

Introducing NX Mold, Tool and Die Solutions

Why NX as a Technology Platform?



NX is built on the most modern architecture of any major CAD/CAM/CAE solution

Every NX release is customer deployment ready

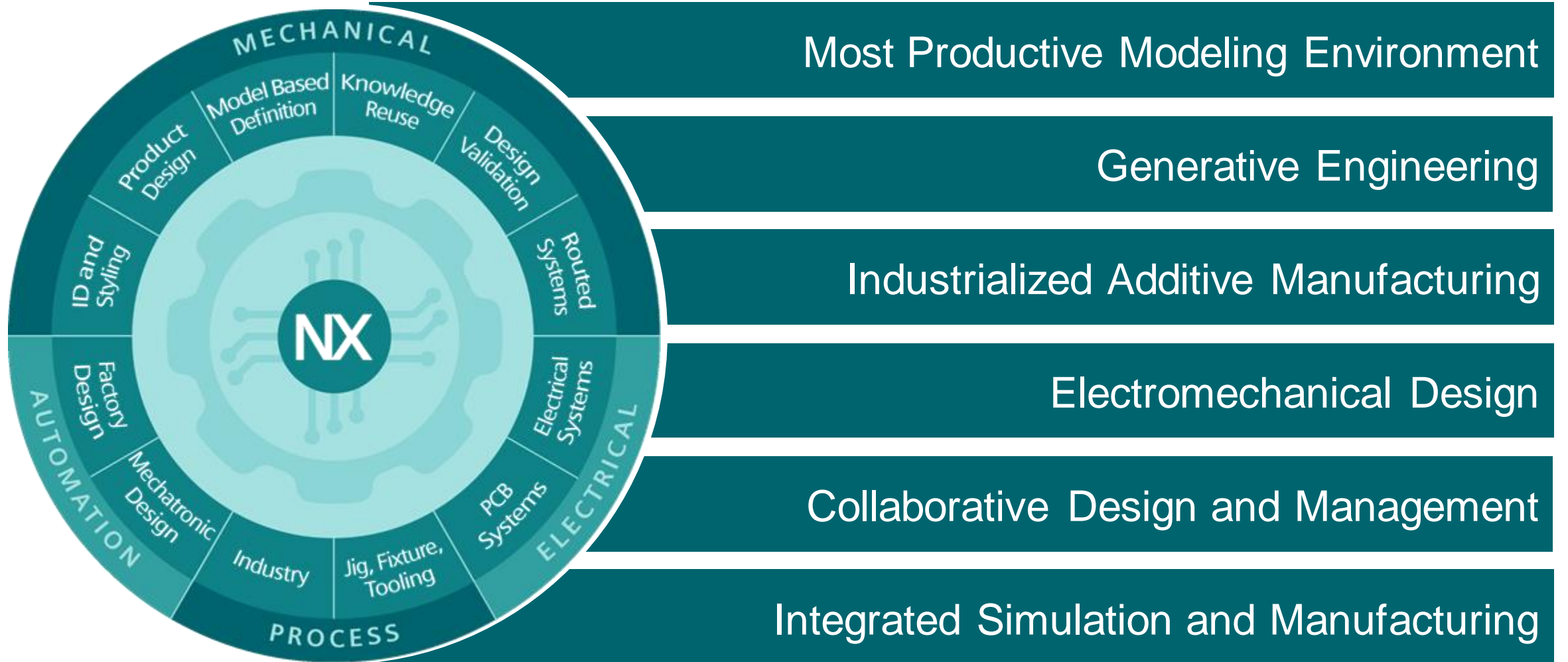
NX is an open solution that “plugs and plays” with your existing IT systems

NX enables you to use data from previous NX and Unigraphics releases in the current release

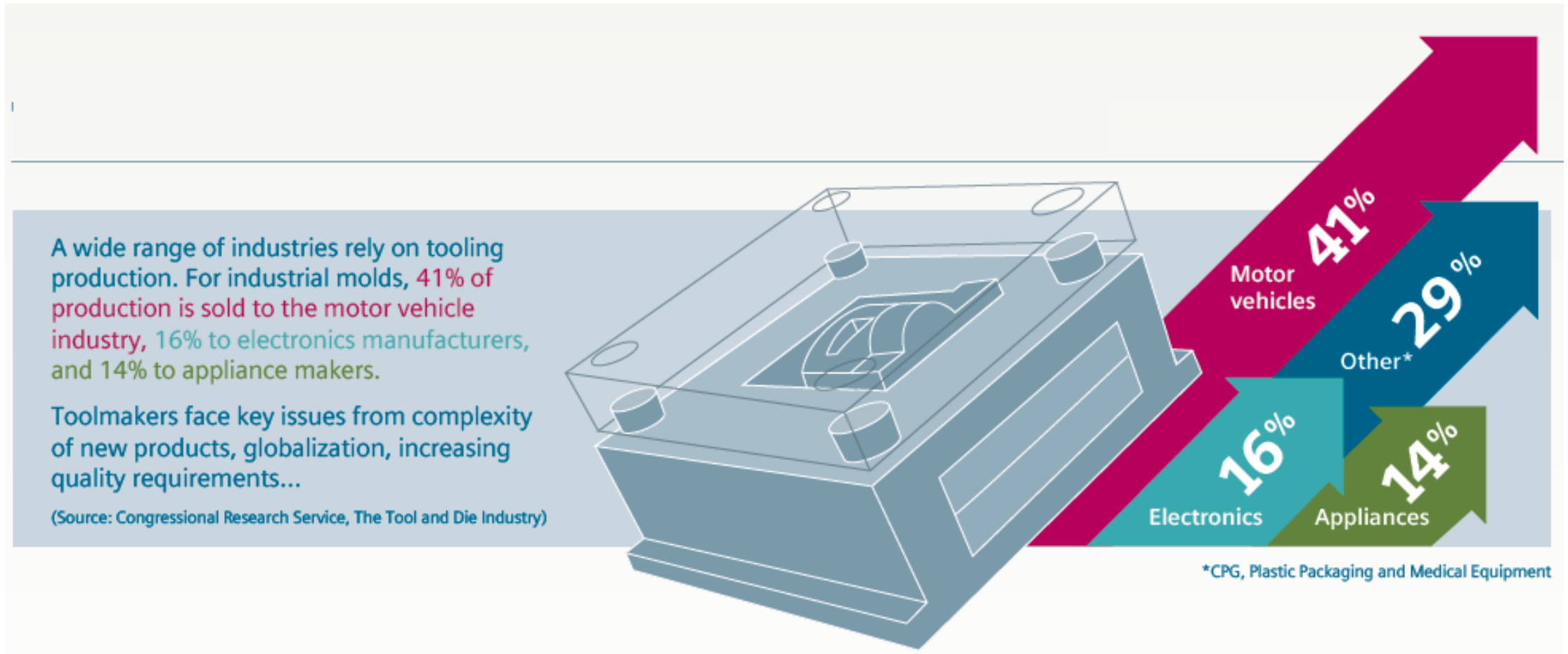
- Goes back to the first Unigraphics release (circa 1984)

