

The Turbocharger for Efficiency: AI enables custom Tools with a single Click

Format Change Part for Cosmetic Packaging
in a Schubert Packaging Machine

SIEMENS



| About us



Conrad Zanzinger

Schubert Additive Solutions GmbH

Technischer Leiter / CTO



Dennis Nier

Siemens

Portfolio Development NX
& Additive Manufacturing

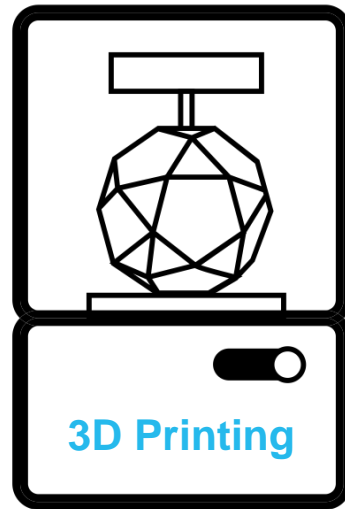
Robot Tools



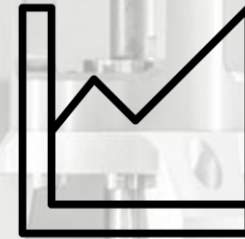
Order Based



Lightweight



3D Printing



Economical



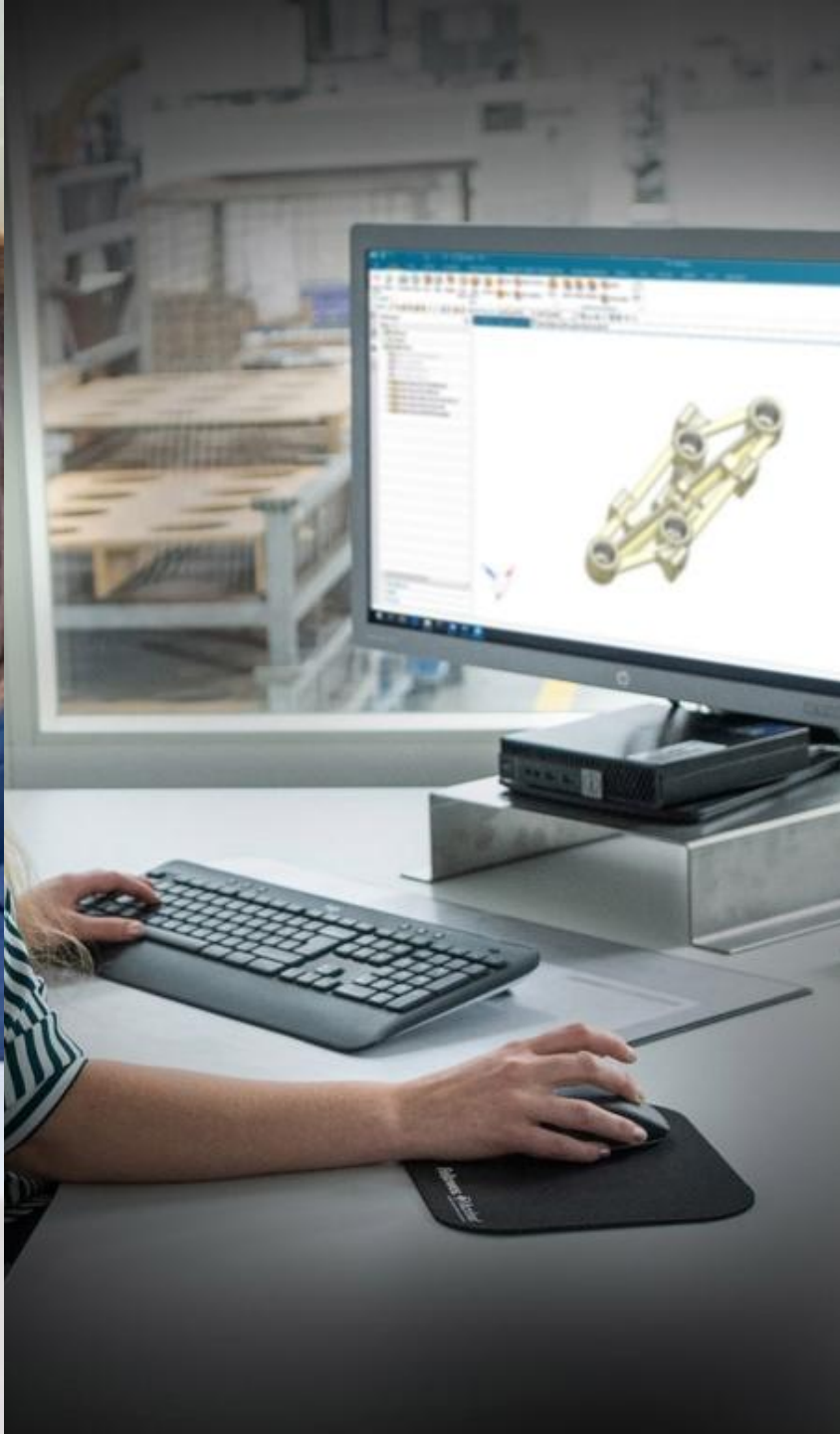
Flexible



Fast

New Format?







