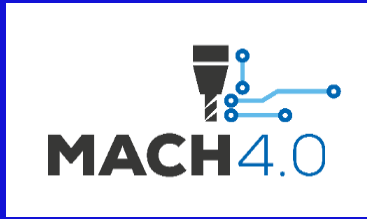




EUROPEAN MANUFACTURING INNOVATION



EIT Manufacturing is supported by the EIT,
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Mach4.0

Learning Factory to Implement Industry 4.0 in Machining

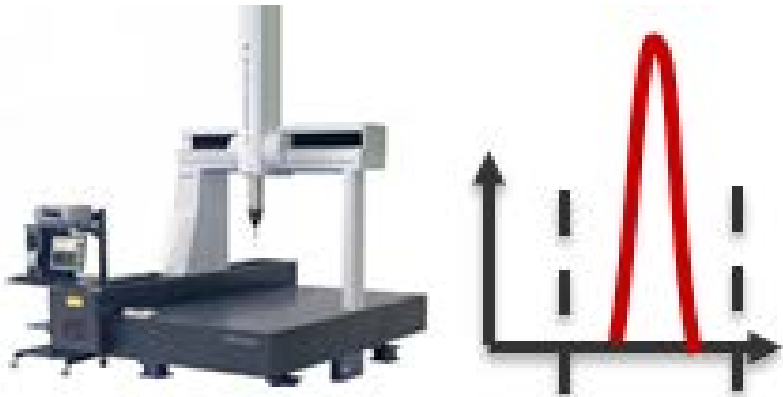


EUROPEAN
MANUFACTURING
INNOVATION



EIT Manufacturing is supported by the EIT, a body of the European Union

Can you imagine a world of zero defect machining?



