



SINUMERIK 828D – Turning

User friendly, high performance CNC for Turning applications in the Automotive industry

Automotive companies around the world are using industry and application specific solutions to increase productivity, flexibility, and efficiency. The growing number of car models and powertrain technologies asks for flexible production processes and faster commissioning of new production machines. Siemens Machine Tool Systems supports you as a partner in increasing manufacturing efficiency in the best possible way. With its unique CNC performance, SINUMERIK 828D control sets productivity benchmarks. These controllers offer suitable automation solution for all machine designs – jobshop, contract manufacturing, and large series production in the respective industries. Rugged hardware architecture and intelligent control algorithms, along with premium drive and motor technology, ensures the highest dynamic response and precision when machining.

SINUMERIK 828D ensures additional quality for surface machining and higher machine tool availability with its extensive capabilities extending from hardware, through software, up to the associated accessories and add on features.

Machine Tool challenges in the Automotive industry:

Global demand continuous to remain an enormous challenge

Reduce part manufacturing cost

Verification of dimensional accuracy on machine

Extract more from the CNC machine to increase machine availability

Shorten production cycles

Automation to overcome manpower challenges

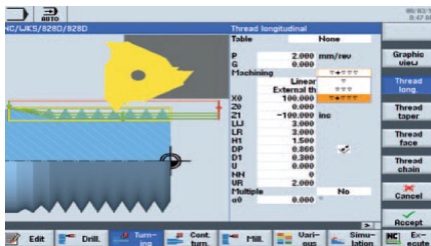
SIEMENS

SINUMERIK 828D

Best in class for compact machines



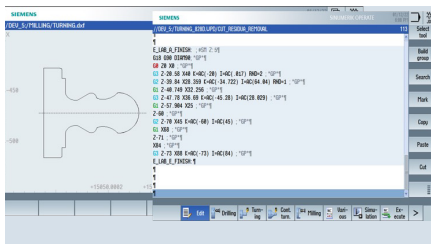
- Fast accelerations & heavy-duty Turning with SIMOTICS motor
- Best accuracy with 4 million pulses/revolution encoders
- **Maintenance Free** - No fan, battery or hard disk
- Unlimited program memory with network drive management



Technology Cycles

Flexible & error-free programming

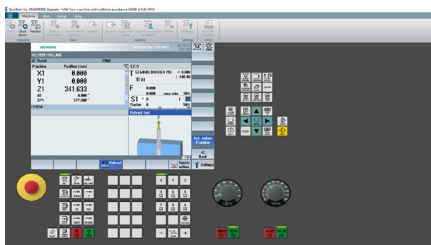
- Graphical animation supported programming for easy understanding
- **Reduced programming time** with Program guide
- Cycles can be interfaced with **Free contour programming**
- Execution of **ISO canned cycles**
- Kinematics for B Axis in Turning, with inbuilt cycle



DXF Reader*

Auto program generation from CAD file

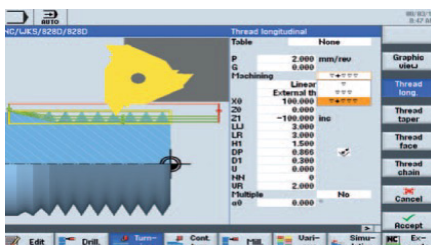
- Simply convert DXF file to NC programs with a few clicks
- Extract hole positions from DXF file for drilling applications
- Integrated with SINUMERIK technology cycles
- Offer **best machining quality** and allows elimination of errors
- **Reduced programming time** and **maximize machine up-time**



Tap Retract

Eliminate tap breakage & reduce the downtime

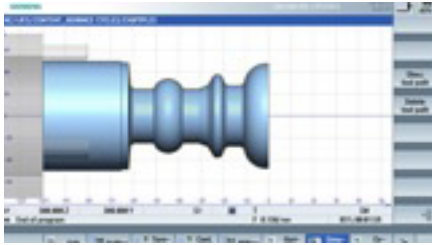
- Retraction of tap even after power interruption
- Inbuilt cycle for all SINUMERIK controllers
- Available in JOG mode with graphical screen
- **Reduction in setup time & increase availability**
- Reduction of part rejection



JOG Measuring Cycles

Increase machine availability

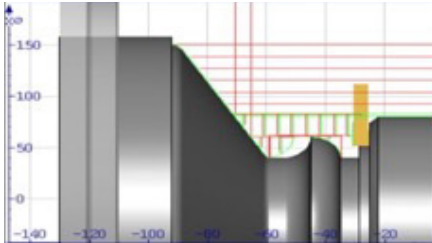
- **Guaranteed minimal measuring time** with JOG measuring cycles
- Measure all type of tools with **graphical screens**
- Dedicated JOG measuring cycles for **probe calibration** & measurement
- Ensure **tool safety** & update tool offset automatically



Advance Turning Cycles*

Easy programming for complex profiles

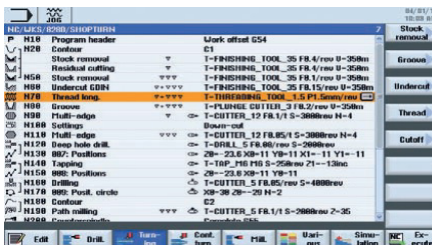
- Increase productivity by 15-20% with simple cycles
- Advantage cycles - Plunge Turning, profile grooving, blank Turning & more
- Easy programming for complex profiles with **inbuilt cycles**
- User friendly programming method for typical grooving and contours
- Improved tool life & reduced load in plunge Turning



Residual Material Removal*

Reduce manufacturing cost

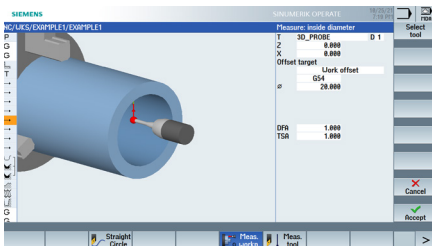
- Shorten machining time using a combination of large to small tools
- Optimized tool path with extremely simple programming
- Works like a **mini-CAM** to detect the material stock automatically
- Manage the **complex steep / under cut** profiles in Turning



ShopTurn*

Easy step programming for Tool room, Job shop

- Program without G & M code knowledge
- Shortest programming time while producing in small batches
- Reduced program length with graphical step programming
- Save programming time and increase productivity with SINUMERIK



Measuring Cycles*

Minimize inaccuracy and improve quality

- Measure and validate workpiece dimensions on machine
- **Auto correction of tool offset** ensures smooth machine execution
- Shortened idle times, thus **reducing the overall setup time**
- Inbuilt graphical animated measuring cycles in Auto mode

Run MyRobot*

Handling & programming robots from CNC

- Handling tasks with robot interface
- Interface KUKA robots for handling tasks with all 828D
- CNC like programming without teach pendant
- No pre-requisite for Robot programming knowledge



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