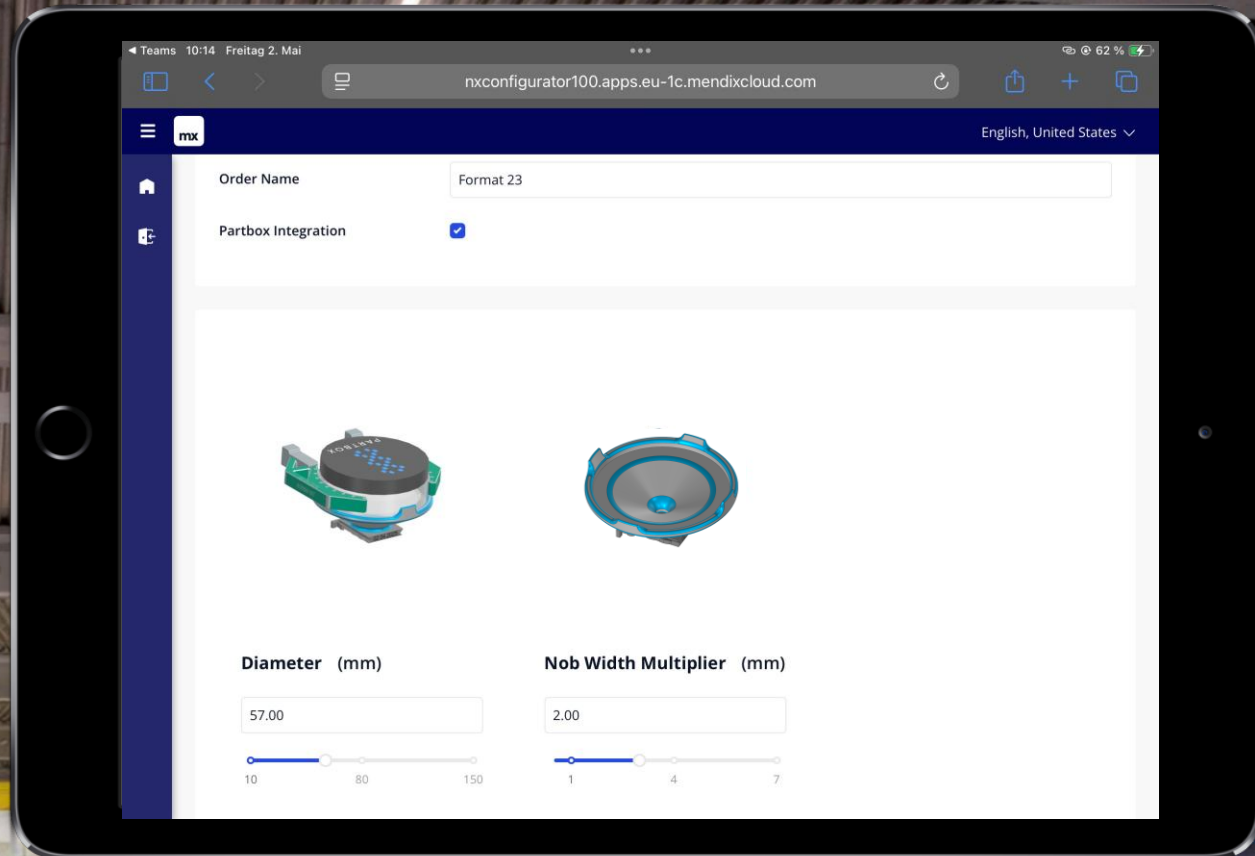
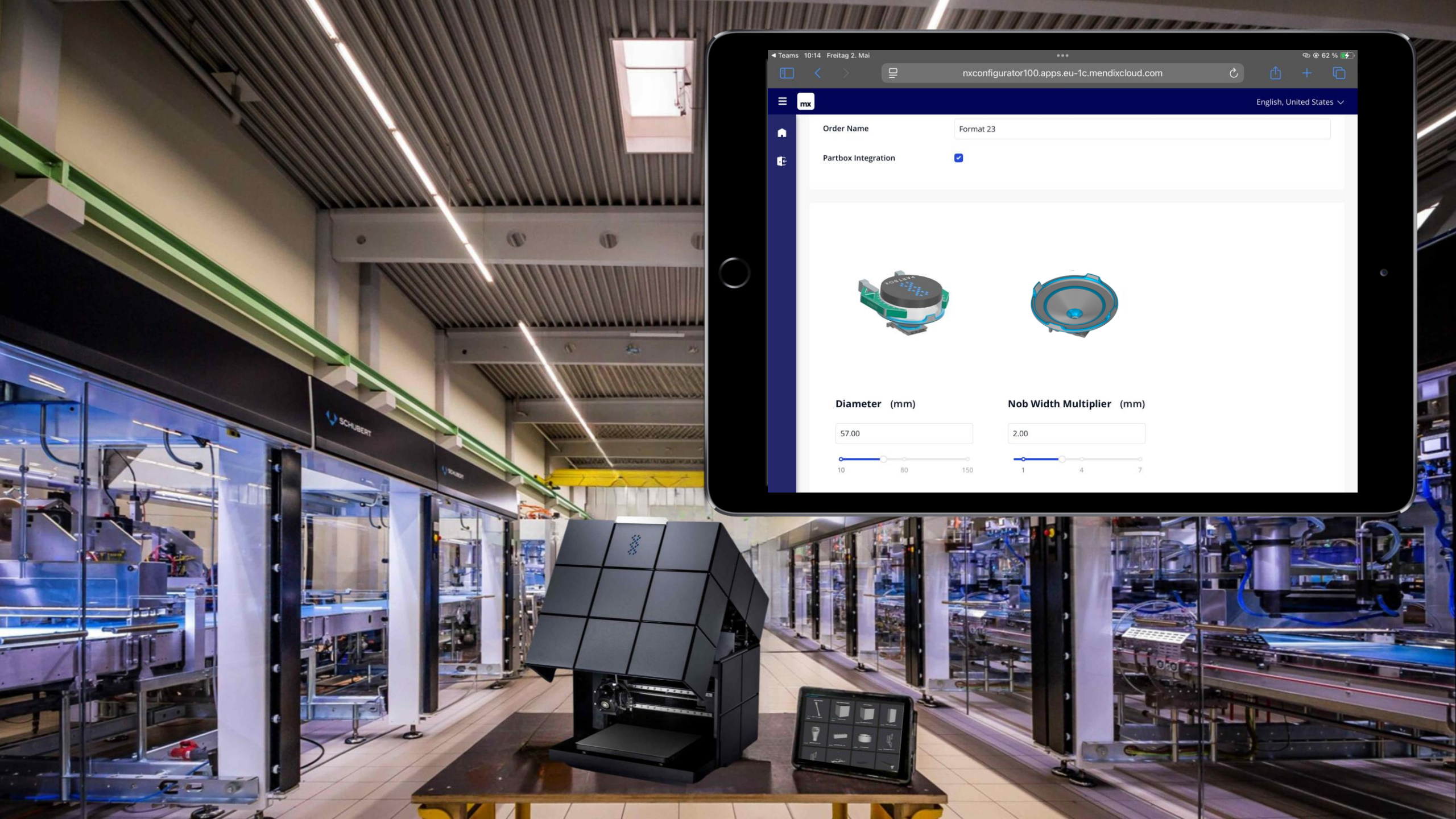




