EMCONNECT
YOUR GUIDE IN TECHNOLOGY

emco group
Designed for your profit

emcoNNECT

- ■ Direct interaction of EMCO-Apps with the control system
- ■ Intuitive user interface optimized for touch operation
- ■ Ongoing expansion of available apps
- ■ Customized applications are possible
- ■ Optimized for EMCO machine portfolio
- ■ Easy update and upgrade options

emcoNNECT
EMCO-WORLD.COM

Connectivity ⟳ optimal workflows +

Control	Remote Desktop	Cutting Calculator	Documents
Dashboard	Web Browser	Calculator	File Import
Machine Data	Remote Support	Notes	Service
System	Settings	Diag Base	

All important information and systems can be centrally accessed from the machine

increased productivity

Highlights

- emcoNNECT means connectivity and networking of the production environment. It enables functions such as:

  - Access to office computers and CAD / CAM systems
  - Web browser for connection to browser-based IT systems
  - Interfaces for seamless integration into the operating environment
  - Remote diagnostics and maintenance of the machine

- emcoNNECT creates the conditions for the paperless machine workstation

- Clear display of monitoring of the current machine status and production data ensures a structured production process

- emcoNNECT is designed as an open platform for machine integration into the production environment

- The user interface, which is based on the principle of the smartphones and adapted for touchscreen operation, facilitates digital process control

- For customer and project-specific requirements, the EMCO modular system makes it possible to implement other applications in a particularly flexible way

- Easy update and upgrade options

Machine Control
and emcoNNECT

emcoNNECT offers situation-specific options for operation. Apps can be used for quick access in the sidebar simultaneously with the controller.

- The familiar NC control as the heart of the machine - the usual machine operation is retained
- With emcoNNECT, the machine control console becomes the central platform for access to all the required functions
- With just one click you can switch between emcoNNECT and the NC control at any time.
- Innovative and user-friendly hardware: clear, modern 22" multi-touch display, industrial PC and keyboard with HMI hotkeys

Applications for optimal structuring,

DASHBOARD

Clear and compact - machine status, machine data and operating mode at a glance
■ epending on the machine configuration and active mode (JOG, MDA, AUTO)
■ All relevant data such as active program, selected tool, axis positions, etc. at a glance
■ Color visualization of the current spindle utilization and the override values

MACHINE DATA

Information about all important production data in full screen or sidebar mode
■ Operating data (BDE) with current production status
■ Machine data (MDE) with the operating and downtime of the machine to determine the OEE values

EMCON

YOUR GUIDE IN

DOCUMENTS

The digital collection of documents, which can be expanded to meet your individual requirements, provides important information directly at the machine at hand.
■ Production / workpiece documentation in direct access for a paper-less production, without travel times
■ Machine documentation incl. service and spare parts documentation
■ Programming Guide

Other applications:
■ CUTTING CALCULATOR: for easy cutting data calculations during turning, drilling and milling
■ NOTES: for storage of important notes, e.g. at shift change
■ GD&T: Information about shape and position tolerance symbols
■ CALCULATOR: pocket calculator with extensive trigonometric functions
■ etc.

control and overview

NNECT

TECHNOLOGY

REMOTE DESKTOP

Allows direct access from the machine to the office
PC - without interrupting the production process.
■ Access to all applications and data running on the office PC
■ Use of CAD / CAM systems
■ Access to e-mail

WEB BROWSER

Connection to any browser-based IT systems saves travel time and the
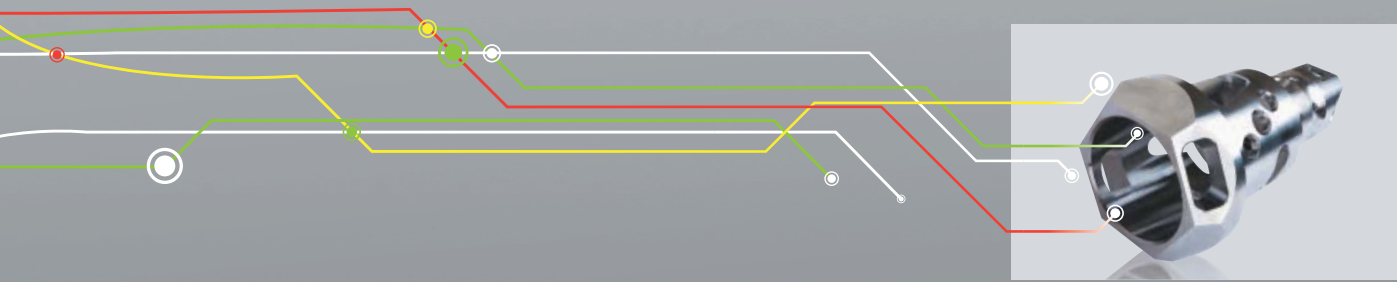installation of own PC workstations in the production area.
■ Access to higher-level production control systems
■ Direct connection with the respective ERP system
■ Use time recording system directly on the machine