Proven Deployment	Data Preservation
Platform Flexibility	Scalable

NX: Breaking down the barriers to innovation



Tooling manufacturing – a vital industrial sector



Tooling industry challenges



Tool quality and upfront feasibility are more important than price among tier 1 suppliers.

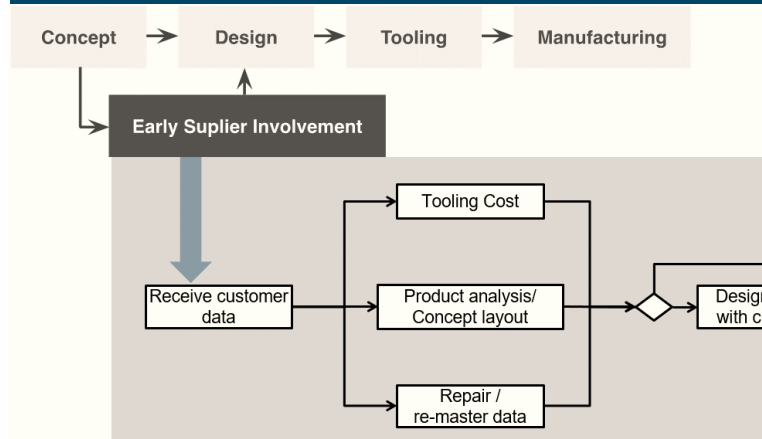
(Source: OESA/HRI Barometer)

65% of tooling manufacturers intend to invest in more CNC automation to improve quality and lead time.

(Source: Harbor IQ Quarterly)

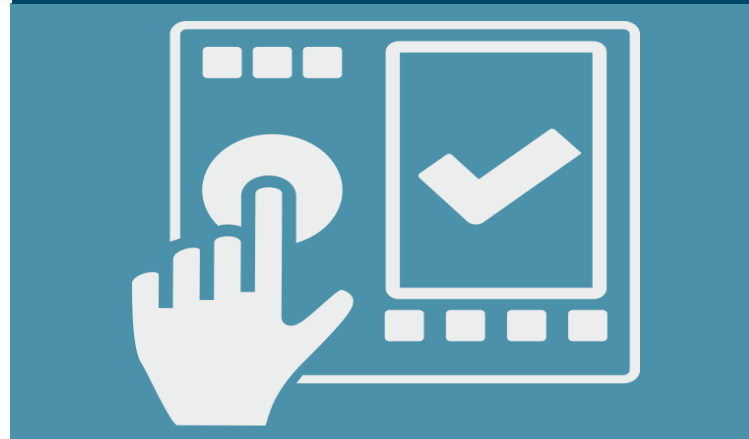
Tooling industry trends

Early Supplier Involvement



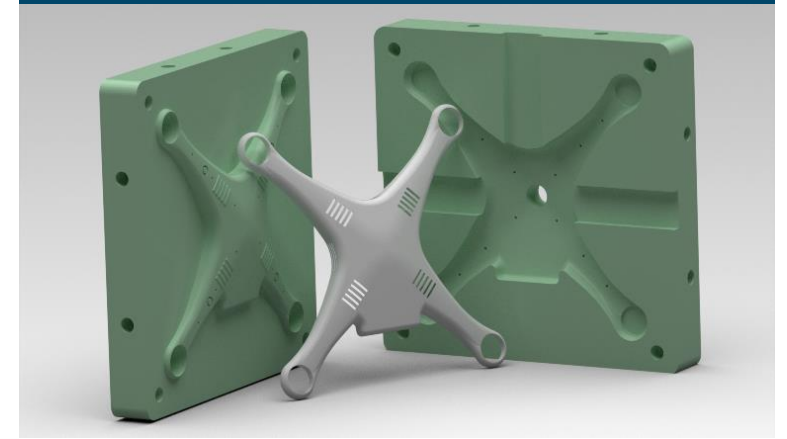
Improve collaboration with customers/OEMs

