



# Winning the Future with SINUMERIK AI-Powered Manufacturing

FRERKING, BJOERN

Director of SIEMENS Machine Tool Systems Portfolio Sales

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## Topic

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\*All product information presented is subject to change. For the latest specifications, availability, and customized solutions, please contact your local Siemens sales team.

# Siemens Motion Control: Our integrated portfolio is the basis for highly productive machines and entire factories



Digitalization and Industrial Software  
#1 market position



CNC Controllers  
SINUMERIK  
#1 market position



Converters  
SINAMICS  
#1 market position

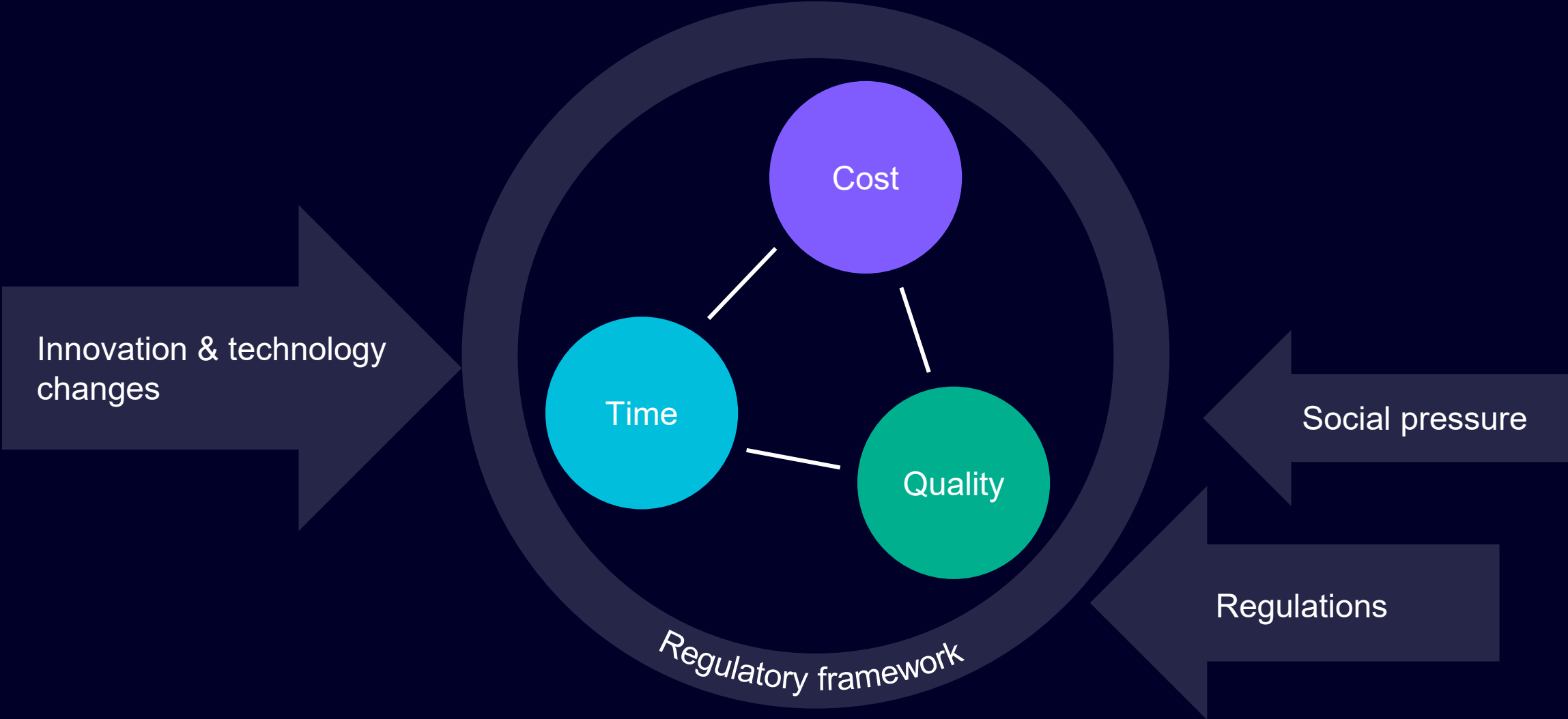


Digital Drive Train



Customer & Digital Services  
#1 market position

**Situation today: Manufacturing is torn between different targets  
- and it is becoming even more challenging.**



# Digitalization gives you the extra boost in Manufacturing



Energy efficient hardware

Operational technology

Digitalization

An integrated solution along the entire value chain raises new potentials for machine builders and users