REMOTE SUPPORT

For easy remote diagnostics and remote maintenance of the
machine, the EMCO helpdesk team connects remotely to the
machine on request.
■ Accelerates problem analysis and resolution
■ Reduces costly machine downtimes

Ready for digital production

emcoNNECT, EMCO technology cycles, Esprit and CPS for the optimal digital production process

TECHNOLOGY CYCLES

Make use of the machine's full capabilities - EMCO's optional technology cycles make it possible. They simplify and secure programming for special machining processes, improve machining times and thus increase efficiency.
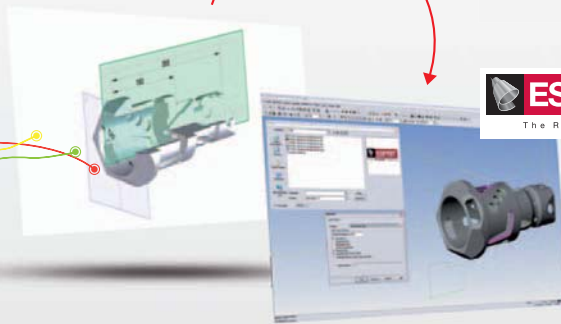
- Power Skiving
- Eccentric turning
- Gear milling
- 4-axis turning / balance cutting

- Alternating spindle speed
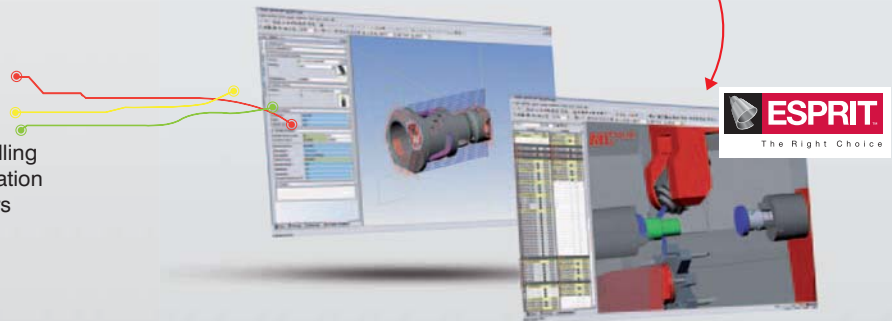- Revolver as tailstock
- And much more.

CAD

Direct CAD data import
- AutoCAD (DWG)
- Parasolid®
- Solid Edge®
- Solid Works®
- ACIS® (SAT)
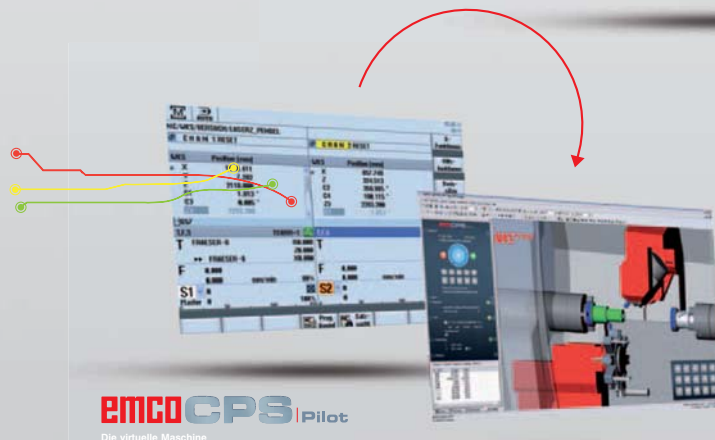- Optional interfaces:
  CATIA®, Pro/ENGINEER®,
  STEP, STL, ...

ESPRIT The Right Choice

CAM

- 2-22 axes turning
- 2-5 axis milling
- Multitasking Turning-Milling
- 3-D engine room simulation
- Certified postprocessors
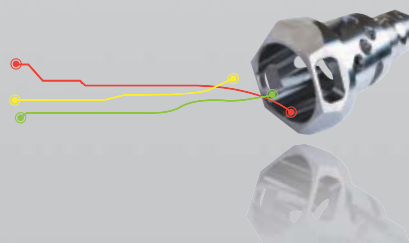
ESPRIT The Right Choice

CPS

- 1:1 simulation with collision detection
- Direct connection to CAM ESPRIT
- Process optimization
- Re-simulation of existing NC codes
- Reduction of the reject rate
- Training on the virtual machine
- Simulation of loading systems
  (e.g. EMCO portal loader)

emcoCPS|Pilot
Die virtuelle Maschine

Produktion

- Reduction of set-up costs
- Reduction of downtimes
- Reduction of repair costs
- Optimum machine utilization
- Certified postprocessors

IT security with emcoNNECT

When it comes to networking and integrating production machines into the operating environment, IT security is of central importance. The protection against unauthorized access is carried out at EMCO by activation of whitelisting and use of a firewall, amongst other things.

■ Effective blocking of malicious software

■ Preventing unauthorized access from the network

■ No execution of unknown programs on the machine