Process Automation



Capture and reuse your best practices

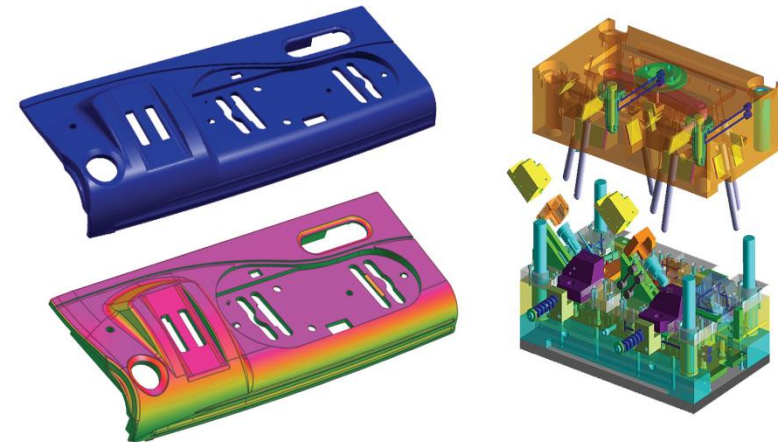
Additive Manufacturing



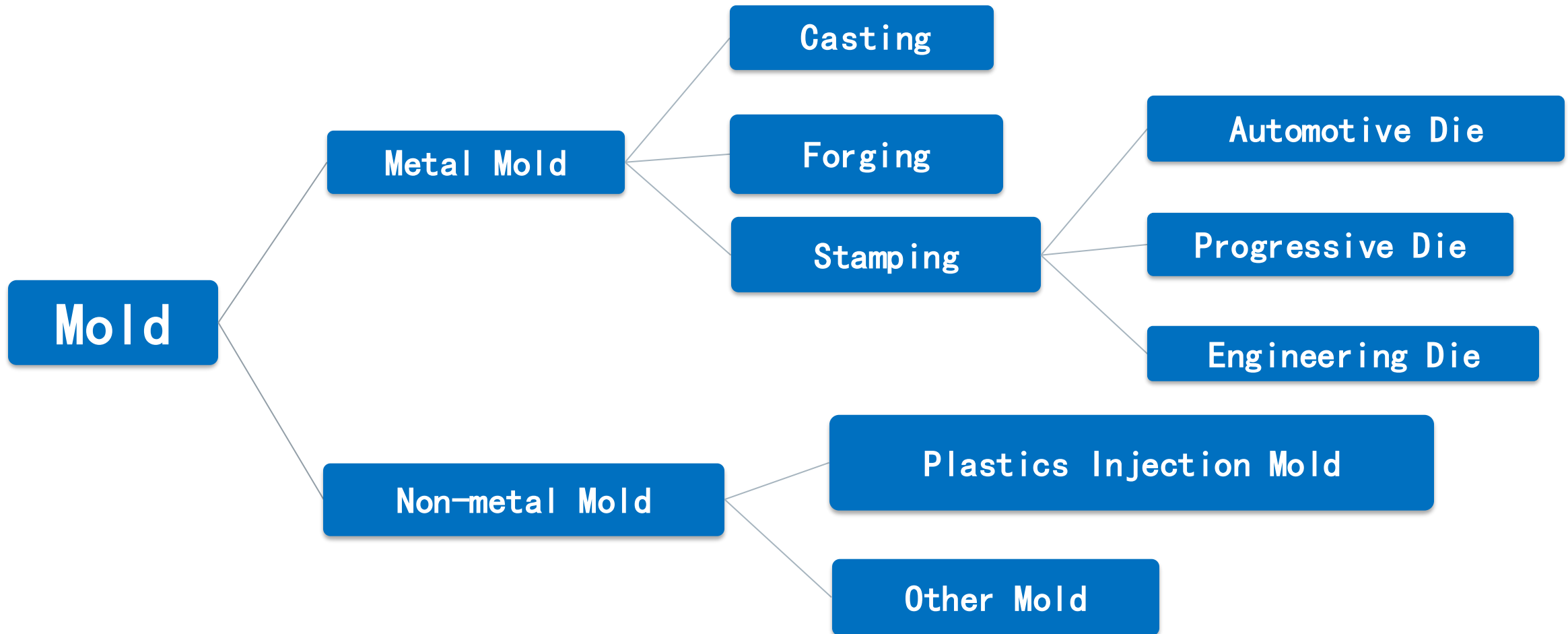
Accelerate prototyping and improve mold performance

Key benefits of NX (Mold, Tool and Die Solutions)

- Helps address challenges faced by every tool shops
- NX offers a complete, integrated solution - “all in one system”
 - One system, one vendor
 - Automated every tasks involved in mold design and mfg. process
 - Solid connection between functions
 - Easy to handle design changes
 - Expandable > data management, shop floor data distribution.....

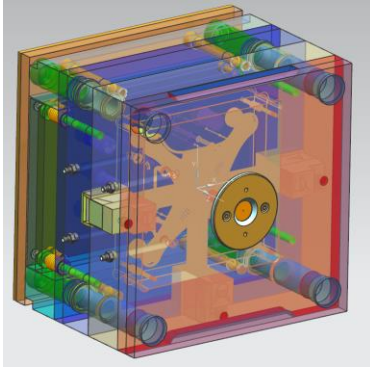


Typical Mold and Die Tools

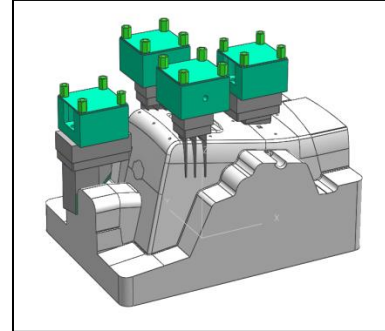


Siemens Solutions Tool Design

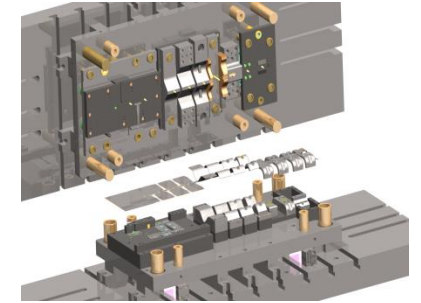
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Ingenuity for life



