your needs.



Connecting ROBO-DRILL-LINKi

- connect ROBO-DRILL machines and other machine tools equipped with FANUC CNC via FOCAS
- connect FANUC robots via Robot Interface
- connect machines without Ethernet via Ethernet I/O converter
- connect third-party devices via OPC UA protocol
- connect third-party machines via MTConnect protocol



Using ROBO-DRILL-LINKi

- web-based user interface
- supports PCs and tablets



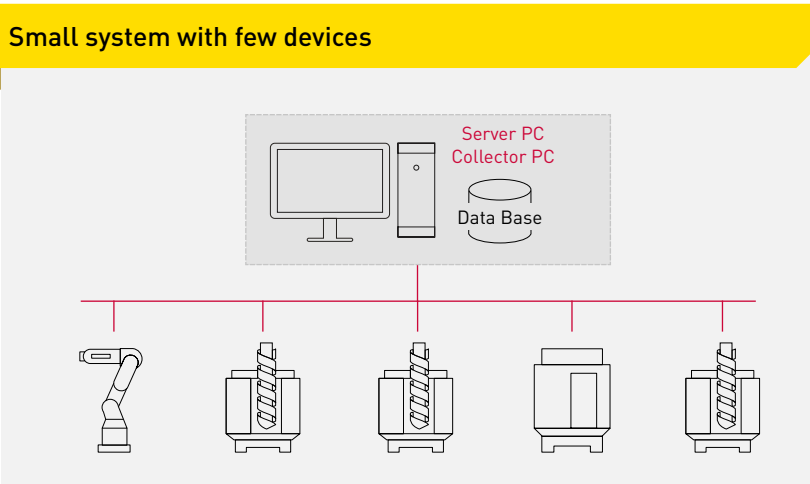
ROBO-DRILL-LINKi FUNCTIONALITY Operational Results

- provides you with graphs displaying the machines' operational states such as OPERATE, ALARM or STOP
- data can be output to CSV file
- helps you to check machine utilization and detect unused production capacity



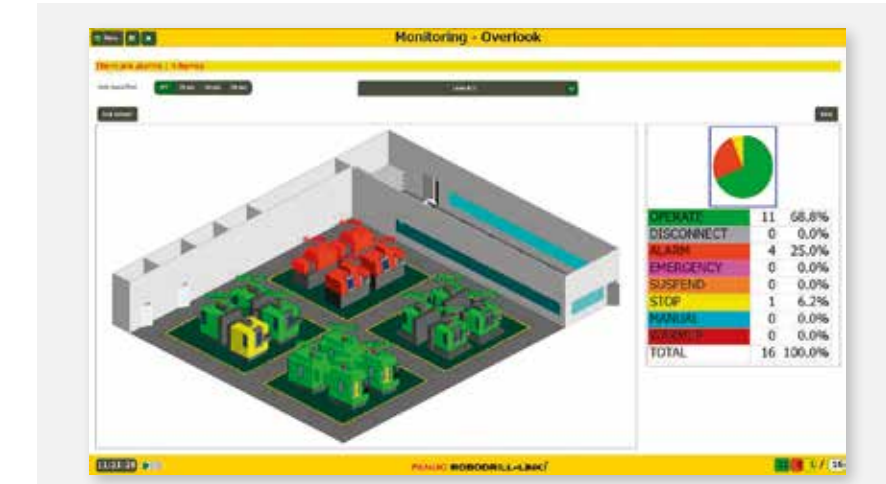
ROBO-DRILL-LINKi FUNCTIONALITY Signal History

- shows you the signal history of various machine signals
- data can be output to CSV file
- allows you to identify correlations between machine signals
- enables you to check the condition of batteries, fans and motors' leakage resistances based on their signals and replace worn-out components in time



Scalable system architecture

- for small systems with less than 25 devices only one PC is required.
- in ROBO-DRILL-LINKi up to 100 devices are considered as a medium system where multiple collector PCs provide all machine data to one central server PC.
- large systems with more than 100 connected devices can be centralized using the ROBO-DRILL-LINKi Integration Server



