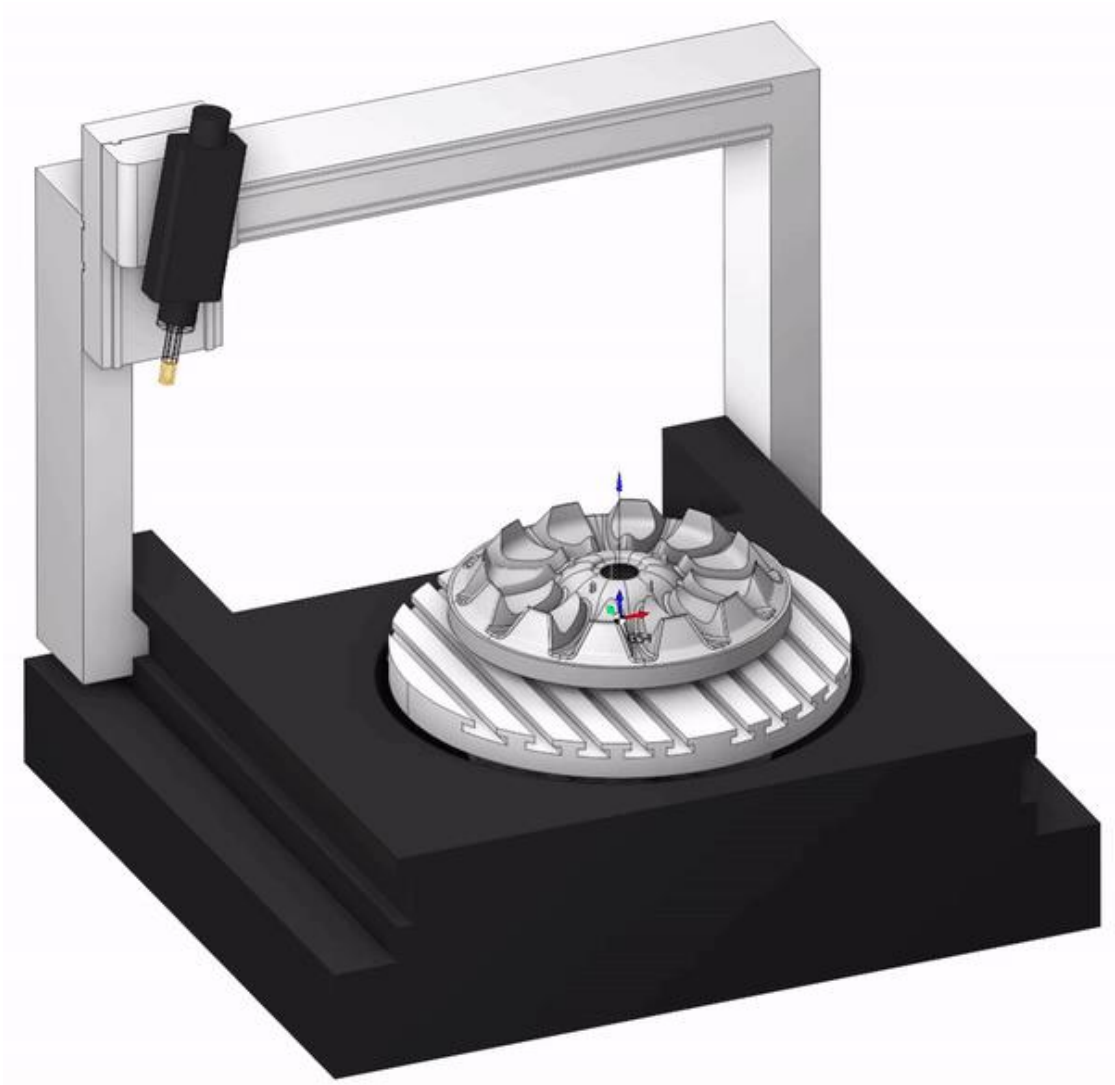
SPRUTCAM X
WORLD CONFERENCE
2023

The History and Future of MachineMaker

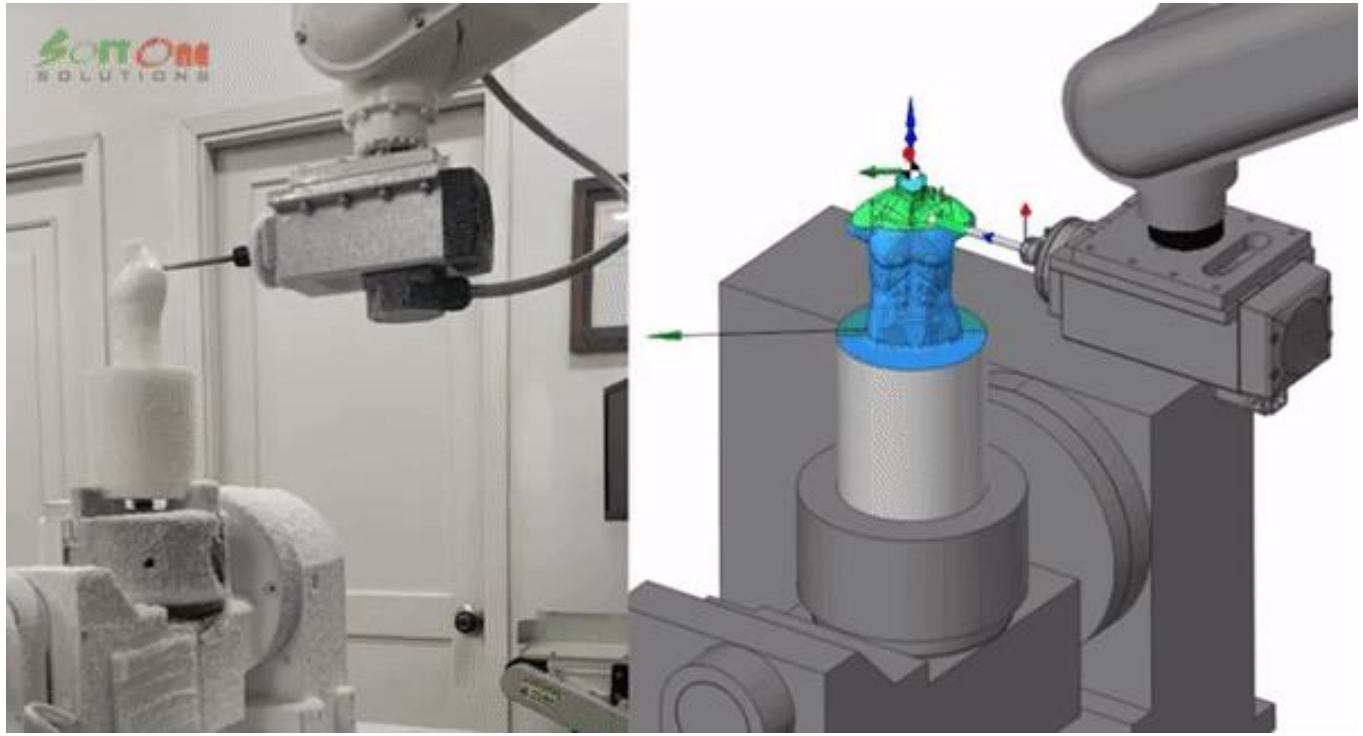