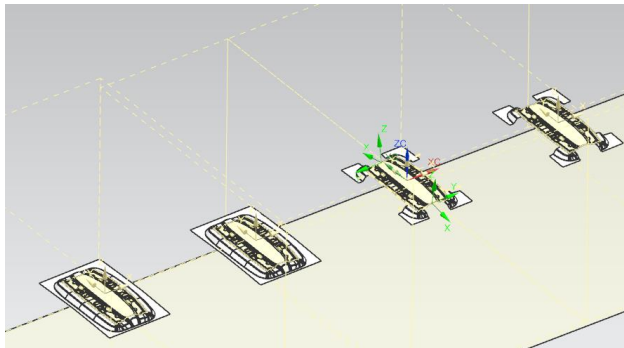
Mold Wizard



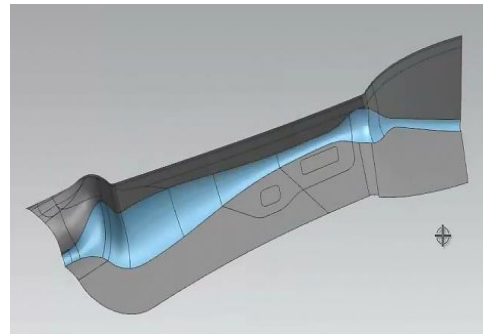
Electrode Wizard



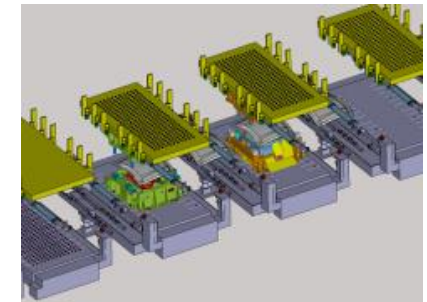
Progressive Die Wizard



Die Engineering



Flow Blend for NX



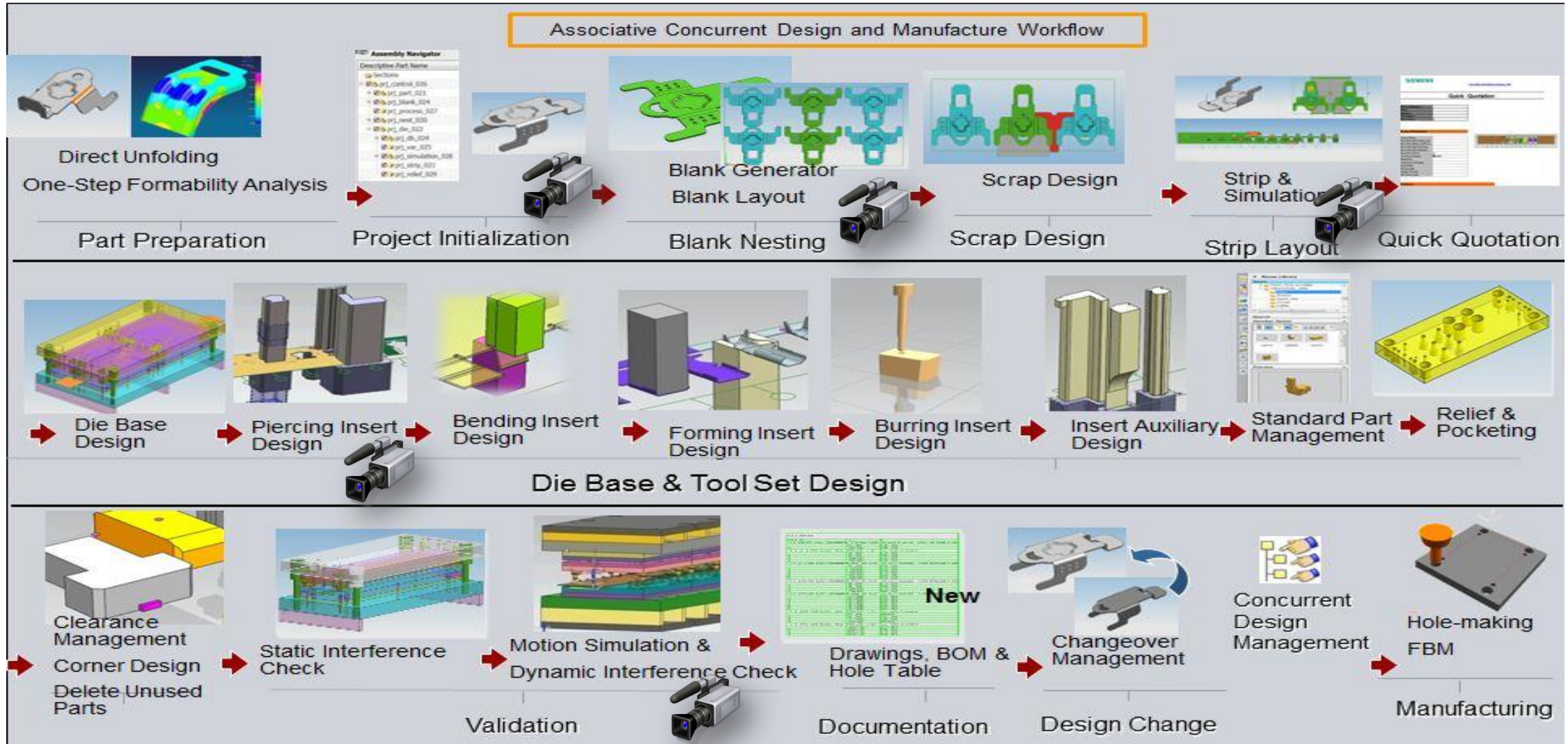
Die Structure Design

Siemens Solutions NX Mold Wizard Coverage

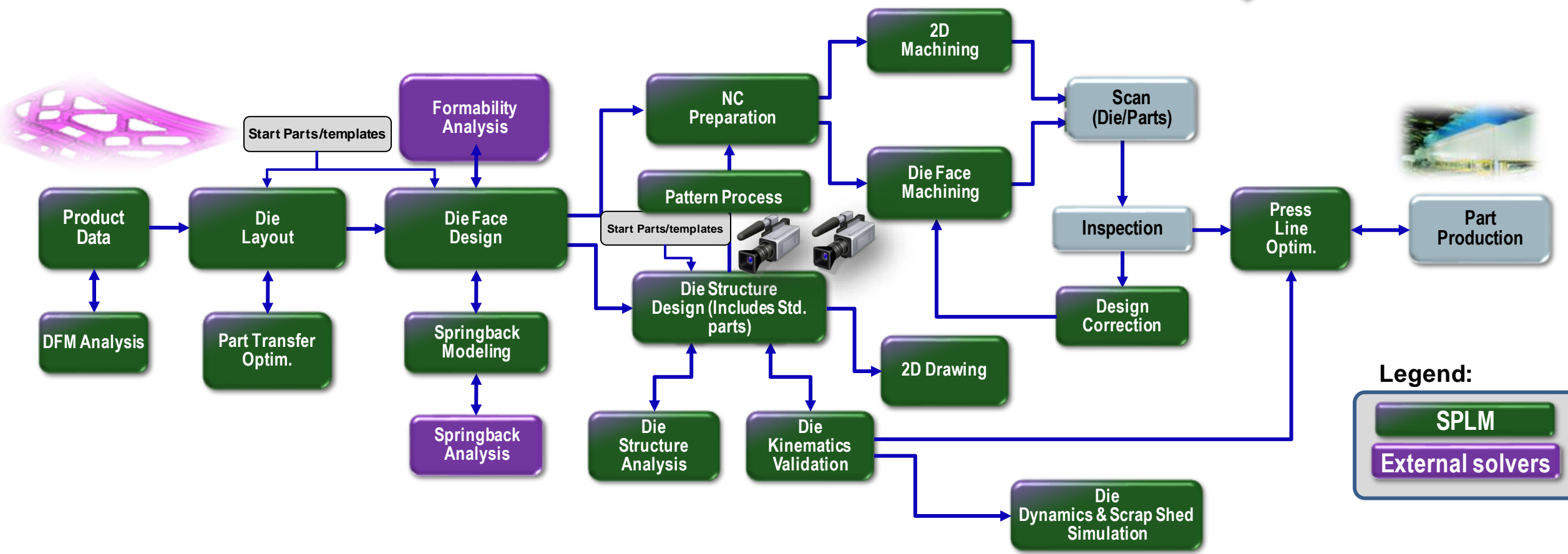