## The digital native CNC

Development from VIRTUAL to REAL

Scalable in VIRTUAL and REAL

Intelligent and highly productive

 Digital transformation of machine tools



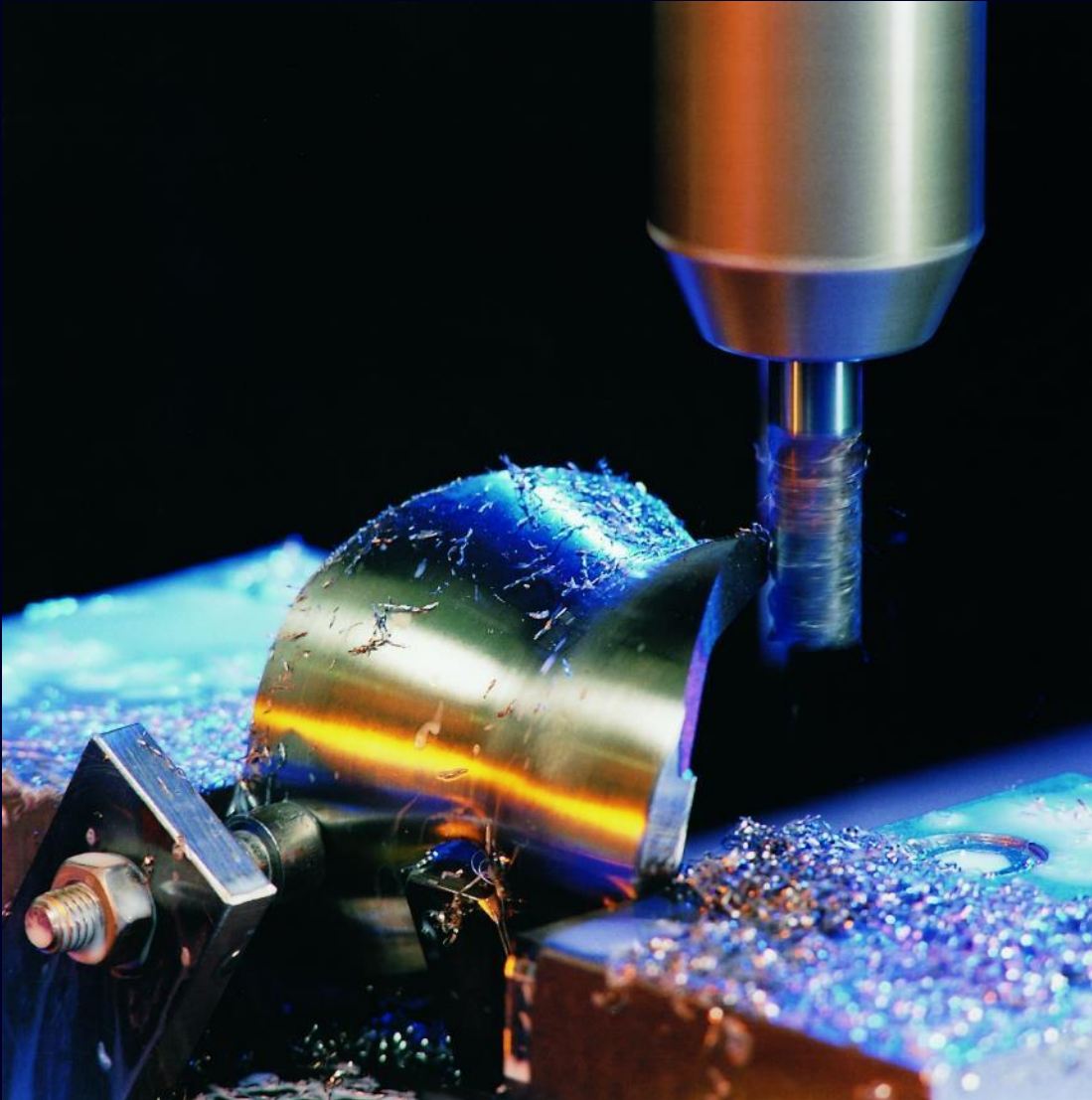
Maximize productivity

Innovate faster

Excite digitalization

Discover a new way of thinking

# How to improve Sustainability, Efficiency, and Digitalization on your **machine** with **AI**?

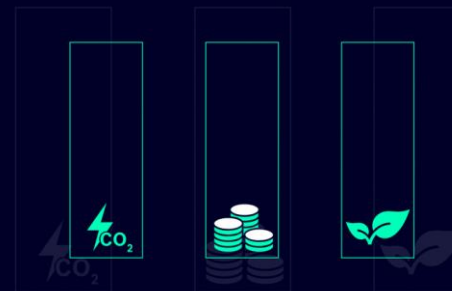


## Analyze MyMachine / SINUMERIK Tuning Center

### acceleration and jerk tuning

Exploiting physical limits of mechanics and electronics e.g.

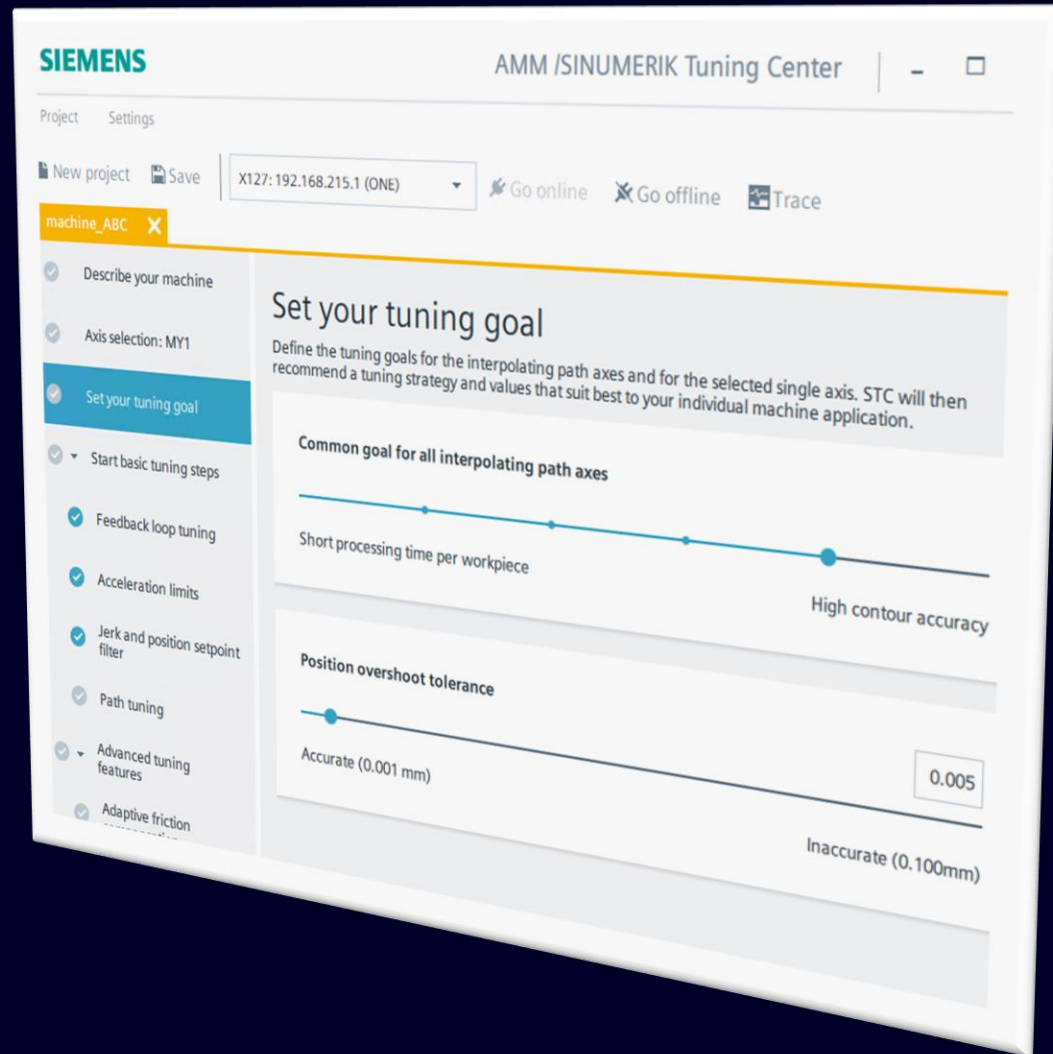
- find max. possible acceleration and jerk
- use overload of the inverter to reduce spindle ramp up time