SprutCAM X

- Machine axis limits



SprutCAM X

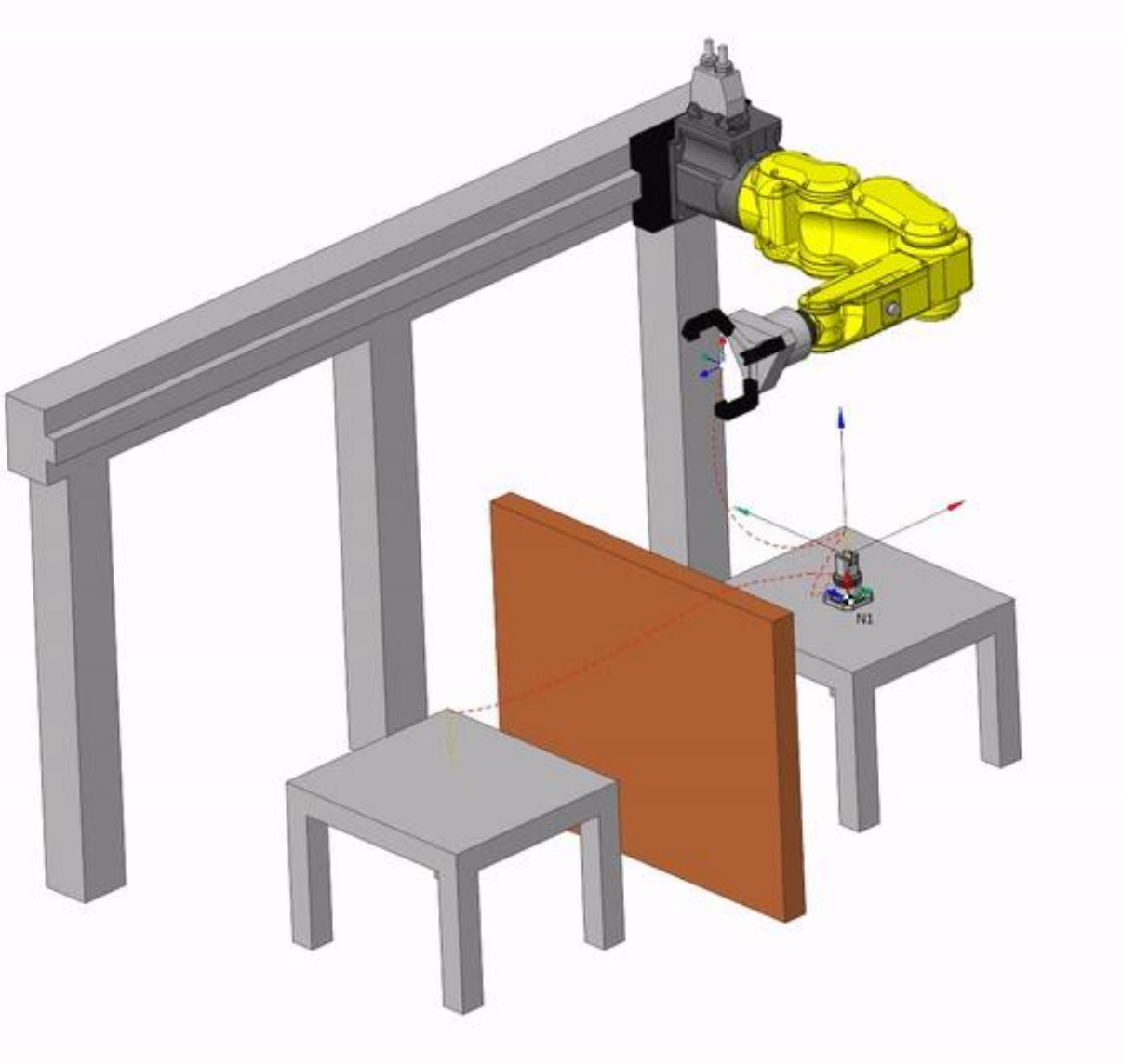
- Machine axis limits
- Realistic simulation



https://softone.net.vn/

SprutCAM X

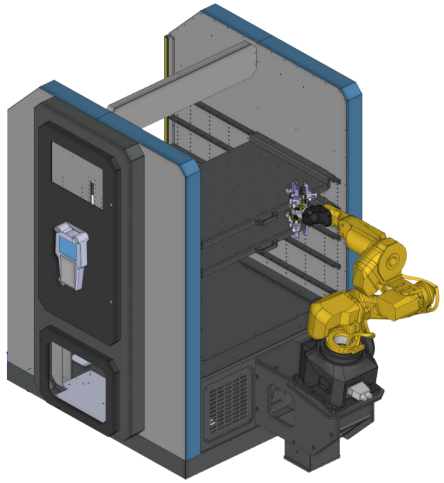
- Machine axis limits
- Realistic simulation
- Detect Collisions
- Avoid collisions