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Siemens Solutions NX Progressive Die Wizard Coverage



Siemens Solutions NX Automotive Stamping Die Design Wizards Coverage



Siemens Solutions

NX Electrode Manufacturing Solutions

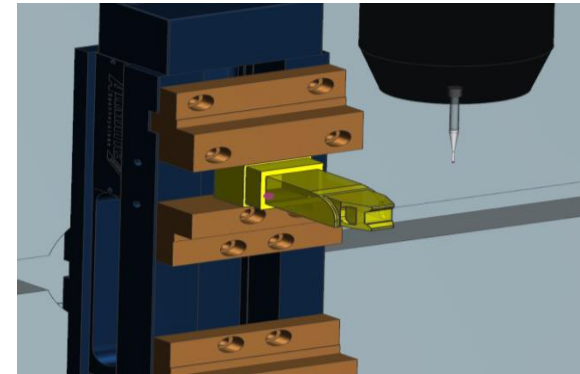
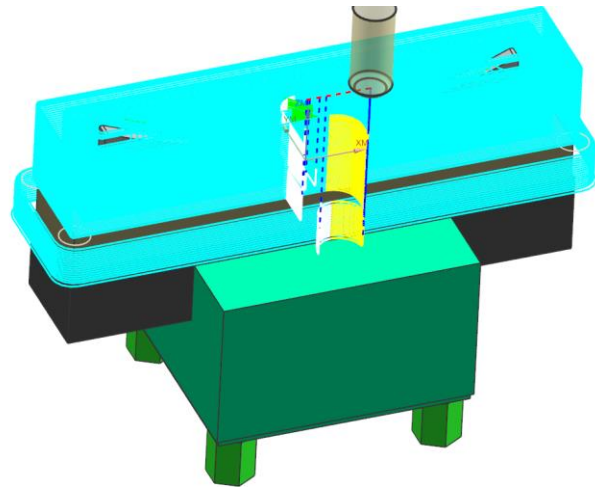
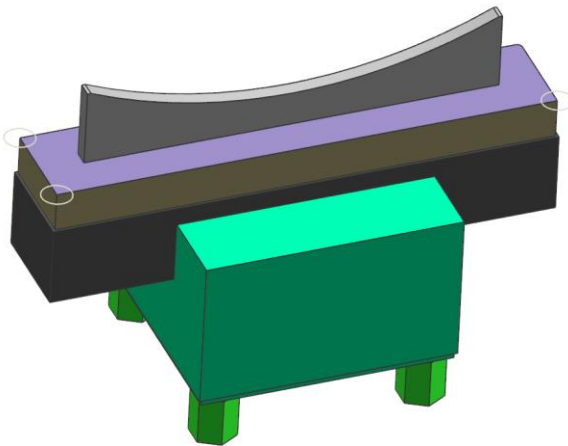
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Electrode Design