Less energy consumption per part by reducing the machining time and therefore the impact of the baseload consumption

# Analyze MyMachine /SINUMERIK Tuning Center

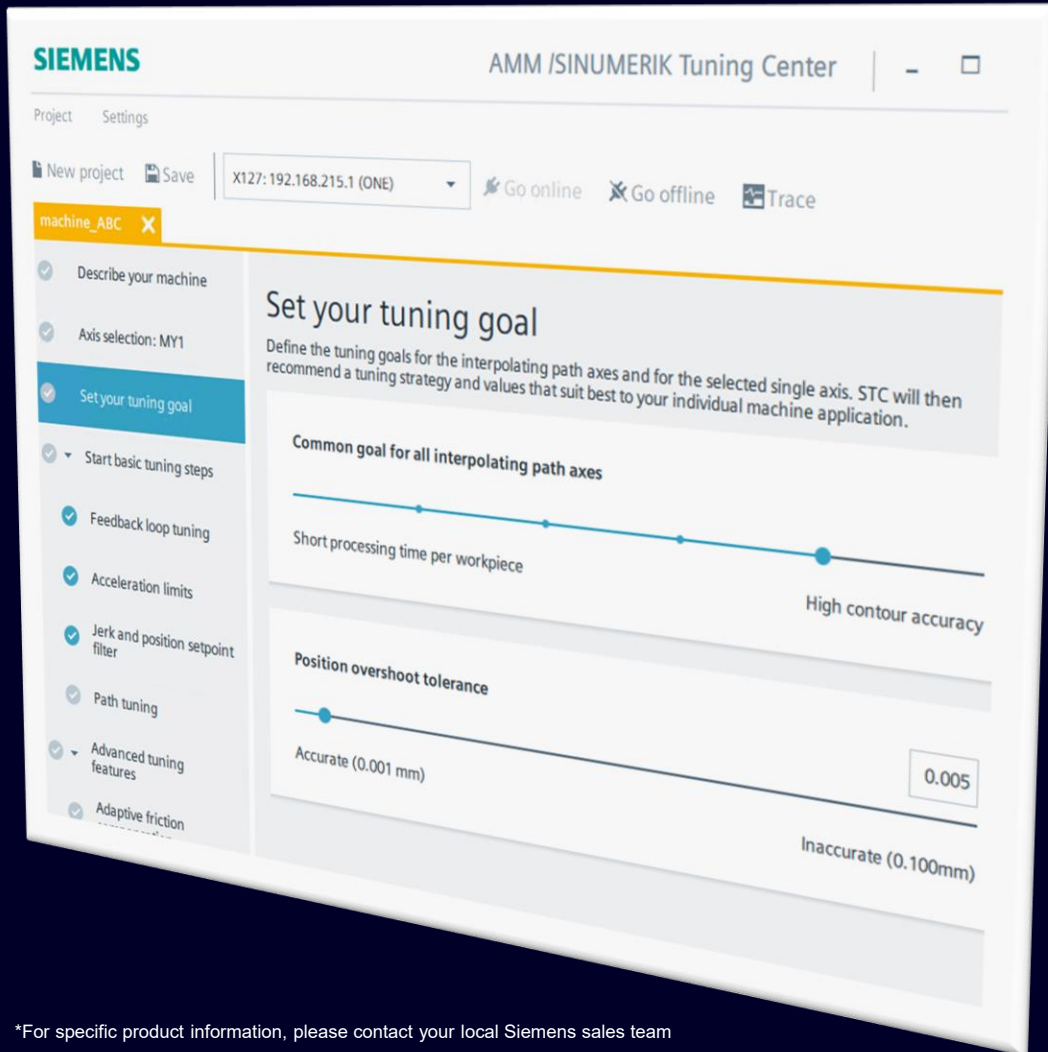
## Machine tools "optimally" optimized made easy



- Only a well-optimized machine tool is precise, productive and reliable
- Optimization takes time and requires advanced commissioning skills from the machine builder
- But also changes on the machine may require re-optimization at the machine user's site
- SINUMERIK Tuning Center enables "optimal" optimization even for non-experts!

# Analyze MyMachine /SINUMERIK Tuning Center

## Machine tools "optimally" optimized made easy



Precise and productive machine tools require very good commissioning knowledge from the machine builder. The SINUMERIK Tuning Center enables even non-experts to achieve "optimal" optimization in less time.