Poor Surface Finish

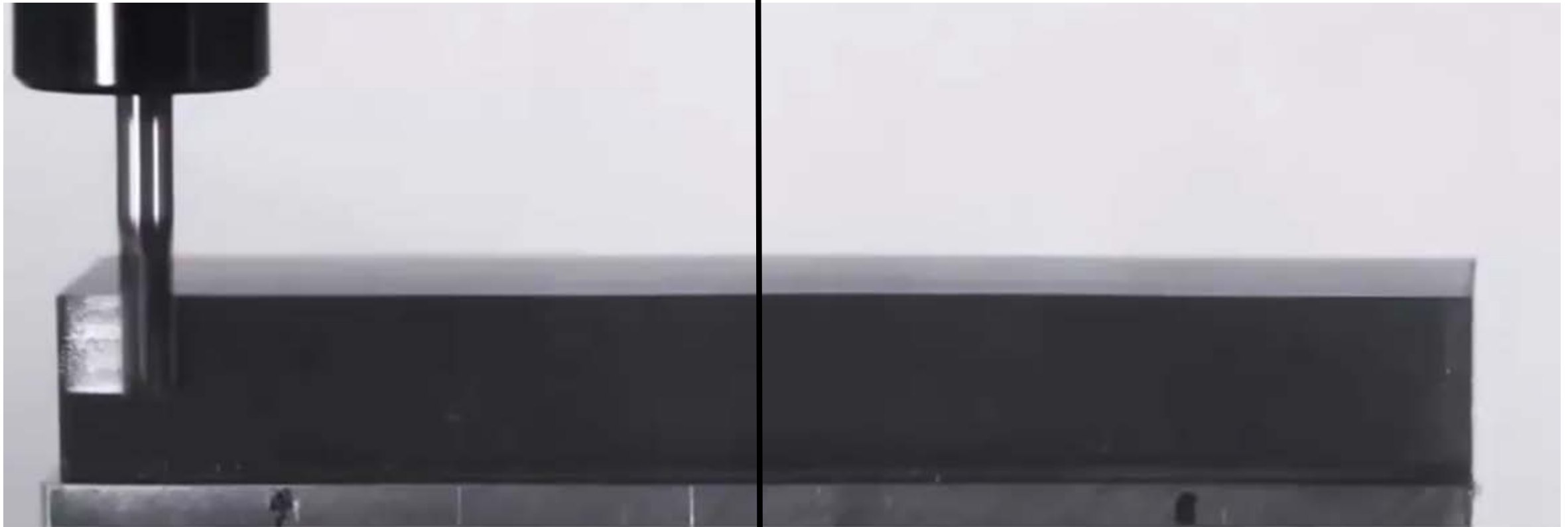


Good Surface Finish



With Chatter

Without Chatter



Without Collision



With Collision





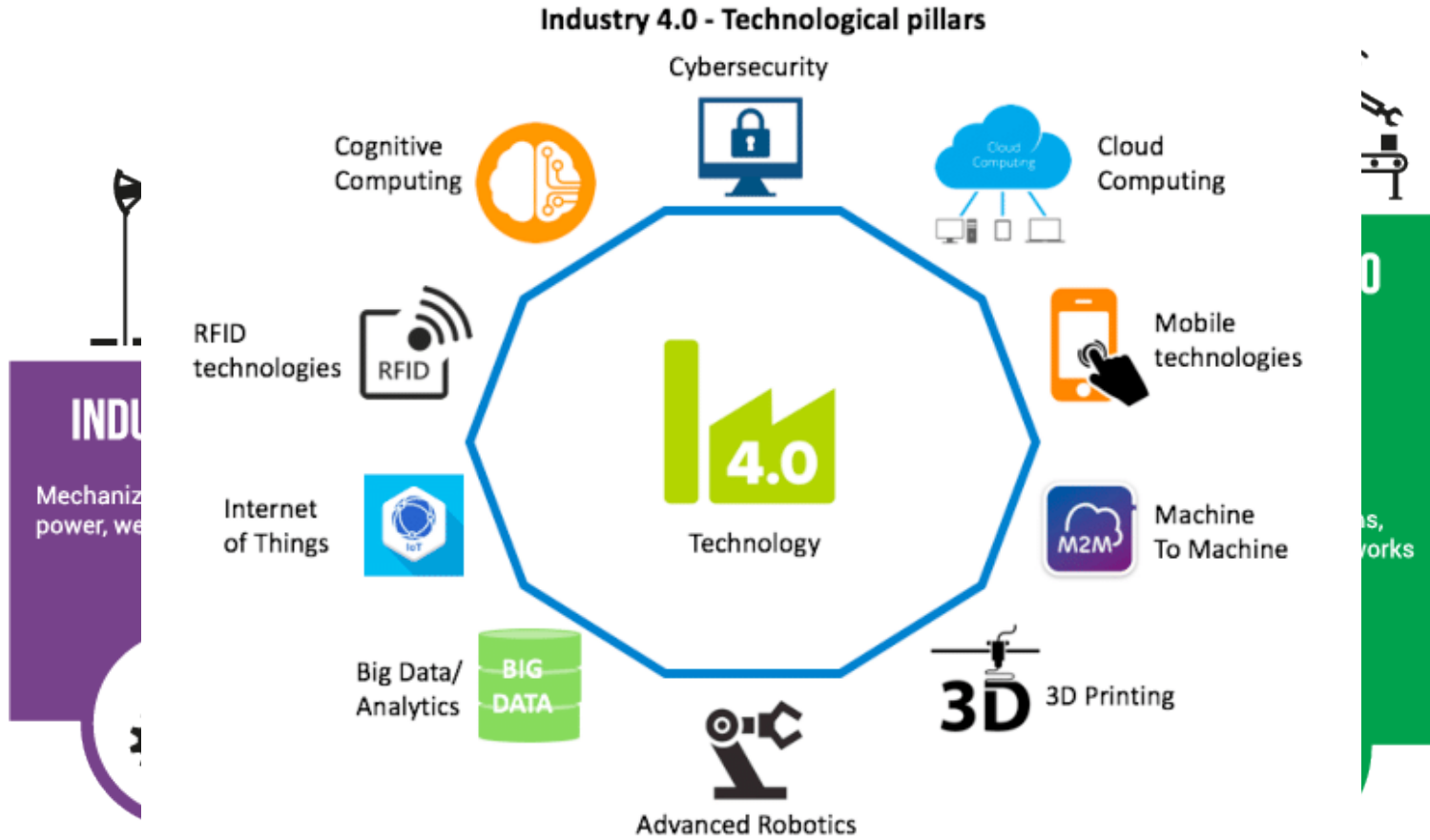
SUSTAINABLE DEVELOPMENT GOALS

<p>1 NO POVERTY</p> 	<p>2 ZERO HUNGER</p> 	<p>3 GOOD HEALTH AND WELL-BEING</p> 	<p>4 QUALITY EDUCATION</p> 	<p>5 GENDER EQUALITY</p> 	<p>6 CLEAN WATER AND SANITATION</p> 
<p>7 AFFORDABLE AND CLEAN ENERGY</p> 	<p>8 DECENT WORK AND ECONOMIC GROWTH</p> 	<p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p> 	<p>10 REDUCED INEQUALITIES</p> 	<p>11 