Electrode Machining

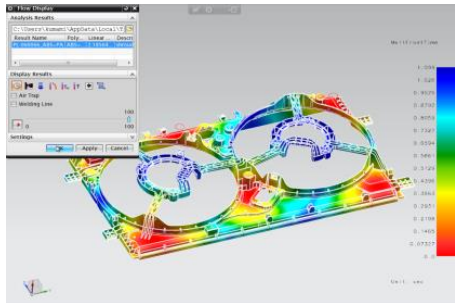
Electrode
Measurements

EDM

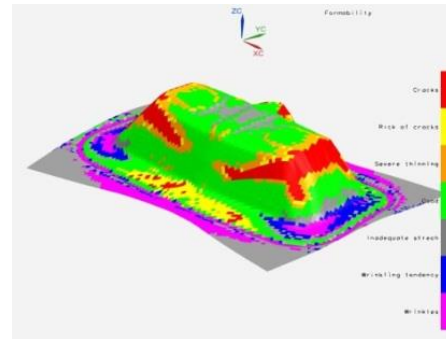


Siemens Solutions Tool Validation

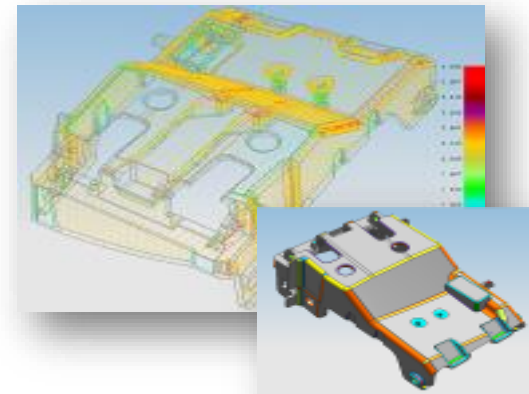
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**EasyFill (mold Flow)
Analysis**



**One-Step formability
Analysis (Stamping)**



**Draft, wall thickness,
tool motion, etc**

Available as part of NX Mold
Wizard, NX Progressive Die
Wizard

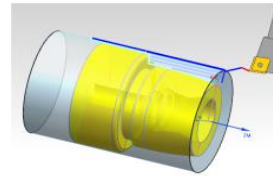


Press Die Checker

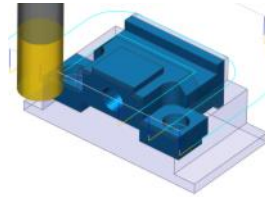
Siemens Solutions Machining

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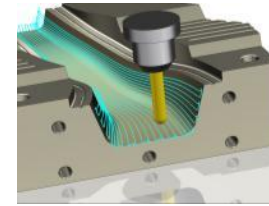
- 2 ½ axis milling
- Drilling – manual and automated
- 3 axis (fixed axis) milling
- 5 axis milling
- Turning
- Wire EDM
- EDM Sinking
- Electrode machining
- Feature based prog.
- Machining simulation
- Machine data and tool libraries