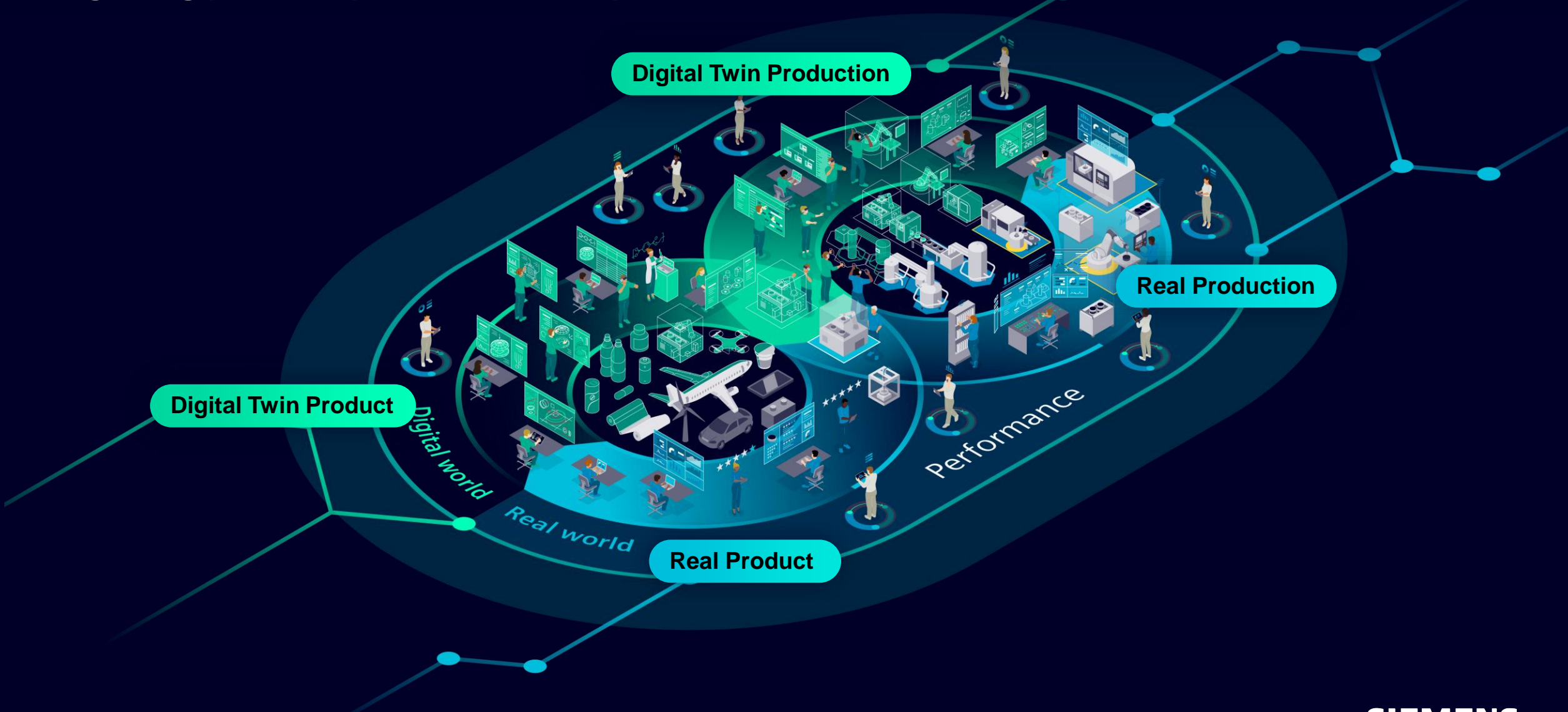


long lead times and waiting
times, high stock

lowest lead times and no waiting
times, no stock



We offer the industry's most comprehensive end-to-end solution for additive manufacturing, integrating product, production, and performance



