WFL standardized loading solution for Kuka KR Quantec extra
- Loading capacity 120kg, nominal working radius: 2.896mm
- Automatic gripper changing system with 2 different gripping heads for shaft and chuck parts
- Workpiece Storage Pallets Solution Single, double, possibly stackable.
- Workpieces:
  - Feeding parts max. 10 kg, length: 30-200 mm, diameter: 80-250 mm
  - Shaft parts max. 45 kg, length: 250-600 mm, diameter: 35-115 mm

The WFL DATA ANALYZER not only disposes of a transparent presentation for the user, but also improves your machine capacity. All data in your production environment are collected and analyzed in order to increase productivity. This results in shorter production times and leads to more effective Smart-Factory processes.

WFL DATA ANALYZER – Applications
- Dashboard Overview – Overview of all machines and their state.
- Tool Monitoring – Monitoring of individual tools with information on wear, period of application and longevity.
- Production Overview – Allows for a quick overview of the status of your machines over time.
- Statistics (incl. OEE) – The recorded data is collected and analyzed according to OEE (Overall Equipment Effectiveness).

Registration: www.wfl.at/en/company/events/technology-meeting
#Tech-Meeting
#ToolingSolutions
#M35MILLTURN

Specifically engineered for metal cutting and designed to guarantee an increase in production, WFL Tooling Solutions have significant savings potential through an increase of productivity, high precision and durability. The continuous development of performance enhancing tools is a continuous process for the machining experts and engineers. Explore the benefit of WFL Tooling Solutions and add value to your production.

**ADVANTAGES**
- Quick and easy installations on your MILLTURN
- Increase of productivity, flexibility and quality
- Reduced costs of your machining process
- Highly customized solutions to fulfil your needs

**Measuring probe**
- runout & roundness measuring
- Gauging, simple calibration (similar like standard probes)
- Faster measurement compared to touchprobe
- Radial runout measuring
- Shape and outline measuring

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#Tech-Meeting
#ScrewManufacturing
#M40MILLTURN

Technological functions:
- Roughing with automatic cutting distribution and Y offset control (rotary milling)
- Wall finishing with automatic „best-fit“ tool orientation
- Channel base finishing

Geometric functions:
- single or multiple channels
- Variable depth
- Any change in slope
- Wall embossing with radius to the channel bottom and wall inclination angle in longitudinal section or in the channel cross-section.

Features:
- Automatic wall thickness measuring
- No connection fluid necessary
- Ultrasonic signal will be transferred by coolant-fluid.
- The head of the probe is protected with a PVC-cover
- Graphic result is displayed on the control screen in real time

Screw programming
In-process-ultrasonic measuring

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The process
The unfinished component of the turbine blade is clamped on both the main and counter spindles. Perfectly balanced synchronous operation means that there are no restrictions in terms of speed or acceleration. Machining, from pre-roughing through to deburring, is performed using a total of 14 tools, which are changed independently and fully automatically. In order to achieve the best results, making the best use of software is critical to ensuring synchronous operation. The WFL process monitoring controls the operation and prevents the overloading of tools and machine.

Advantages
- Complete machining with a single clamping operation
- Constant cutting forces due to newly developed production strategy (less tool wear)
- Internal high-pressure coolant also enables the machining of high-alloy steels and super alloys
- Extremely quick and precise machining through synchronous spindle operation
- Tool carrier (or TBM) with highly dynamic X and Y axis perfect for turbine blade machining.

Complete machining of turbine blades
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CrashGuard Studio

Programming with 3D simulation software for verification of NC programs on the PC
- Visualisation of all programming steps (incl. WFL/customer cycles) for error detection at an early stage
- Improved quality of NC programs with respect to efficiency and machine safety
- Shorter set-up times on the machine, thanks to prior simulation
- The machine operator receives a collision tested, finished program
- All 3D geometry data (tools, clamping devices and workpieces) can be used for both CrashGuard and CrashGuard Studio. The two systems complement each other!
- Easy to program
- Software maintenance contract available
- Full-featured 3D workspace with collision monitoring

Millturn PRO

Universal and easy to understand programming editor with graphic support, directly on the machine.
- Programming directly on the machine possible.
- Efficient and easy creation of NC programs.
- A cost efficient alternative to big brother „CrashGuard Studio“
- Millturn Pro available in controlpanel-version and additionally for PC
- Allows editing of NC programs created in CrashGuard Studio to be edited directly on the control panel in the interactive screenform
- No maintenance contract
- No 3D workspace

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E-PowerChuck

Electro-mechanical universal 4-jaw chuck
- Each jaw driven and controlled via e-motor
- Wireless transfer of power and sensoric via inductive coupler
- Clamping of any shape workpieces
- Automatic adjustment of the center line
- Constant monitoring of the clamping force and the clamping position while rotation
- Sealed and low maintenance

#E-PowerChuck #M80XMILLTURN #Tech-Meeting

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Additive manufacturing

Laser welding
- Diode laser with highest efficiency
- Laser head with high-performance welding optics at the turning-boring-milling unit
- Automatic exchangeable welding optics

Laser hardening
- Laser head with high-performance hardening optics at the turning-boring-milling unit
- Automatic exchangeable laser head
- Ratio pyrometer for temperature measuring and power control
- Visible adjusting laser included

Grinding Solutions
- Automatic exchangeable grinding tools for grinding on the outside and inside contour of work pieces
- Directly accommodated grinding tools
- Grinding attachments with prismatic tool holder
- Automatic dressing of grinding wheels inside machine using a dressing diamond (dressing device on tailstock)

Structure-borne sound measuring
- Variable adjustable fluid sensor
- Production control
- Error early recognizable
- Bevel control and shorter cycle times
- Collision control and less damage to grinding wheel and machine
- No blanks or air cuts

Coroplus boring bar
- Sandvik damped boring bar: Ø 100mm
- Working range: 1600mm
- Overhang: 16 x Ø
- The operators display will show you precise information for: deflection, load, surface roughness, temperature of dampener, vibrations and cutting time
- Visualization on control panel
- Additive speed control
- Automatic retraction in case of overload

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ID machining solutions

Features

1. Deep hole drilling tool
   Rotating, with coolant supply

2. Deep hole drilling tool
   Non-rotating, for concentric bore

3. CNC special contour boring bar, Rotating,
   with radius adjustment (seat pocket machining)

4. CNC special contour boring bar
   Non-rotating, with radius adjustment
   (bottle boring)

5. CNC facing head
   Rotating, with radius adjustment

6. ID machining tool
   Driven, for ID operations
   (milling, tapping, deburring, ...)

7. Boring bar, High length/diameter ratio,
   vibration damped

8. WFL system boring bar, For various cutting
   heads, automatic head change

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"Coming together is a beginning, staying together is progress, working together is a success."

Henry Ford
Kindly apply here:
www.wfl.at/en/company/events/technology-meeting

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