SUSTAINABLE CITIES AND COMMUNITIES</p> 	<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p> 
<p>13 CLIMATE ACTION</p> 	<p>14 LIFE BELOW WATER</p> 	<p>15 LIFE ON LAND</p> 	<p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p> 	<p>17 PARTNERSHIPS FOR THE GOALS</p> 	



Enviro Steward





GUIDED LEARNING PLATFORM

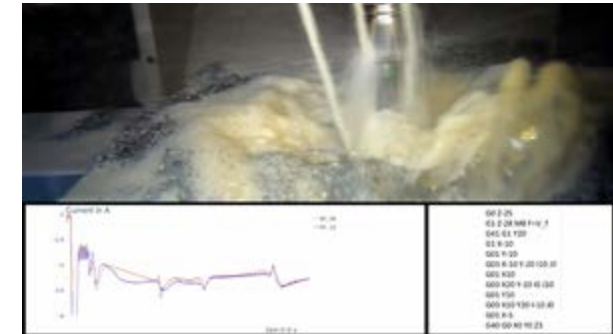
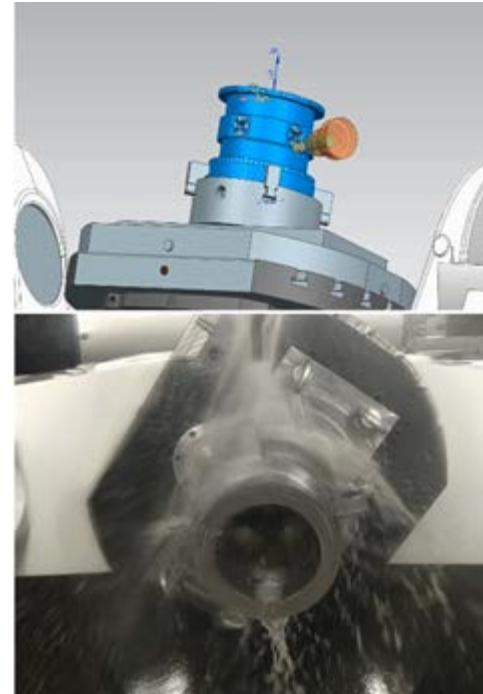


What are you looking for?

- External Author**
Geometric dimensioning and tolerancing (GD&T)
21. Oct. 2020 | Info | Any | 40 min.
- External Author**
MACHINABILITY