Siemens Xcelerator and NX



- The foundation of the digital twin is the digital twin of the product
- The creation of the digital twin of the product starts with NX
- A complete mechanical design solution from concept to manufacturing
- Seamlessly integrating across disciplines including electrical and electronic systems
- Break down the barriers to innovation to fulfill your digitalization strategy

Today's Challenges in Industrialization of Additive Manufacturing

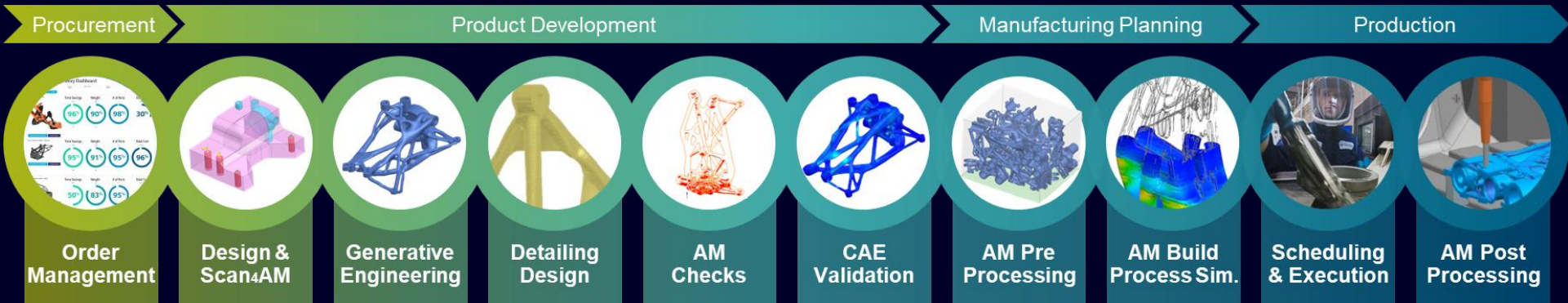
Seamless with NX – One integrated Additive Manufacturing Solution

conventional way of working

disconnected SW
Multiple file conversions

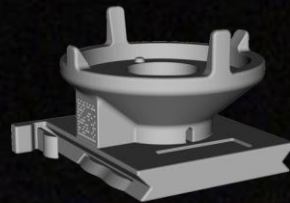


Seamless & associative tool chain



I have no
CAD
System

I have no
3D Printing
Knowledge

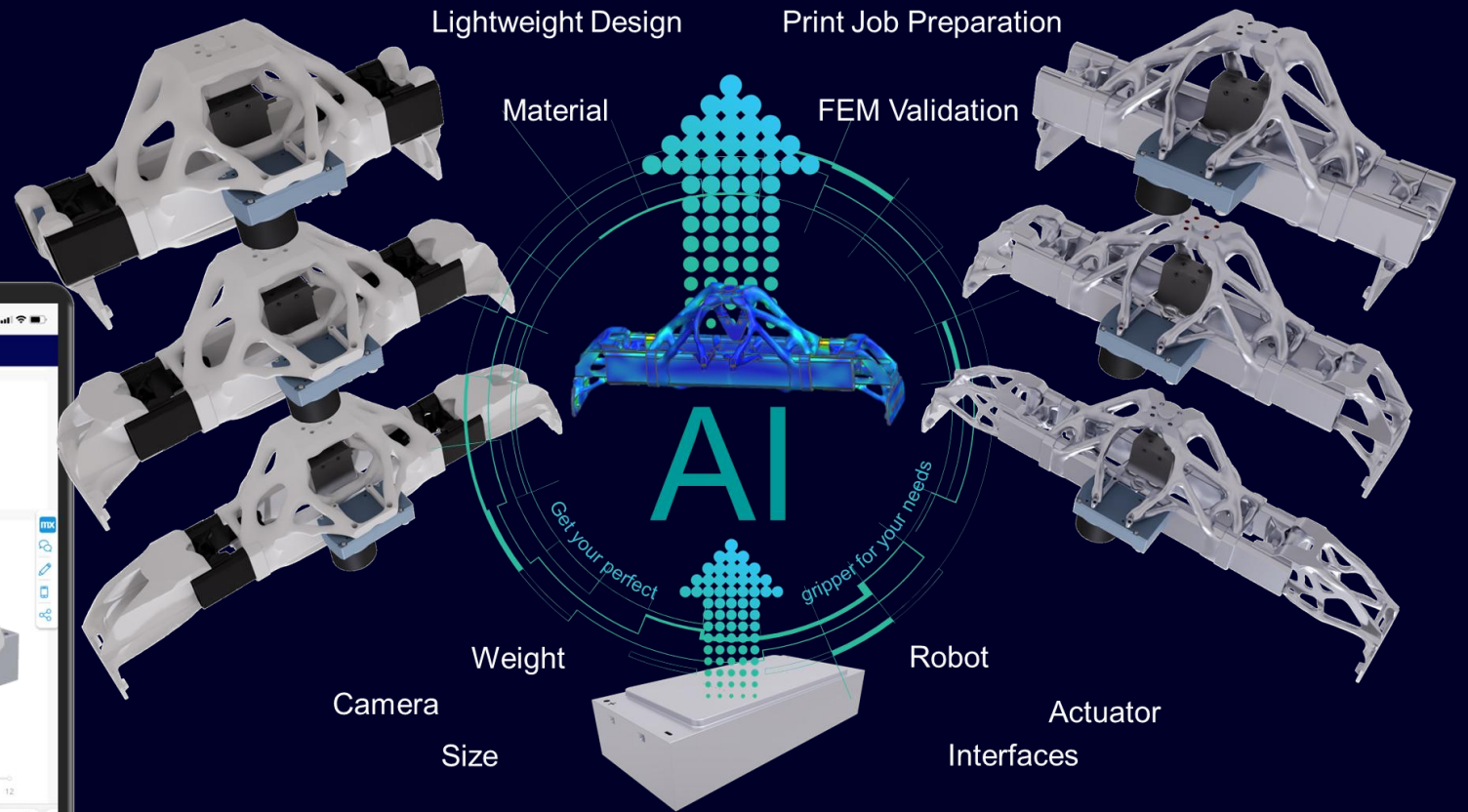
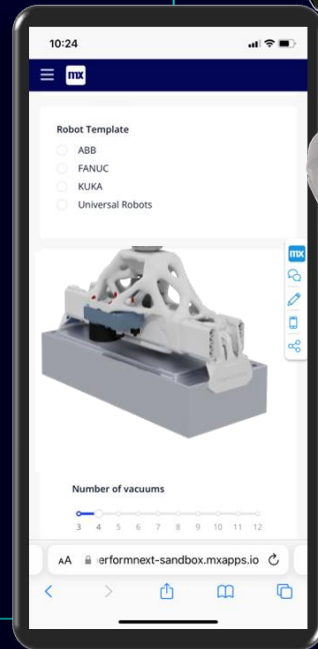