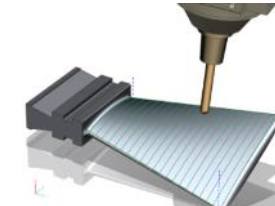
Turning



2 ½ axis milling



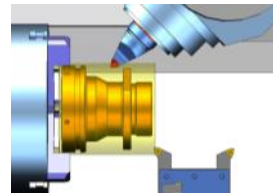
3 axis milling



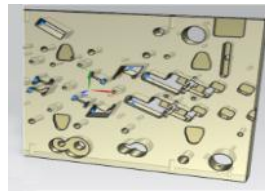
5 axis milling



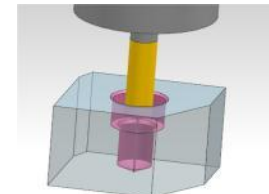
**Turbo machinery
milling**



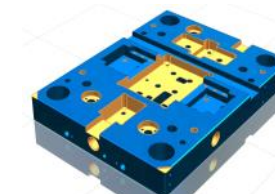
Mill turn



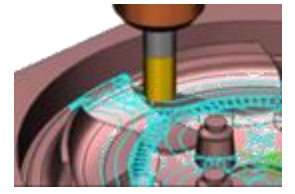
Wire EDM 2 & 4 axis



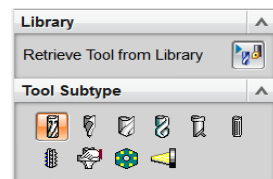
Hole making



**Feature based
machining**



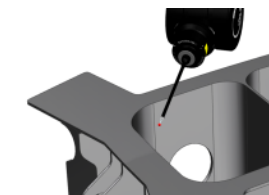
High speed milling



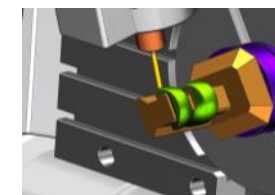
Tool libraries



**Shop floor
documents**



**On machine
probing**



**Machine tool
simulation**

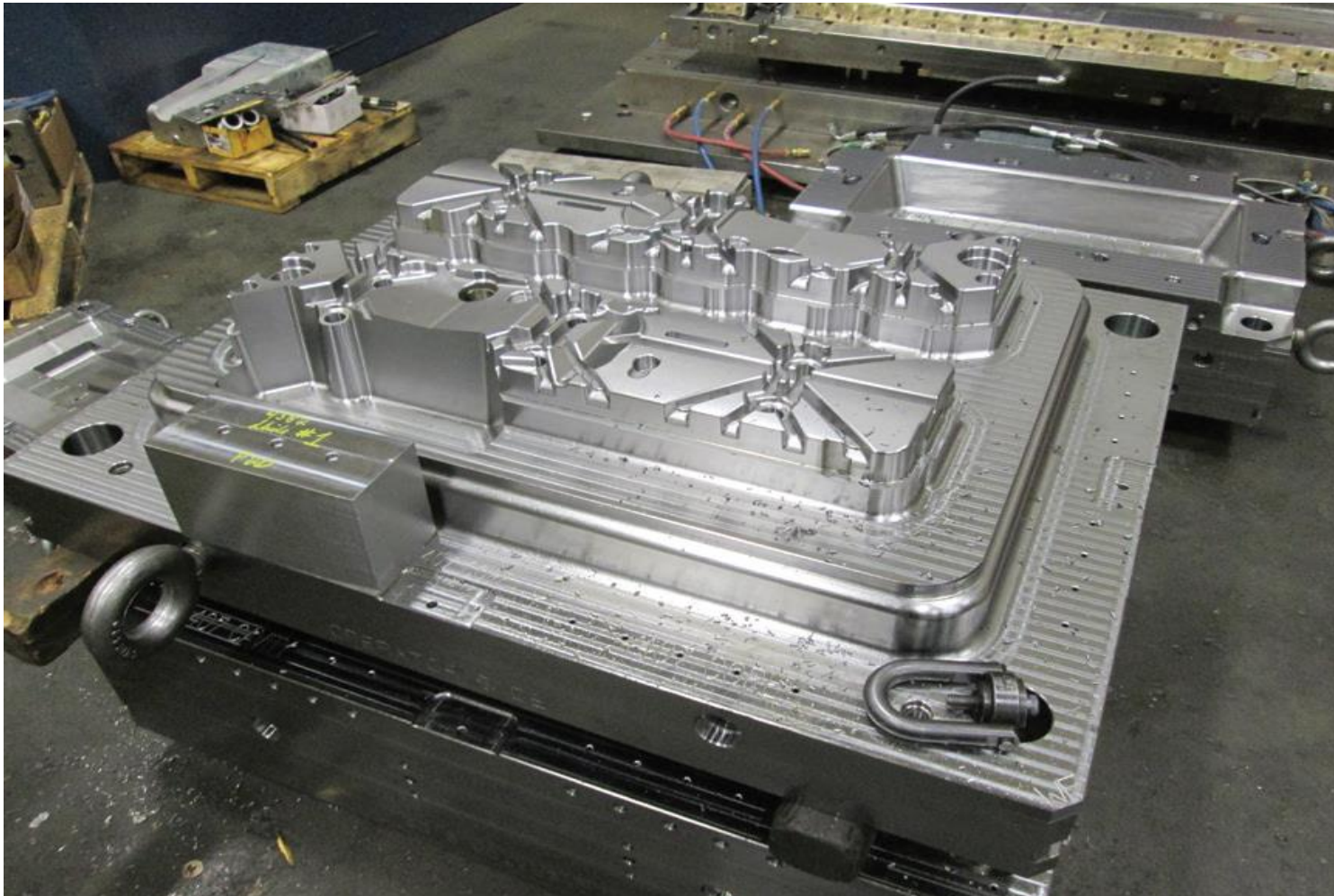


Post processing

Efficiency in Mold Design

Cavalier Tool and Manufacturing

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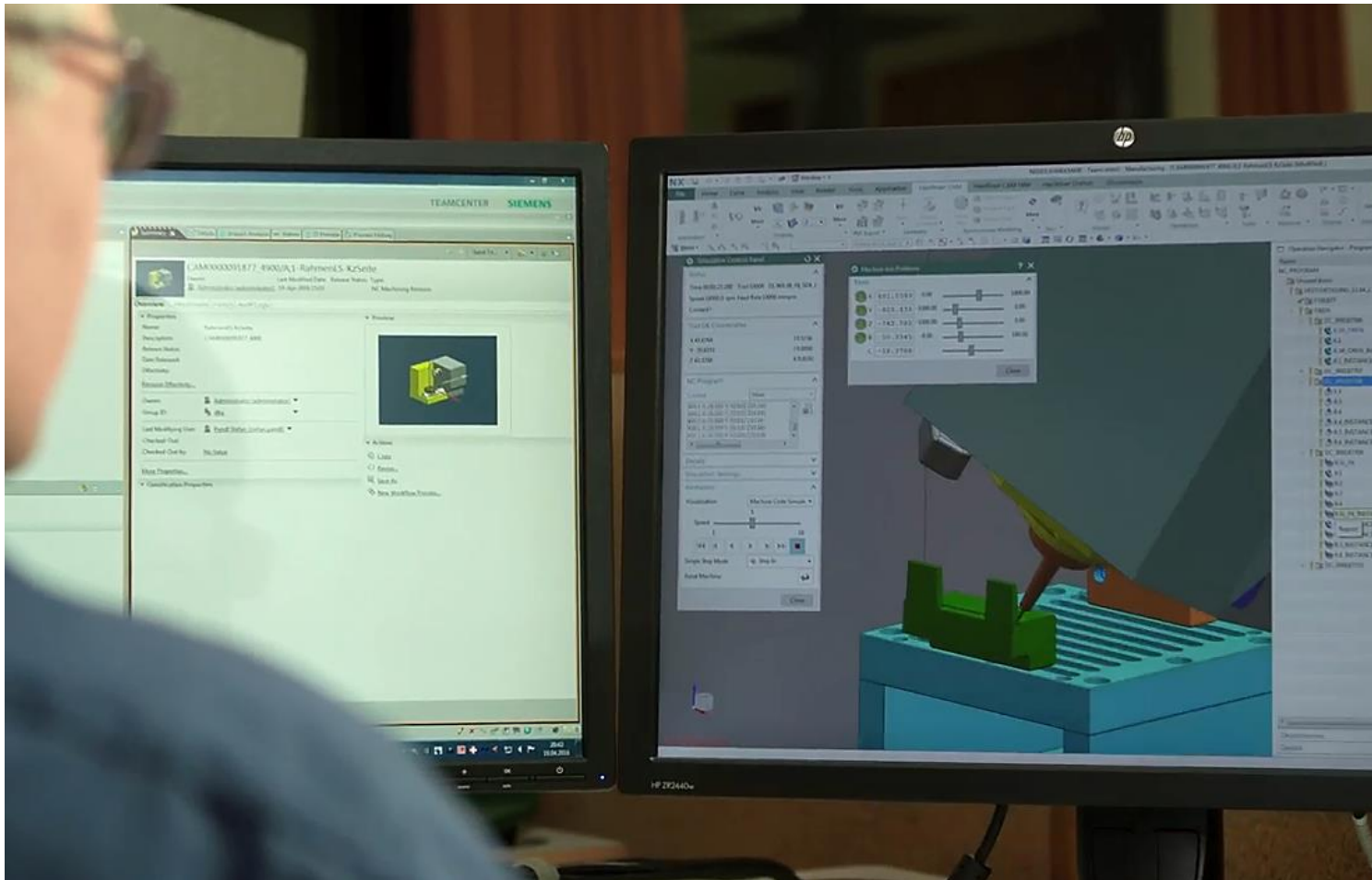
**Award-winning
mold manufacturer
relies on NX**