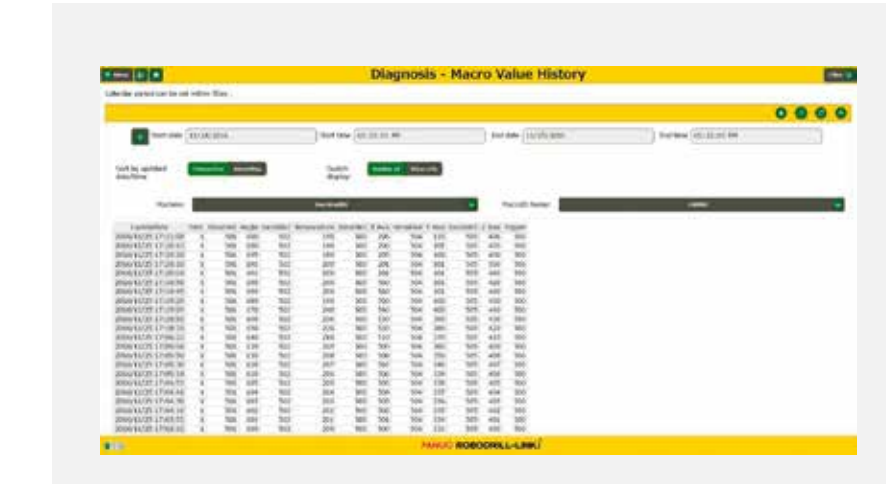
ROBO-DRILL-LINKi FUNCTIONALITY Overview

- enables you to recognise abnormal states of your machines quickly
- detailed information available by just clicking on a machine
- reduce down time by starting countermeasures immediately



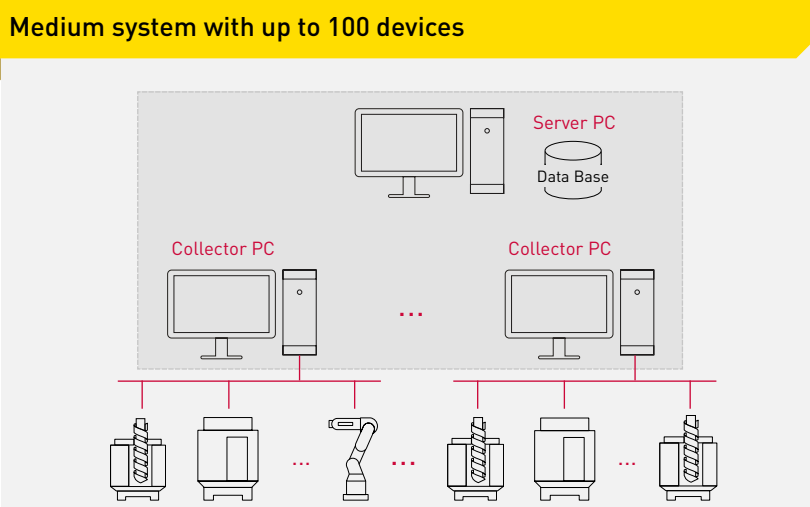
ROBO-DRILL-LINKi FUNCTIONALITY Production Results

- shows you the production results and production plans of your machines
- data can be output to CSV file
- allows you to easily identify deviations from the production plans