Seamless & associative Tool Chain – and now?

First Apps for Design Variants with AI and Mendix low-code

Create design variations in minutes using Mendix low-code apps and Siemens NX

- Easy variant creation with MENDIX apps for mobile, tablet or PC
- Fully parametric NX design for variant flexibility as base
- Simply adjust steering Parameters by sliders
- No NX or designer skills needed – Just choose
- Easy to use with AI and chatbot integration



The Perception of Code

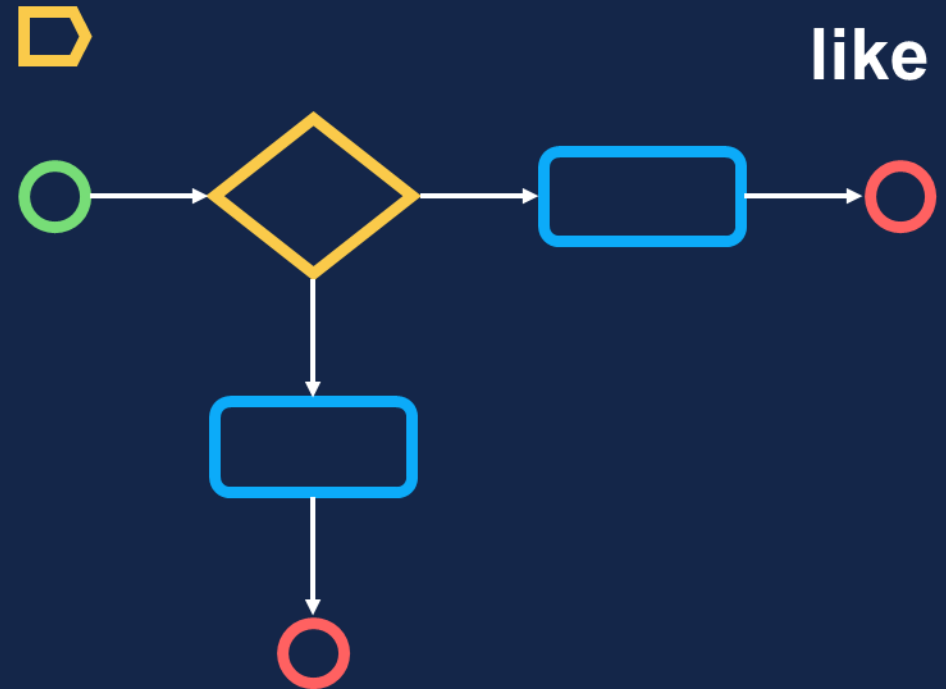
What is... low-code with mendix ???