This presentation covers an important aspect of machining processes, which is the term Machinability. This term basically means the ease at which a material can be machined.
6. Nov. 2020 | Info | Any | 25 min.
- External Author**
Modelling of Chip Formation Process
- Text -
27. Sep. 2020 | Info | Any | 5 min.
- External Author**
Process stability: forced vibrations, chatter
4. Nov. 2020 | Info | Any | 14 min.

DIGITAL TWIN

PROCESS MONITORING

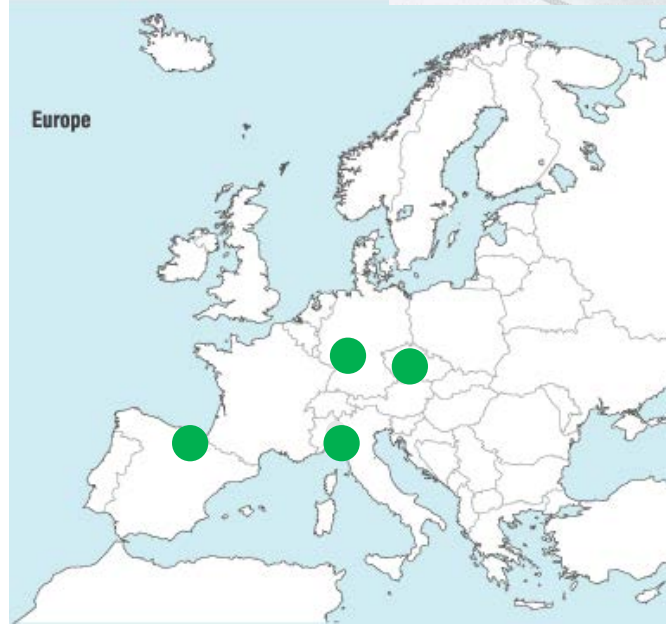




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Mondragon Faculty of
Unibertsitatea Engineering