SINUMERIK Tuning Center guides you through the optimization of **SINUMERIK ONE / 828D / 840D sl**

▶ Well optimized machine tools are precise, productive and reliable

A machine description consolidates control data with expected machine and workpiece data

▶ Easy collection of consistent data for achieving the best possible optimization

Wizards guide you through the optimization of the axis controllers, acceleration and jerk values up to precise path control

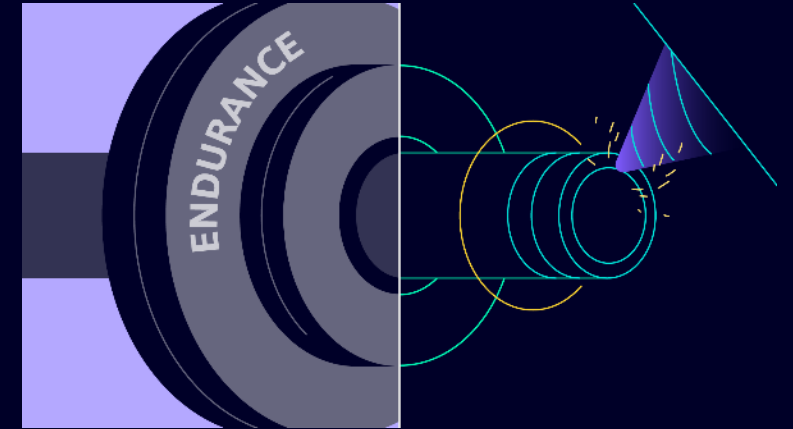
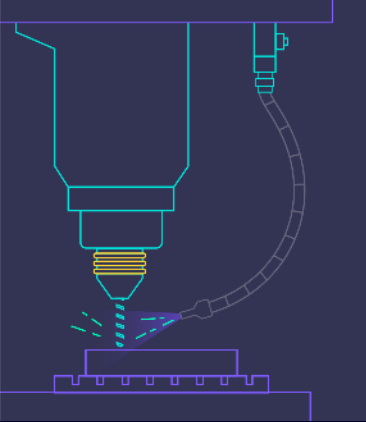
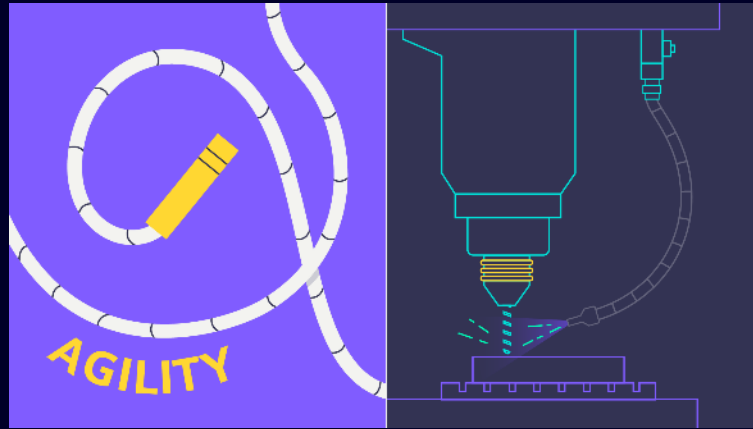
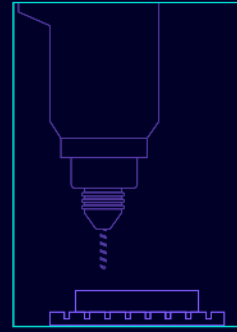
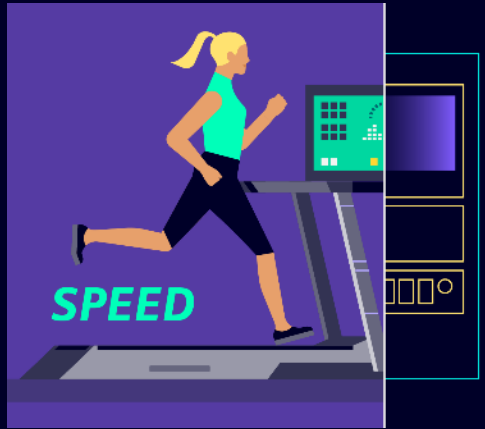
▶ "Optimally" optimized machine tool without expert knowledge and familiarity with the relevant machine data

The trace functionality enables extensive evaluation options for servo (NC) and PLC data

▶ Convenient and easy review / documentation of optimization results

\*For specific product information, please contact your local Siemens sales team

# How to improve speed, agility and endurance on your **Shopfloor** with **AI**?



Enhance your **speed to market** and **stay ahead** of competition.

Increase efficiency on your shopfloor by **accelerating processes** and increasing **production output**.

**Swiftly adapt** to market changes and enhance your production's **resilience**.

Full transparency on all manufacturing resources makes your shopfloor ready to respond even to **last-minute changes**.

**Future-proof** your production and ensure **sustainable growth** in the long run.

Maintain shopfloor endurance by ensuring **smooth, efficient processes** and preventing **unplanned disruptions**.

# AI-powered Digital Thread for Part Manufacturing

Smart Manufacturing

Objectives:

- Reduce weight
- Enhance performance
- Ensure safety
- Improve sustainability

Enabled by AI, cloud  
and the comprehensive,  
cross-domain Digital Thread

Design

Planning

Programming  
& Verification

Preparation

Manufacturing  
Execution

Optimization

Design

Realize

Optimize

# Products within the MACHINUM portfolio

## Smart Shop Floor

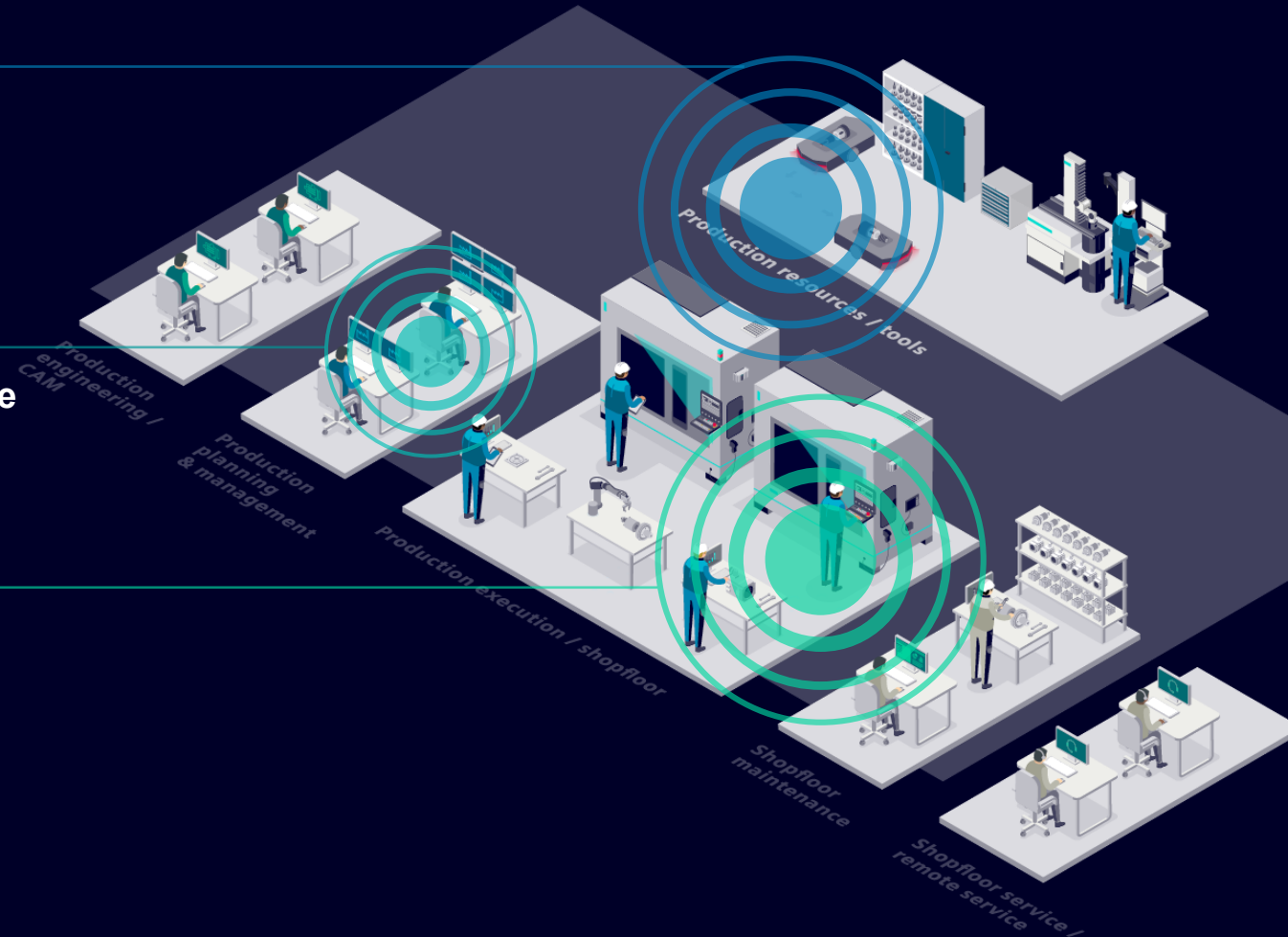
- Manage MyResources
- Analyze MyPerformance
- Access MyData

## Smart Virtual Machine

- Create MyVirtual Machine
- Run MyVirtual Machine

## Smart Machine

- Optimize MyMachining
- Analyze MyMachine
- Analyze MyWorkpiece
- Manage MyMachines
- Protect MyMachine
- Optimize MyProgramming



Performance goals improved with **MACHINUM**:



\*Product specifications subject to change. Please contact your local sales team for the latest information.

# Digitalization in machine tool industry

## Customer Value

### Smart Shop Floor

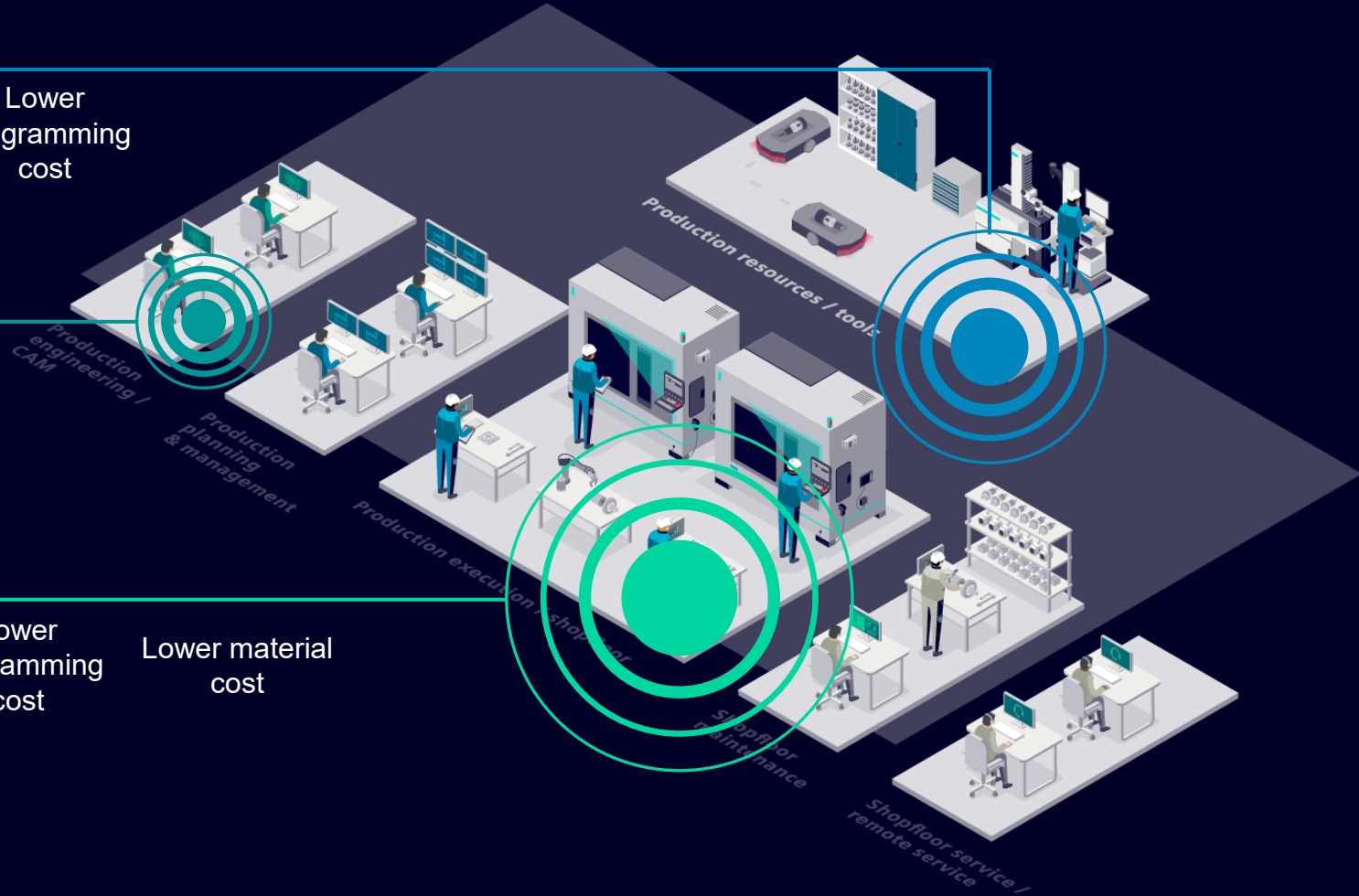
- Lower material cost
- Higher utilization
- Lower operational cost
- Lower programming cost