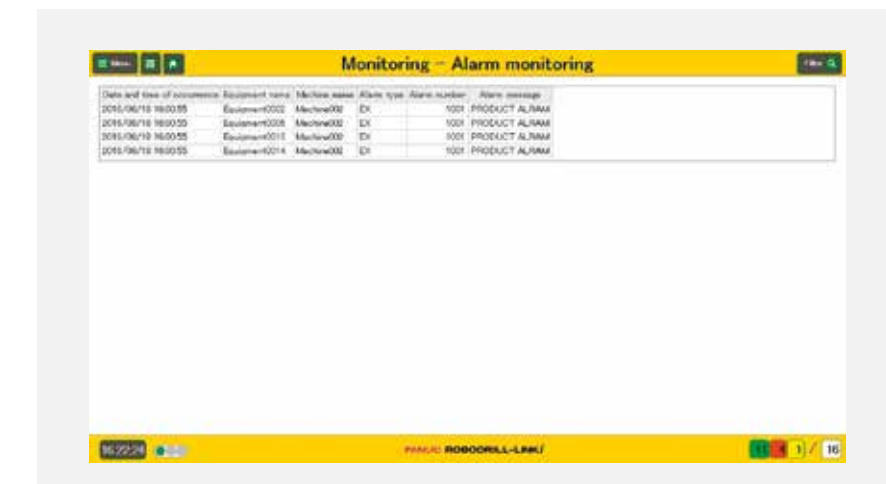
ROBO-DRILL-LINKi FUNCTIONALITY Macro Value History

- shows you stored values of given macro variables from the past
- data can be output to CSV file
- can be used to collect and store various kinds of data, e.g. measurement data of tools and workpieces



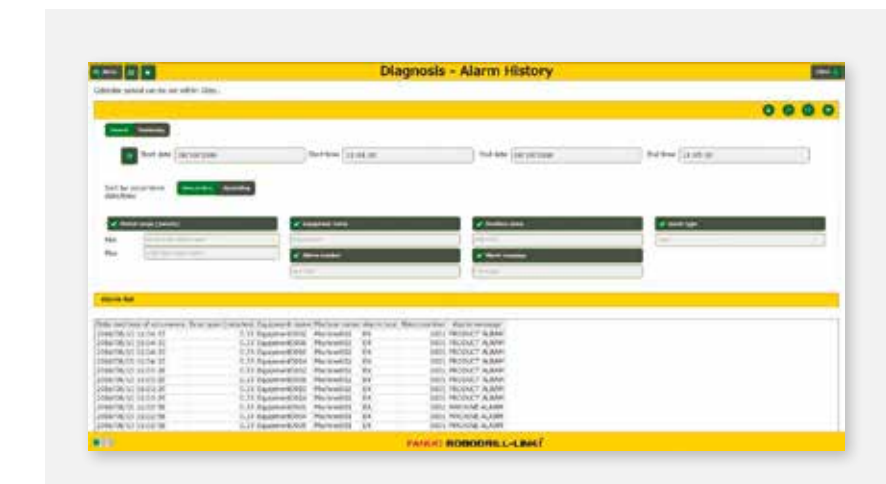
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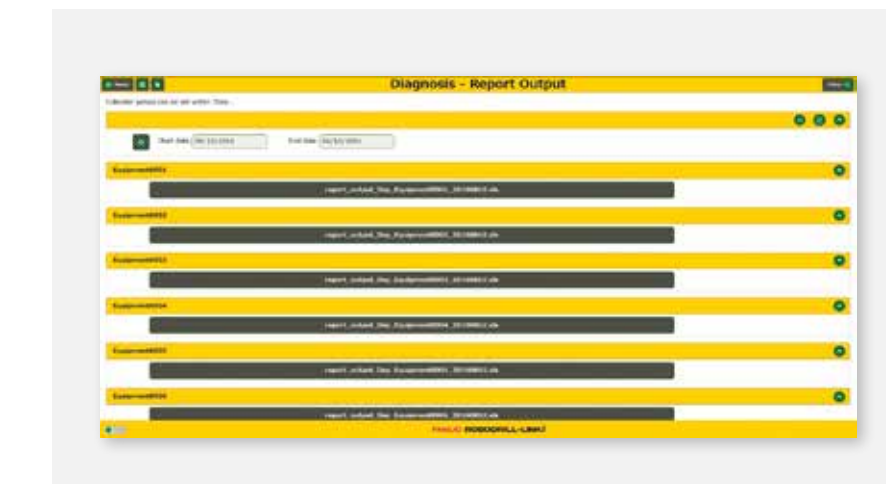
ROBO-DRILL-LINKi FUNCTIONALITY Alarm Monitoring