**FACULTY
OF MECHANICAL
ENGINEERING
CTU IN PRAGUE**

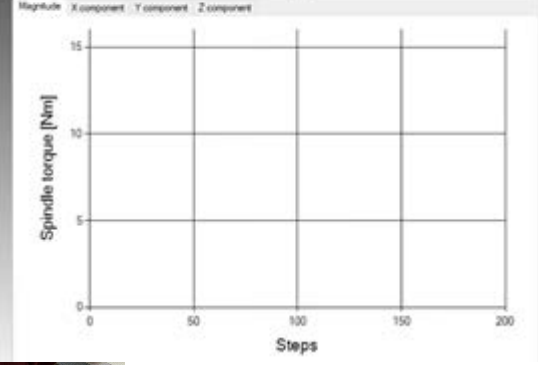
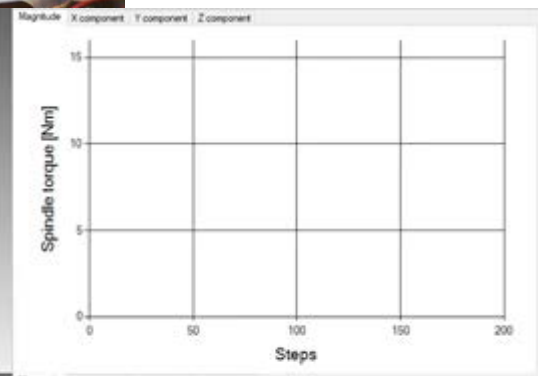
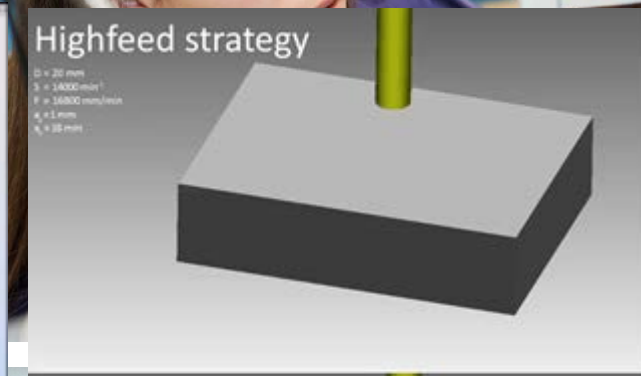
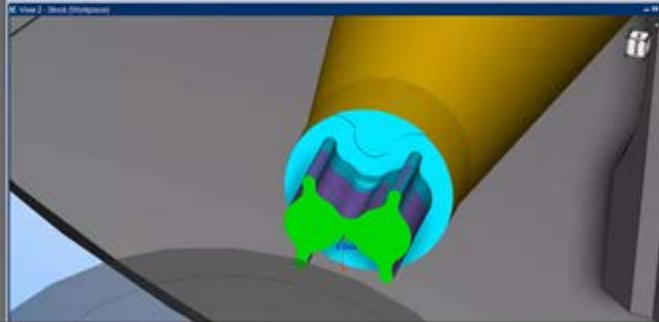
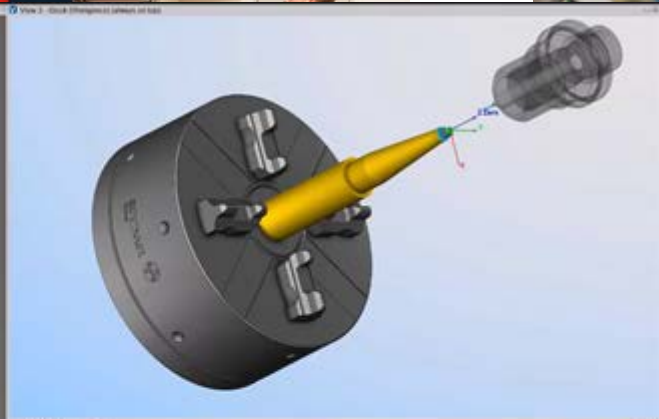
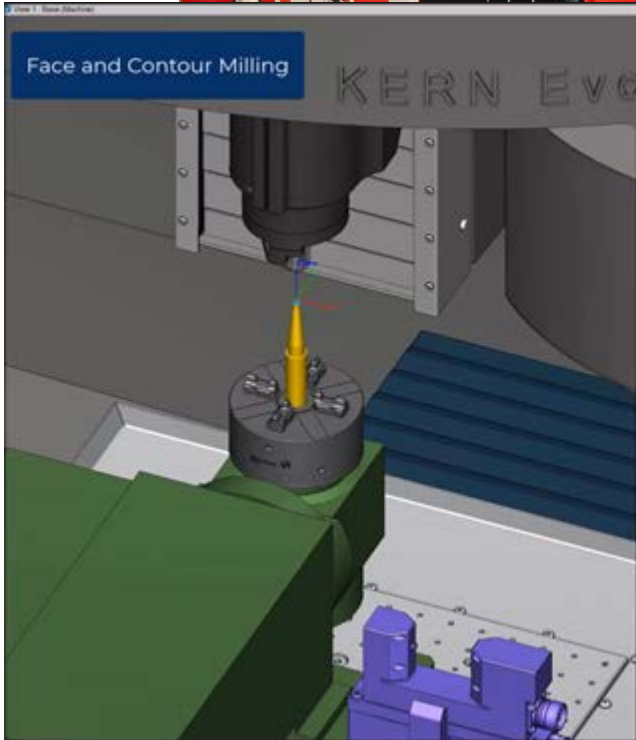
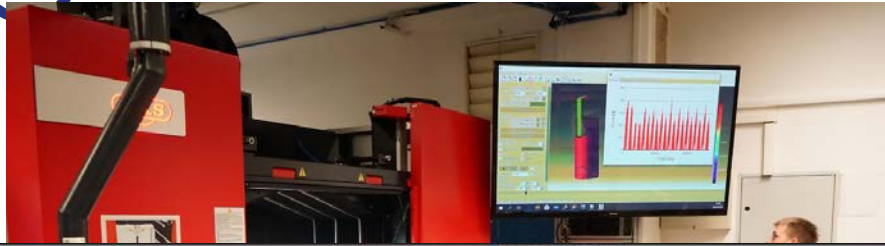