Workflow

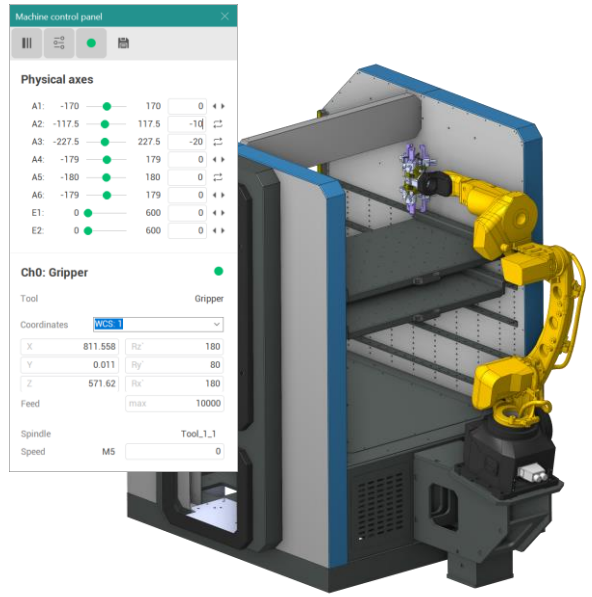
Real machine

DataSheet
3D models



Digital twin

XML + osd



SprutCAM X

G-Code

History

XML — 2007

MachineMaker — 2012

MachineMaker 2.0 — 2021

XML

- Powerfull