### Smart Virtual Machine

- Lower programming cost
- Better machine engineering
- Higher quality
- Higher utilization

### Smart Machine

- Faster machining
- Higher quality
- Higher machine uptime
- Lower programming cost
- Lower material cost



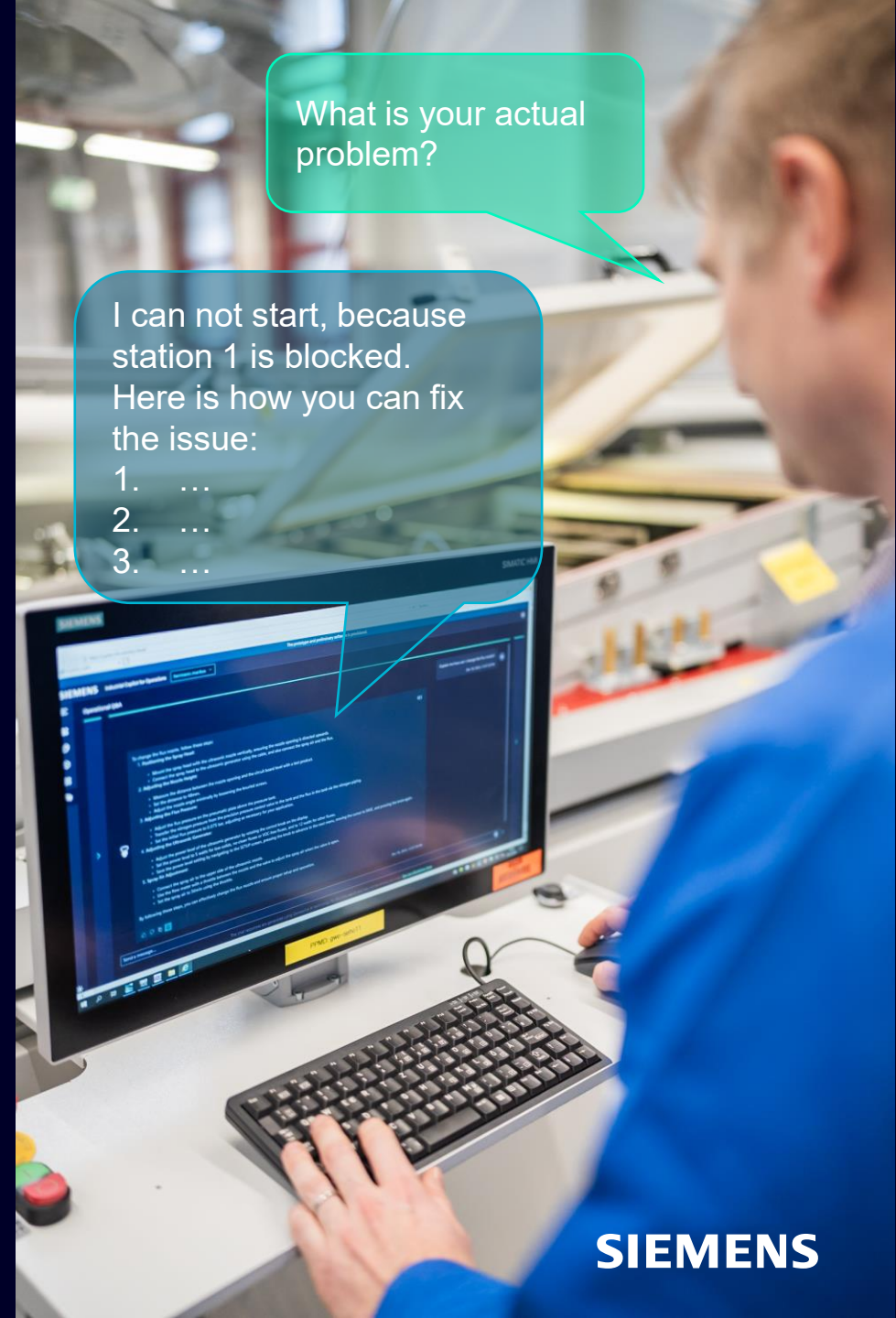
With us, **generative AI-Powered assistant for the shopfloor**

We empower people to optimize processes and boost efficiency on the shopfloor.

What is your actual problem?