- enables you to monitor alarm information occurring on your machines live
- helps you to identify the alarm's cause quickly
- notifies users via e-mail to take action



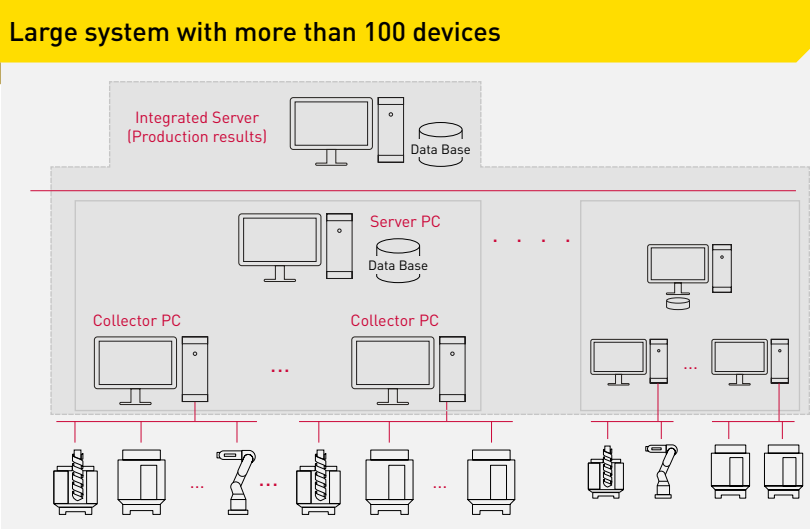
ROBO-DRILL-LINKi FUNCTIONALITY Alarm History

- shows you information on alarms that occurred in the past
- data can be output to CSV file
- helps you to identify common alarms, analyse alarm causes and eliminate them



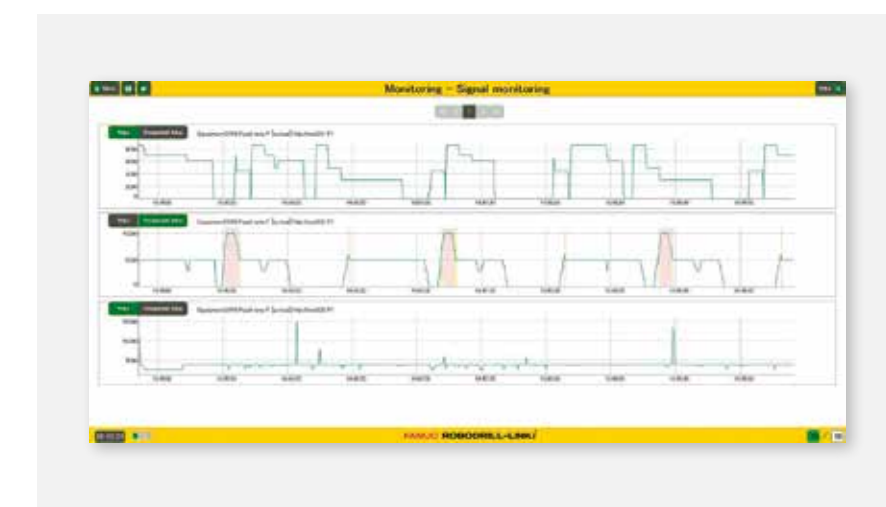
ROBO-DRILL-LINKi FUNCTIONALITY Report Output

- enables you to schedule automatically generated daily, weekly and monthly reports in Excel file format
- report templates can be customised
- allows you to save time with automatic reports



