Seconds ahead





Optimized machining time right from the first workpiece Shortening of the programming time by up to 80 percent 100 percent process reliability

# PROCESSLINE

From virtual planning to finalproduction in five steps

- 1 CAD-Software
- 2 NX CAM
- 3 Postprocessor
- 4 Virtual Machine
- 5 Production

Technology – Made by CHIRON Group

# **PROCESSLINe**

Modeling of ideas Process Pr

A Process simulations

A CHIRON Group SmartLine product 01011010

#### Quick and efficient to the first part ...

The ProcessLine is an essential component of our TURNKEY process. An integrated CAD/CAM and simulation solution for your manufacturing process. Modelling, programming, simulating, producing: all the expertise from one source. With the ProcessLine, you maximize the usefulness of your investment into modern machine tool technology. A proven solution from the model preparation to final production.

### **D** Modeling of ideas

25 Quality finished Pa

Thanks to the optional NX CAD module, you are able to map the process chain in an integrated system. From simple workpieces to complex 5-axis components, part geometries are perfect with SIEMENS NX CAD<sup>®</sup>.

#### Your advantage:

- The most modern and user-friendly CAD technology
- Fast model preparation and processing
- Seamless integration of existing CAD models
- Excellent Model Quality and Validation

#### **Design** processes

Milling, drilling, turning, simultaneous 5-axis machining, to integrated automation - Siemens NX CAM® is the basis of the ProcessLine and supports all machining strategies on your CHIRON machining centers and helps you to efficiently and economically develop your machining processes.

#### Your advantage:

- Reducing the programming time by 80 percent through automated programming
- Easy implementation of MillTurn processes as well as multi-channel multi-function machines
- User-friendly user surface due to customized machining operations
- Integration of different PLM systems
- Zentralisierte Datenverwaltung für Werkzeuge, Spannvorrichtungen und Technologiedaten
- Content: CAD CAM Postprocessor Virtual Machine Simulation Collision Analysis Process Optimization



#### **B** Generate NC code

With the certified **CHIRON post-processor**, you already get an optimized NC program right from the first post-processor run. The machine manufacturer has the greatest expertise, so the post-processor has been developed and constantly improved at CHIRON to meet customer requirements.

#### Your advantage:

- All necessary functions and machine cycles have been integrated in the post-processor
- Approach and retraction strategies adapted to the respective machine kinematics
- All controls can be mapped (SIEMENS / FANUC / Heidenhain)
- Easy operation due to the pre-defined control functions in the system

#### **Process simulations**

With the CHIRON Virtual Machine, you can simulate the correct clamping situation to absolutely safely plan, test and verify the process. It accurately simulates the NC program, which will later run your CHIRON machining center.

#### Your advantage:

- 100 percent accurate simulation thanks to the real machine NC Archives
- Simulates the created NC code
- Discovers rapid movements in the material
- Simulation with material wear
- Significant reduction in setup times
- Maximum process reliability due to collision detection and process validation

#### **D** Quality **finished** parts

The **CHIRON machining center** is now ready to take your ideas to perfect implementation in a few steps. As usual, you produce your parts using the latest machine control technologies. The essential difference: Now you can be even faster, safer and more efficient from the first part.

## From planning to series production

The economical solution from one source

TURNKEY

- Complete process design
- Expert Engineering
- Experienced project management
- Validation of the statistical process capability
- Securing target productivity
- Production assistance during the start-up phase
- Individual automation solutions
- Complete systems
- I Training in operation and programming
- CHIRON Group Services available all around the world

CHIRON Group





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Milling | Turning | Automation | Turnkey