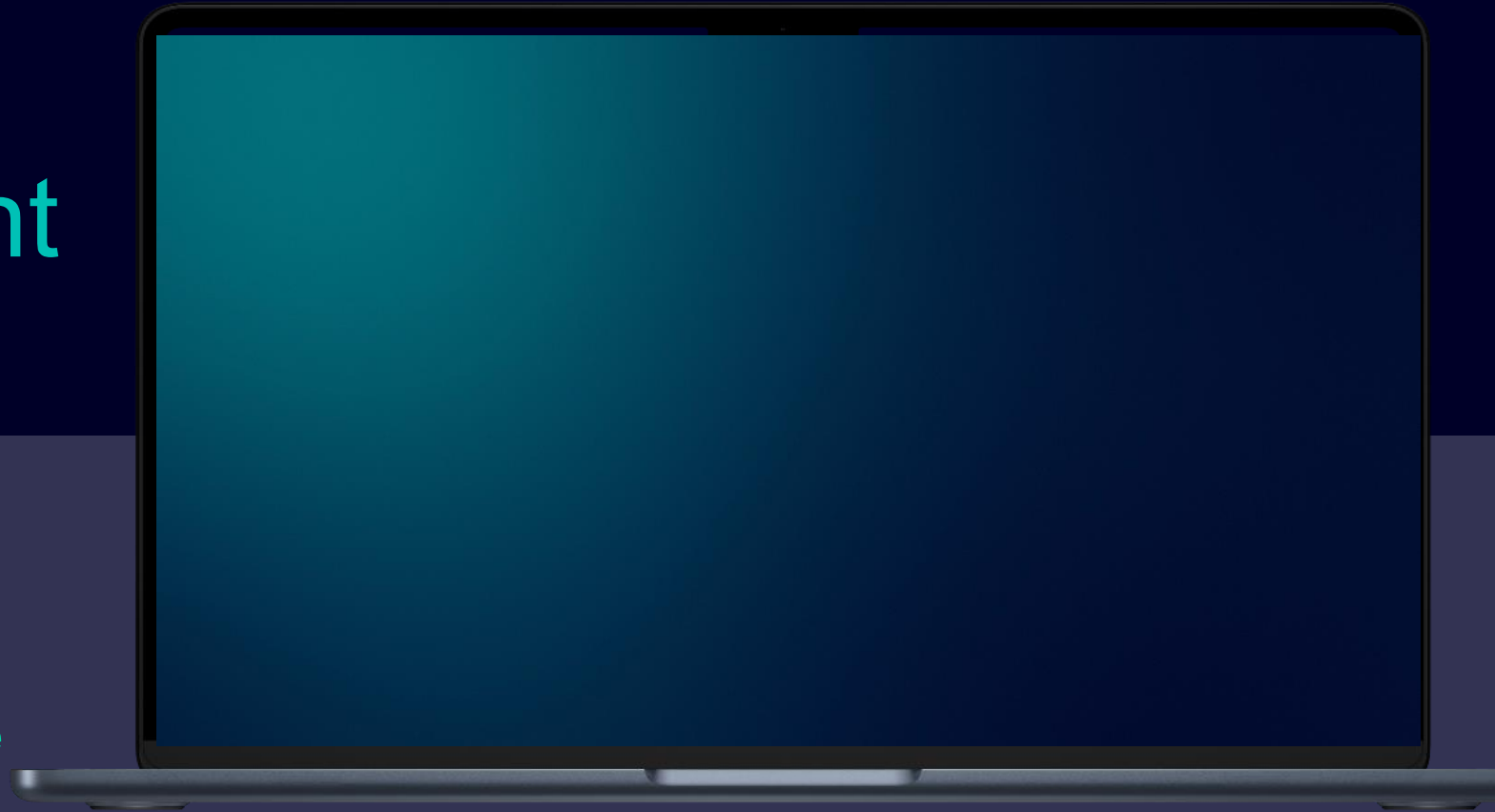
I can not start, because station 1 is blocked. Here is how you can fix the issue:

1. ...
2. ...
3. ...



# Generative AI- Powered assistant for the shopfloor

is a power tool for **operators and maintenance engineers**, leveraging generative AI to digest machine data and user manuals for **swift error recovery and machine performance insights**.



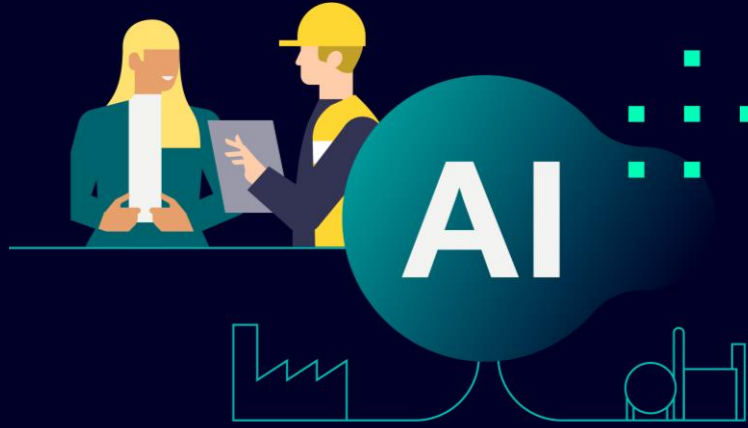
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# Siemens makes AI ready for industry



## Robust

Driving collaboration to achieve reliable, secure, and trustworthy AI for industry



## Democratized

Making Industrial AI accessible to everybody, anywhere, and anytime



## With purpose

Supporting companies to achieve their scalability, quality, and sustainability targets

# SIEMENS

How we **#TransformTheEveryday**

## Siemens footprint and partnership in Southeast Asia



# In ASEAN **SINUMERIK** have strategically partnerships with CNC-Design

## CNC Design Office Locations globally



CNC Design operates globally with offices throughout Australasia and SE Asia. Their professional team of over 160 employees have successfully completed more than 3,000 projects around the world.

## CNC Design Thailand Office



# Cooperation history, CNC Design capabilities in machine tool servicing, logistics, and training

## Cooperation history



*Signing Siemens MTS Agreement 1988*

CNC Design is the Exclusive Distributor and Service Partner for Siemens Machine Tool Systems in Australia, New Zealand, Indonesia, Thailand, Malaysia & Singapore. Providing support for OEMs, End Users and Machinery Dealers in this region. This includes technical support, product sales, CNC retrofitting, cabinet building, field service, spare parts, preventative maintenance and training.