mx

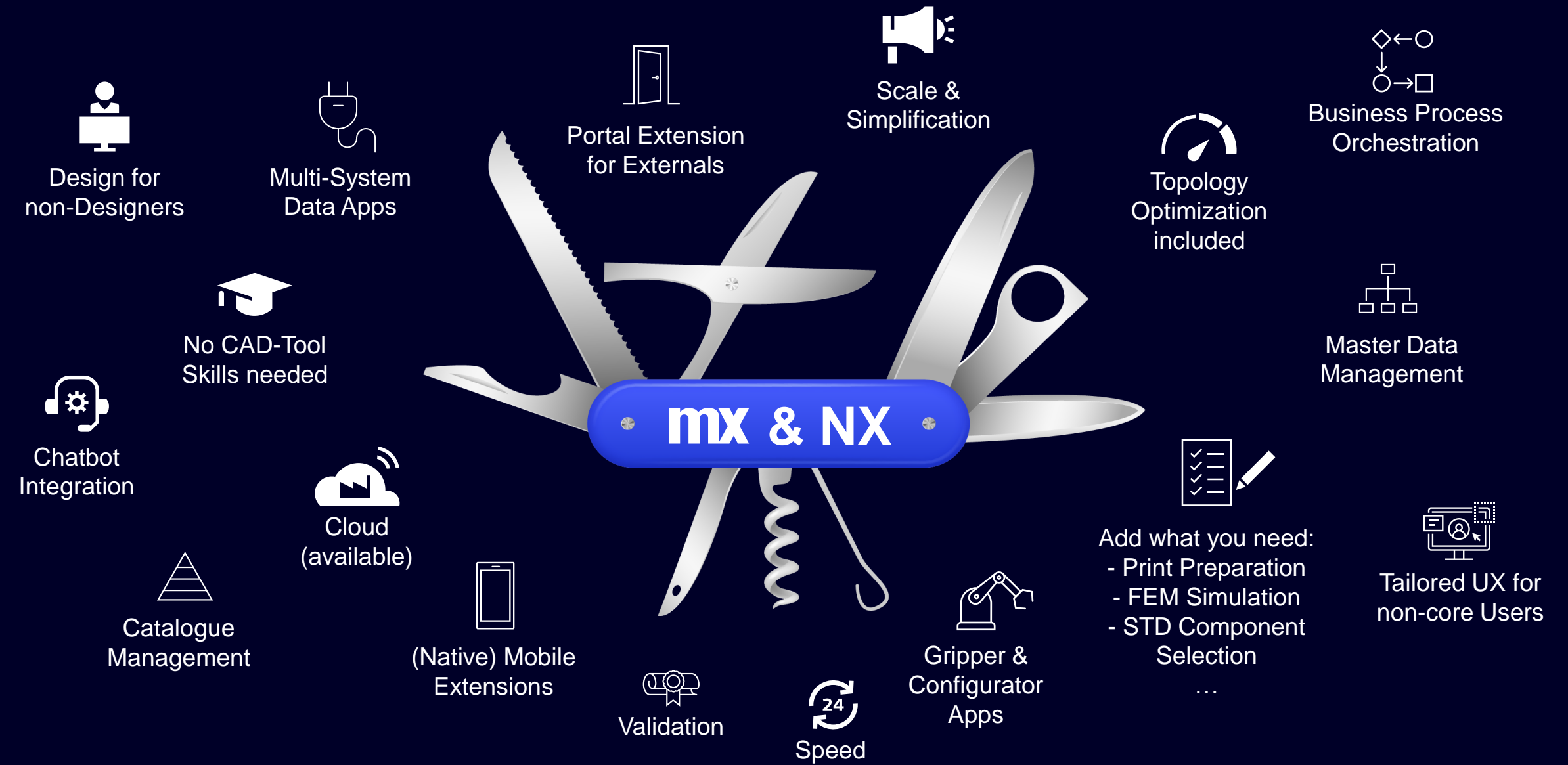
What
people
think
coding
looks like



What coding
also looks
like



NX with Mendix is a Multi-tool



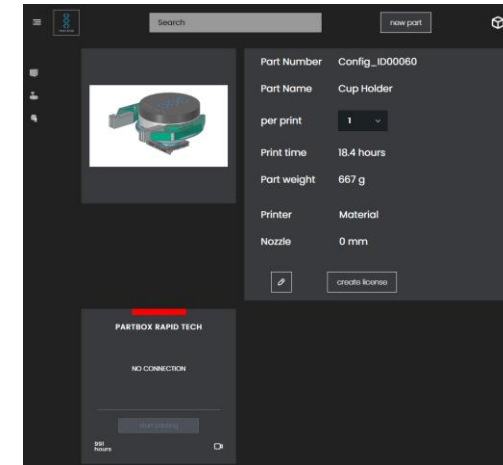
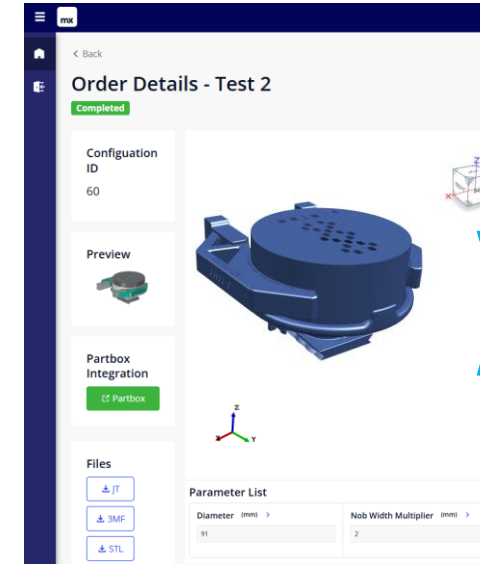
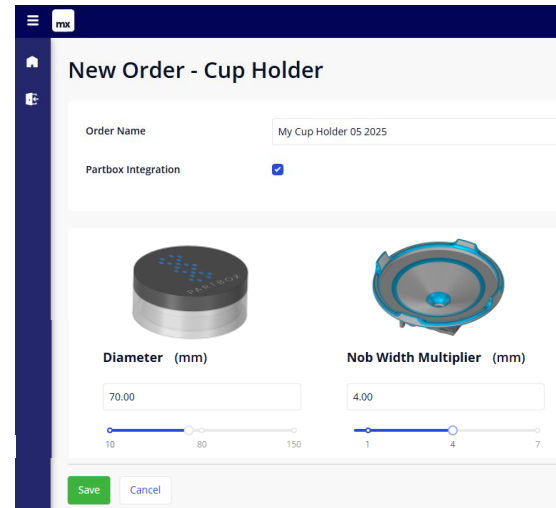
The Way to custom Tools with a single Click