[video >](#)

Digitalizing end-to-end mold manufacturing

Haidlmair GmbH

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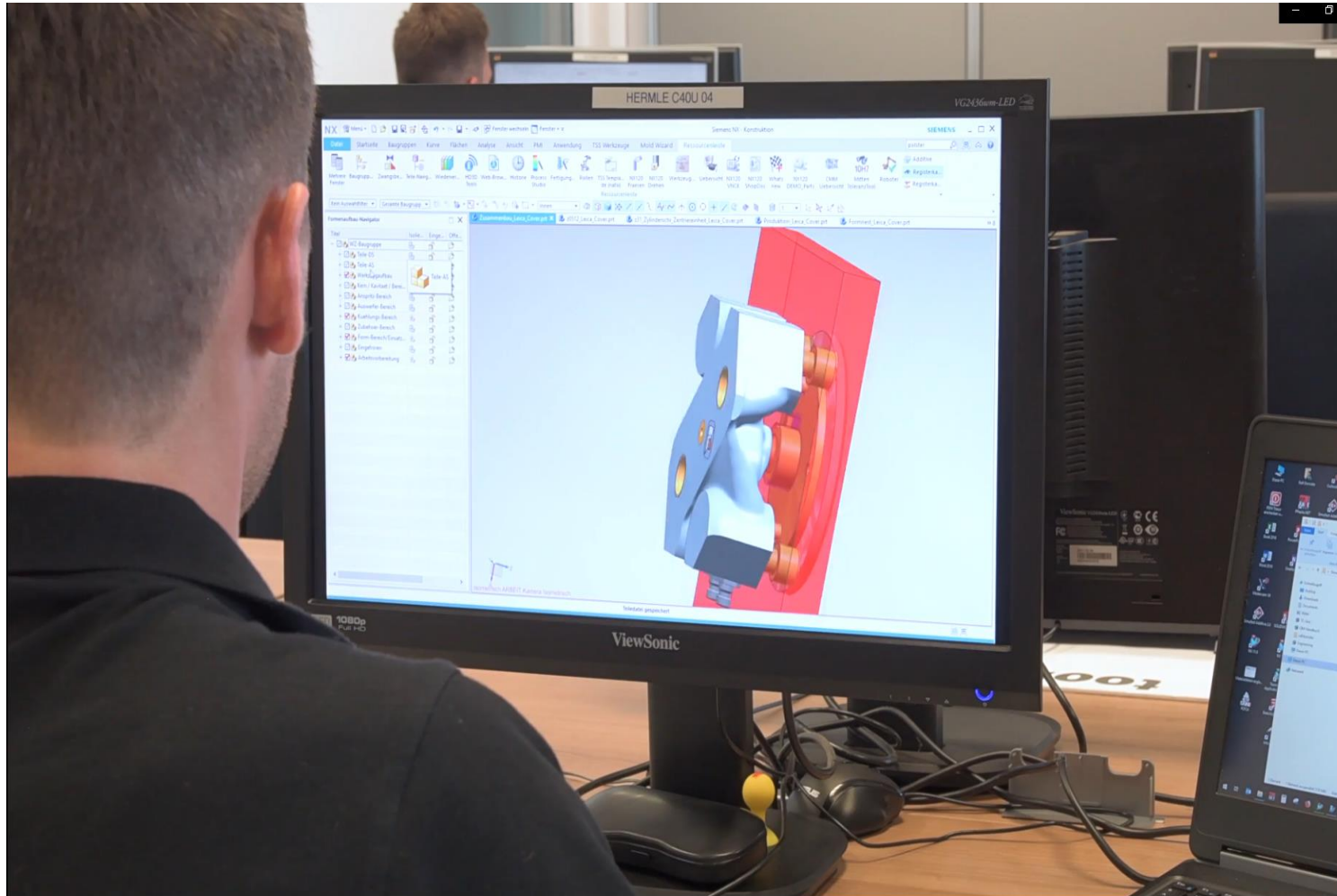


Transforming how
molds are made

[video >](#)

Additive manufacturing for Mold Inserts Toolcraft

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**30% reduction of
cycle time**

[video >](#)

Gain productivity using NX, an integrated tooling solution

Part Manufacturability: Control impact on downstream costs and time

Tool Design: Achieve high levels of productivity using automated processes

Tool Manufacturing: Automate CNC programming and machine high quality tooling



Our commitment to our customers

Siemens Digital Industries is the first major CAD/CAM/CAE vendor to offer its customers a continuous release process for new software versions

The NX team is committed to:

- Delivering quality releases that are easy to deploy
- Building solutions on the most modern architecture to protect your investment
- Our **historically proven** commitment to data compatibility



Thank you.