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MILANO 1863



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Practice and Simulation



Manufacturing



Conventional data analysis

Domain knowledge



- Experience
- Technical dependencies
- Historical quality data



**Program/
Rules**

Decisions based on
domain knowledge

Data analysis via AI

Process data



- E.g. current, pressure, temperature, ...

Quality data

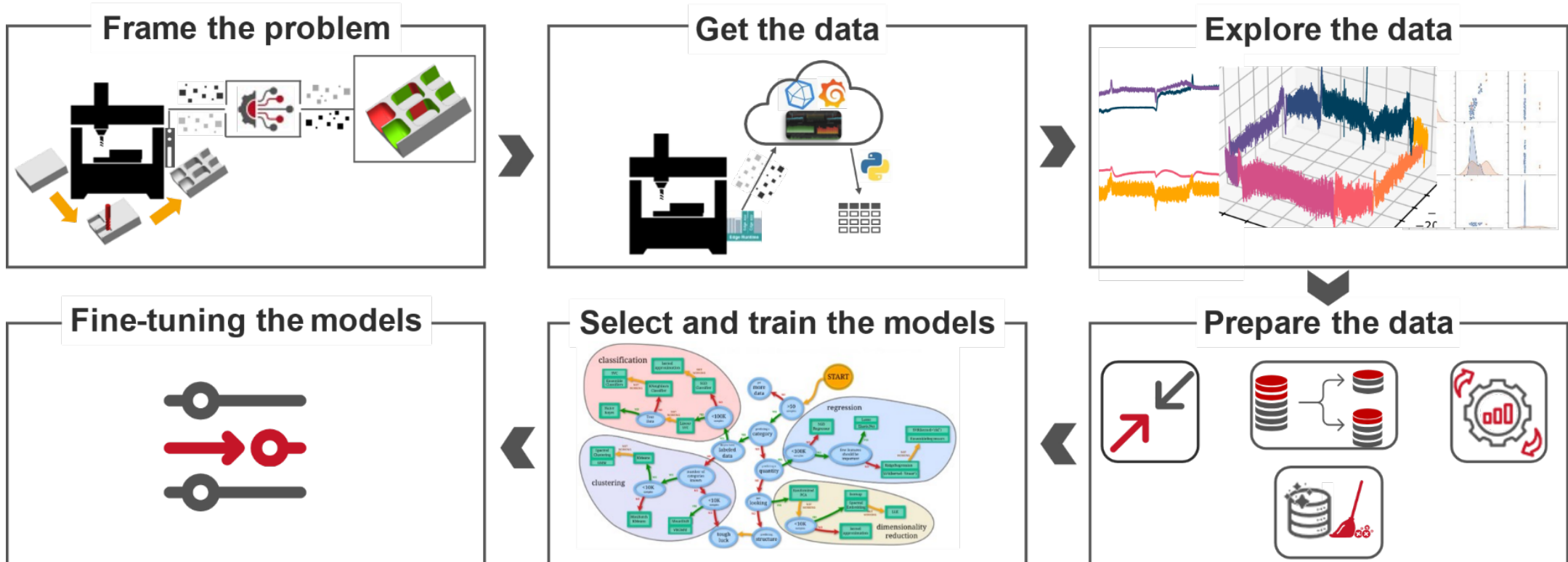


- E.g. Good & Bad parts, measurement results



**Trained
Algorithm**

Decisions based on
historical data



Sources: [NOU20], [SCI20]

ARTIFICIAL INTELLIGENCE

GUIDED LEARNING PLATFORM Manufacturing

EN

My learning nuggets

What are you looking for? Filters

- External Author

Geometric dimensioning and tolerancing (GD&T)

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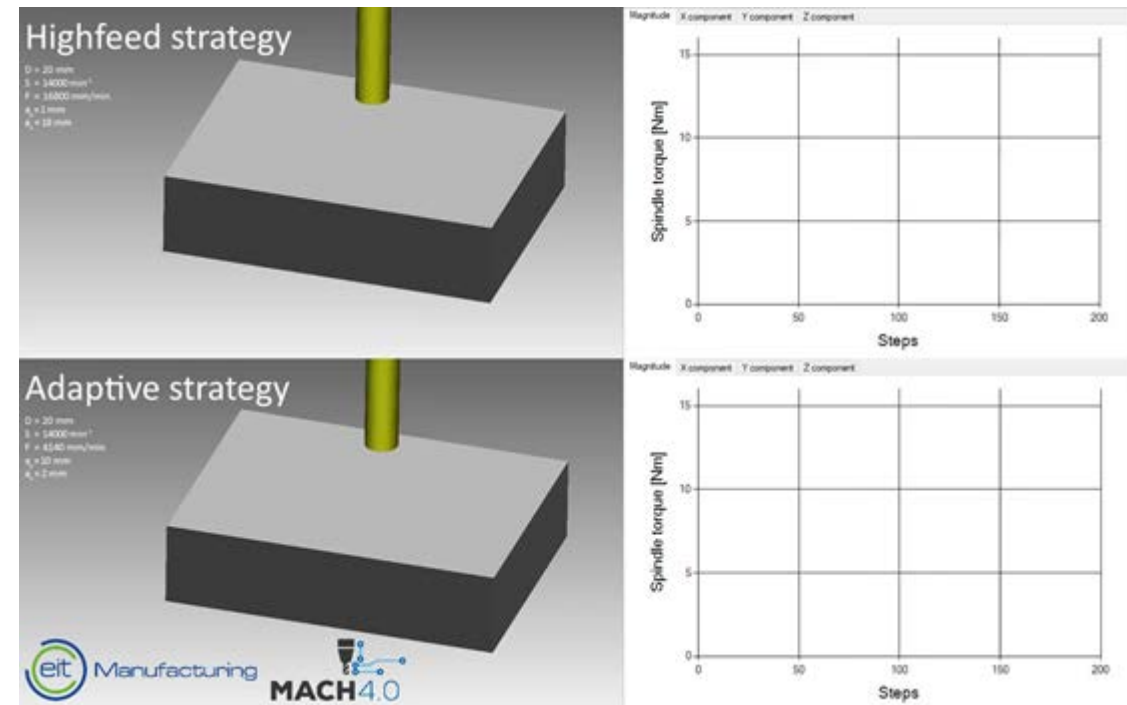
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- Text -

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Process stability: forced vibrations, chatter

4. Nov. 2020 Info Any 14 min.



- Better quality products
- Increased efficiency
- Reduced waste, pollution and lower energy consumption