Process Overview – fully associative with SIEMENS NX & easy mendix Access



User Expressions

- = [mm] diameter=150
- = [mm] Extra_Hight=10
- = nob_width_multiplier=2
- = zd=diameter
- = [mm] zL1=14
- = [mm] zL2=30
- = [mm] zL3=28



Original CAD-File

Design the CAD-File as usual in Siemens NX with tools and features that designers use every day

Parameter

Control your own CAD model with simple User Expressions in NX

Configurator App

Use a simple web & cloud-based platform to configure your required tools without CAD knowledge

Individual Part

Within seconds, your individual part variant with 3D-Viewer and download options is available

PARTBOX

With the PARTBOX integration, you can access the new item directly in the application and start printing



English, United States ▾



Welcome to PartGenius!

Your app to configure topology optimized parts powered by Mendix and NX

Chatbot



Cup Holder

Create your individual cup holders

Select Variant



Organizer Boxes

Create your own individual organizer box

Select Variant

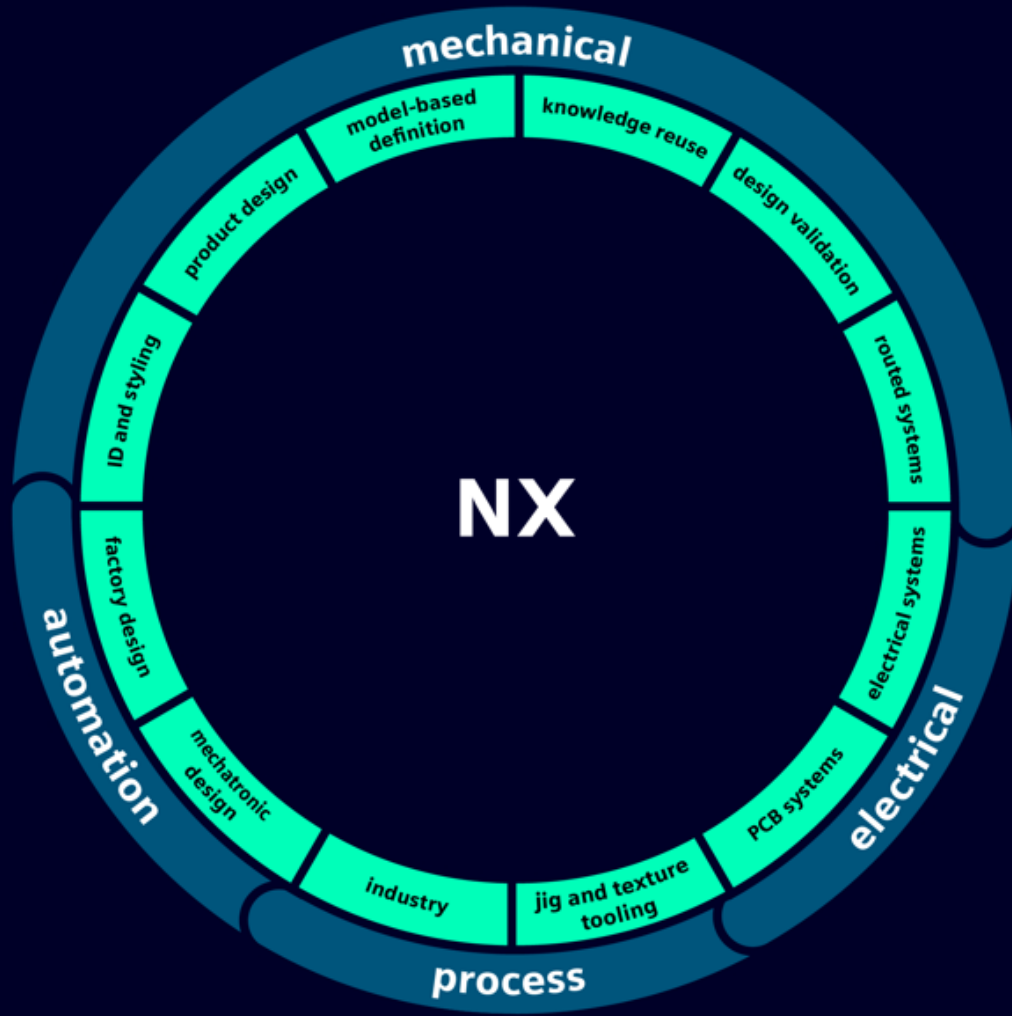


Vacuum Grippers

Create your own individual vacuum gripper

Select Variant

Perfect Match



Mendix - Page

nxconfigurator100.apps.eu-1c.mendixcloud.com

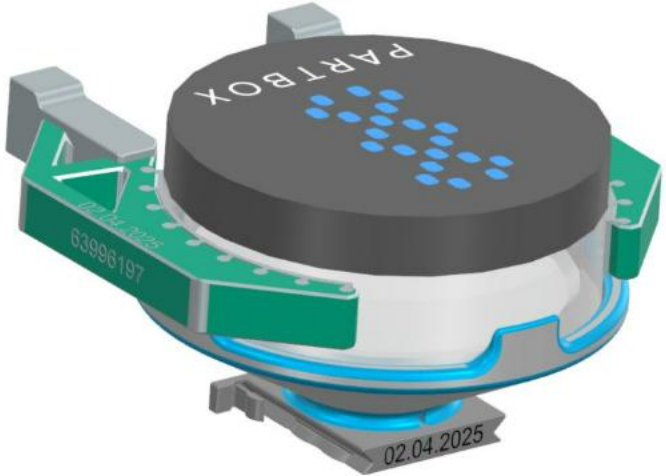
Partbox Logo

mx English, United States

New Order - Cup Holder

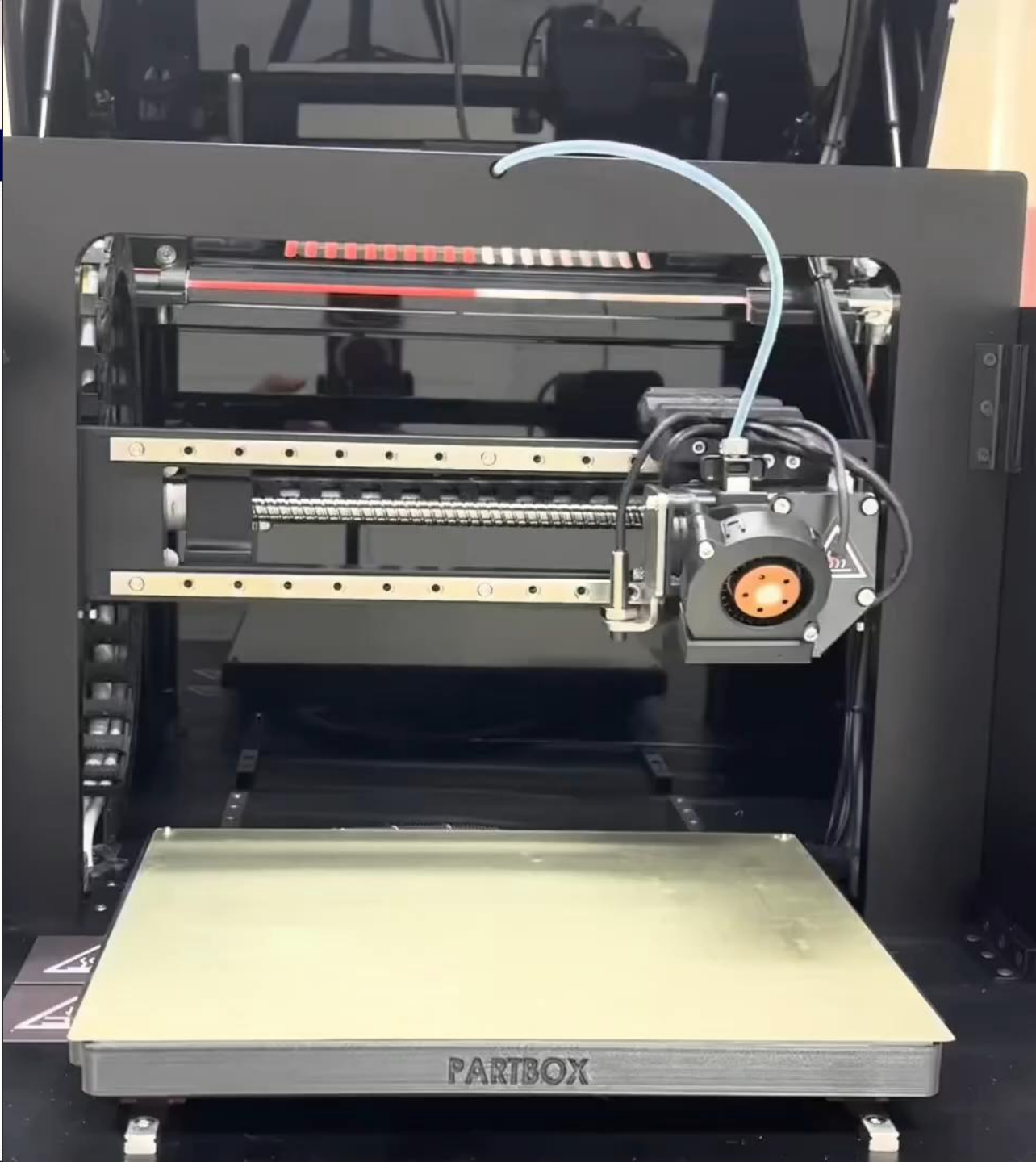
Order Name

Partbox Integration ☐



Diameter (mm)

10 80 150



Q & A



| Contact



Conrad Zanzinger

Technischer Leiter / CTO

E-mail c.zanzinger@schubert-additive-solutions.de



Dennis Nier

Business Development Additive Manufacturing
Automotive PRBD - DACH

E-mail dennis.nier@siemens.com