## Service, Spare Parts & Motor Repairs

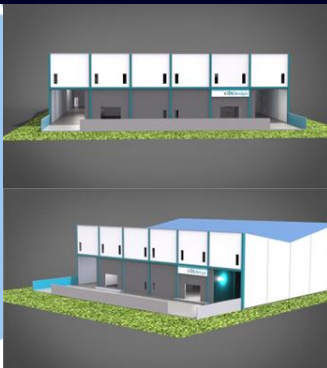
CNC Design is the authorised service partner in Australasia and SE Asia for: Siemens Machine Tool Systems - SINUMERIK, SINAMICS, SIMOTICS, SIMATIC. Supporting Siemens warranty for imported machines for Dealers and End Users as well as for locally sold equipment.



**Approved Partner Certificate**



## Batam FTZ Centralized Logistics



CNC Design will open the new regional logistics hub. This is located in the Batam Duty Free Zone next to Singapore. This is a duty-tax-free zone where we will do product warehousing, distribution and manufacturing to support OEM's and end users in Southeast Asia and Australasia.

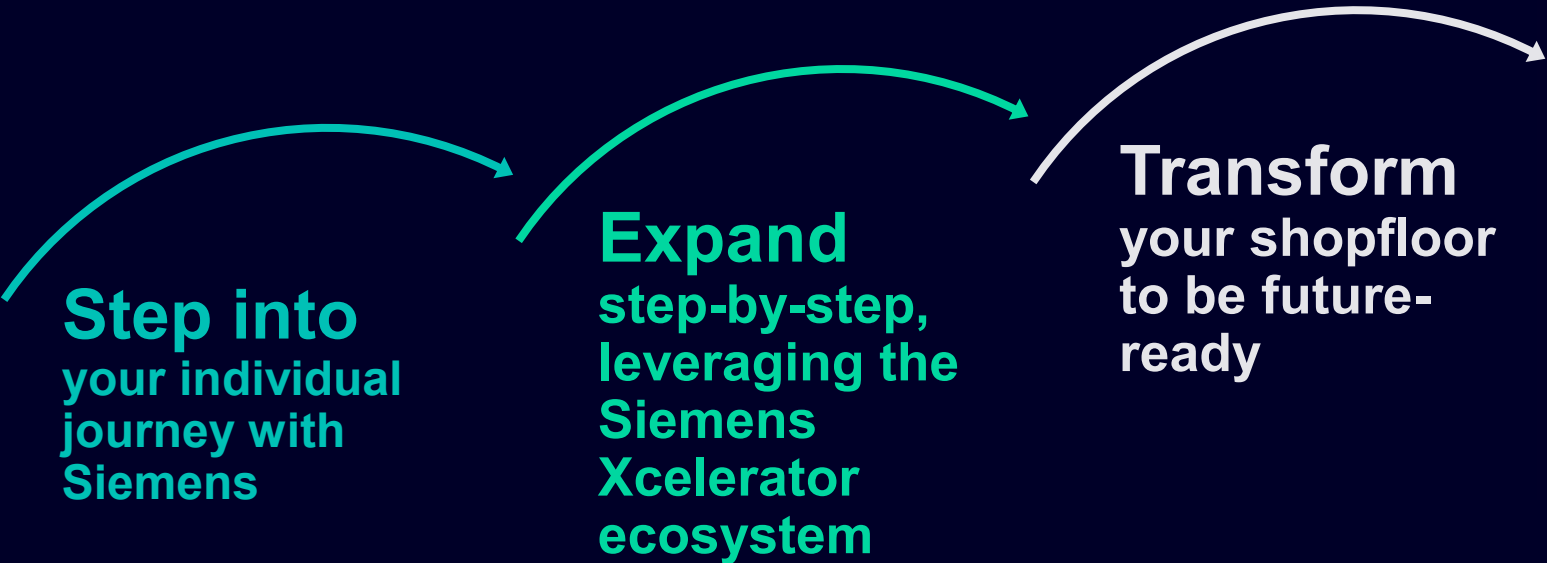
## Training

In Australia, Malaysia, Indonesia and Thailand CNC Design have Technology and Application Centers (TAC) where they provide training and application support for Machine Dealers, OEMs and End Users. Courses available include Digitalization, Motion Control and CNC Programming, Operating and maintenance.

Each of our TAC's can seat 20 people with dedicated SINUMERIK and SINAMICS simulators.



# Start AI powered Siemens digital journey **NOW**



# Contact

## Siemens

**FREKING, BJOERN**

Director of SIEMENS Machine Tool Systems Portfolio Sales

No.19, Suyuan Road, Building A1

Nanjing City, Jiangsu Province, China

E-mail: [bjoern.freking@siemens.com](mailto:bjoern.freking@siemens.com)

## CNC Design

**Christian Beckers**

Director Sales & Business Development

M: Australia: +61 466 557 484

M: Thailand: +66 967 303 632

**Email:**

[christian\\_beckers@cncdesign.com.au](mailto:christian_beckers@cncdesign.com.au)

CNC Design Pty Ltd  
A.B.N. 66 006 029 296  
Unit 2/ 137~145 Rooks Rd,  
Nunawading, Victoria, 3131  
Australia

[www.cncdesign.com](http://www.cncdesign.com)  
[www.virtualsmartfactory.com](http://www.virtualsmartfactory.com)

**Justin Sorbello**

Managing Director - Southeast Asia

M: Australia: +66 61 474 5239

M: Thailand: +61 404 891 527

**Email:**

[Justin\\_Sorbello@cncdesign.com.au](mailto:Justin_Sorbello@cncdesign.com.au)

CNC Design Co., Ltd.  
33 Moo 12, Buengkhamphroi  
Lumlukka, Pathumthani 12150  
THAILAND

<https://www.cncdesign.co.th>

**\*Important Notice:**

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