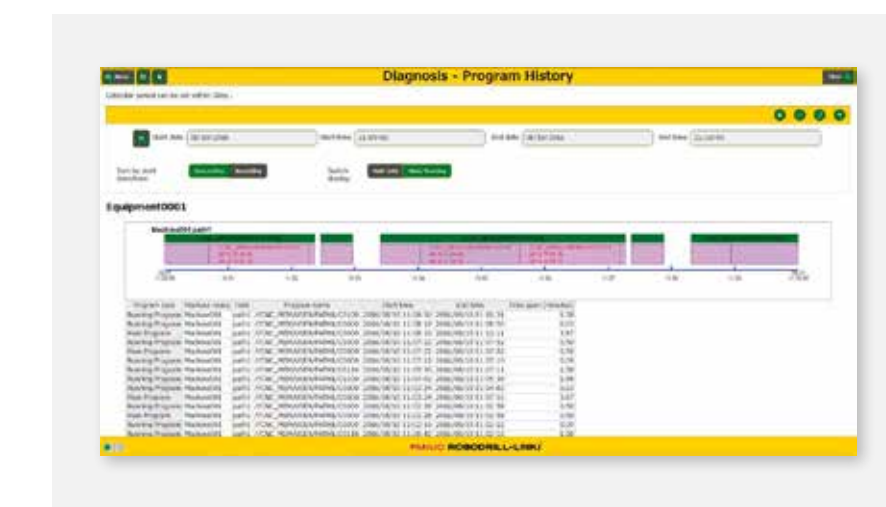
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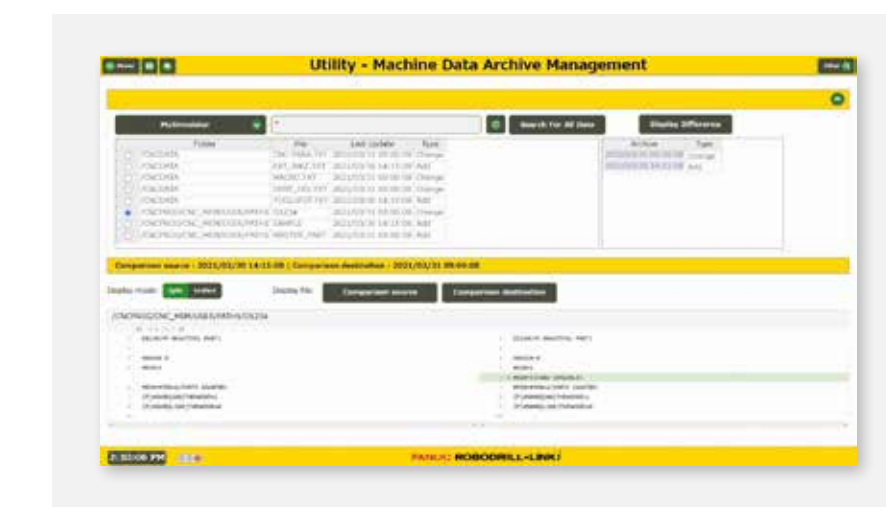
ROBO-DRILL-LINKi FUNCTIONALITY Signal Monitoring

- enables you to monitor signals such as feed rates, spindle/servo load and temperature, override and so on live
- notifies users via e-mail if signals exceed the threshold



ROBO-DRILL-LINKi FUNCTIONALITY Program History

- shows you information on programs that ran in the past
- checks the cycle time of your programs
- data can be output to CSV file
- helps you to check machine utilisation and machine productivity



ROBO-DRILL-LINKi FUNCTIONALITY File Transfer

- download/upload NC data (NC programs, parameter files etc.) between ROBO-DRILL and ROBO-DRILL-LINKi Server PC
- ability to send the same NC program to multiple machines at once
- enables you to create backups easily and store the backup data in a central place
- manages your archived files and shows differences between archived backup versions

One common servo and control platform – Infinite opportunities **THAT'S FANUC!**



FA

CNCs,
Servo Motors
and Lasers

ROBOTS

Industrial Robots,
Accessories
and Software

ROBOCUT

CNC Wire-Cut
Electric Discharge
Machines

ROBODRILL

Compact
CNC Machining
Centres

ROBOSHOT

Electric CNC
Injection Moulding
Machines

IoT

Industry 4.0
solutions