- Still works

- Extremely hard to learn
- Easy to make mistake
- Hard to find problem

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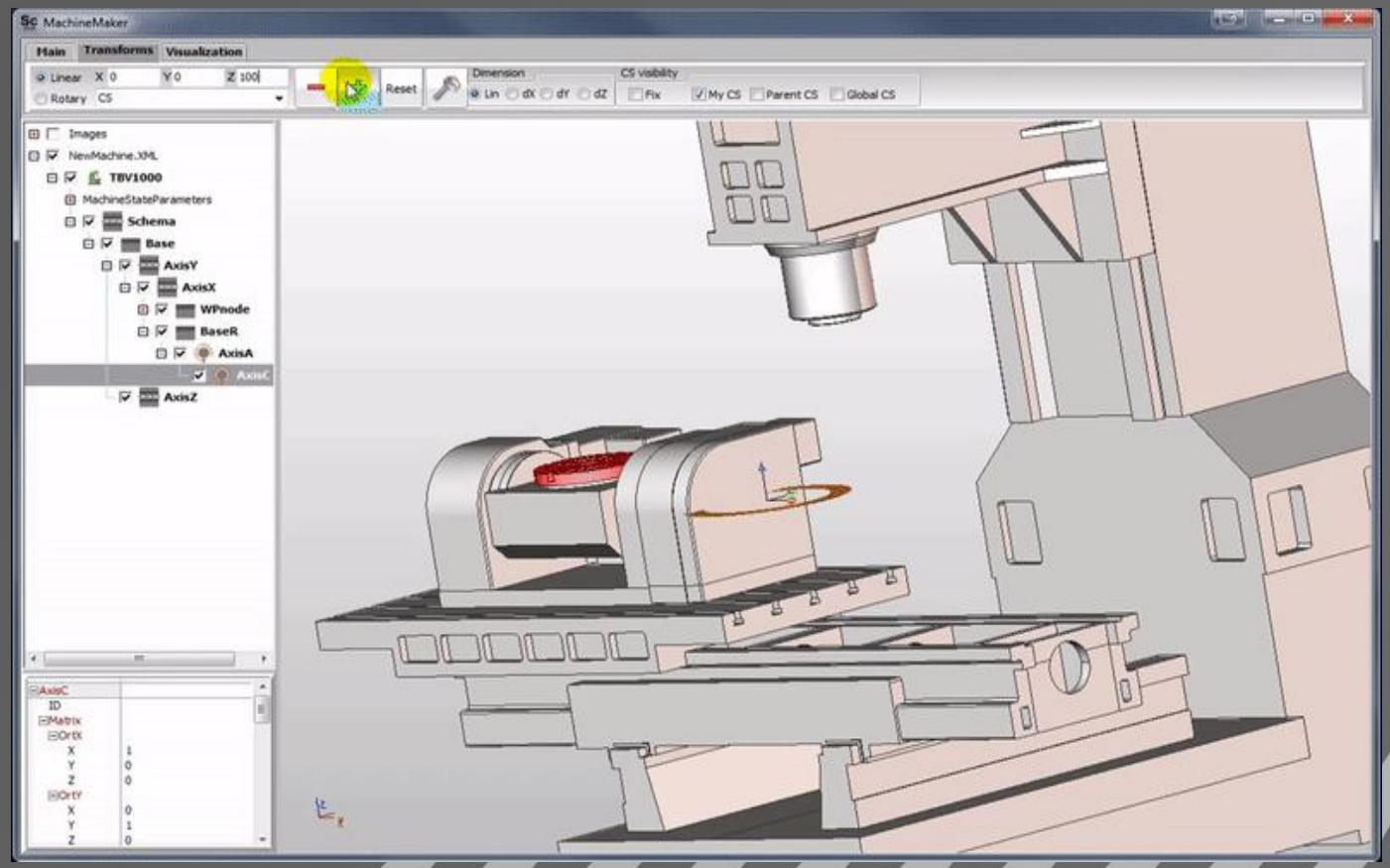
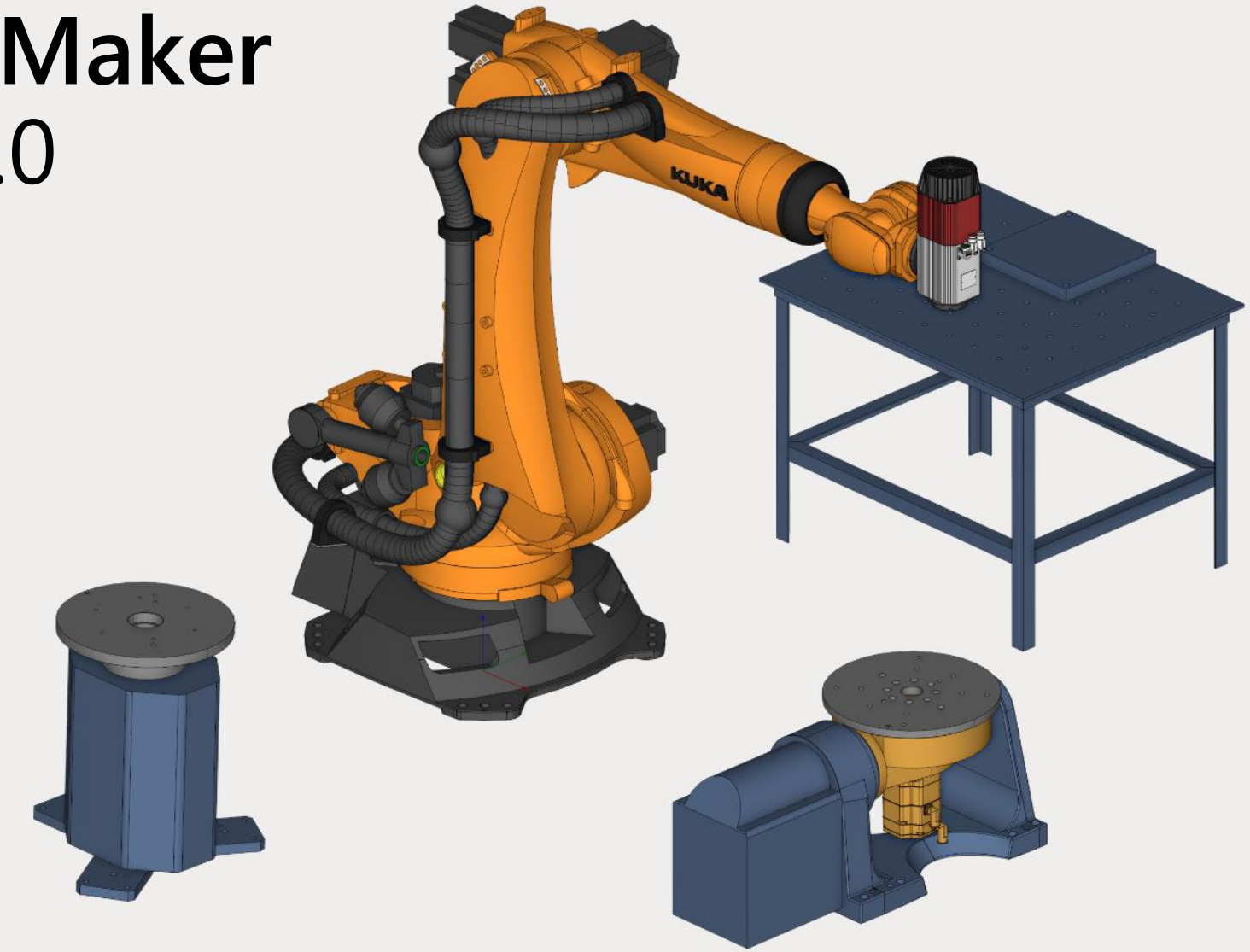
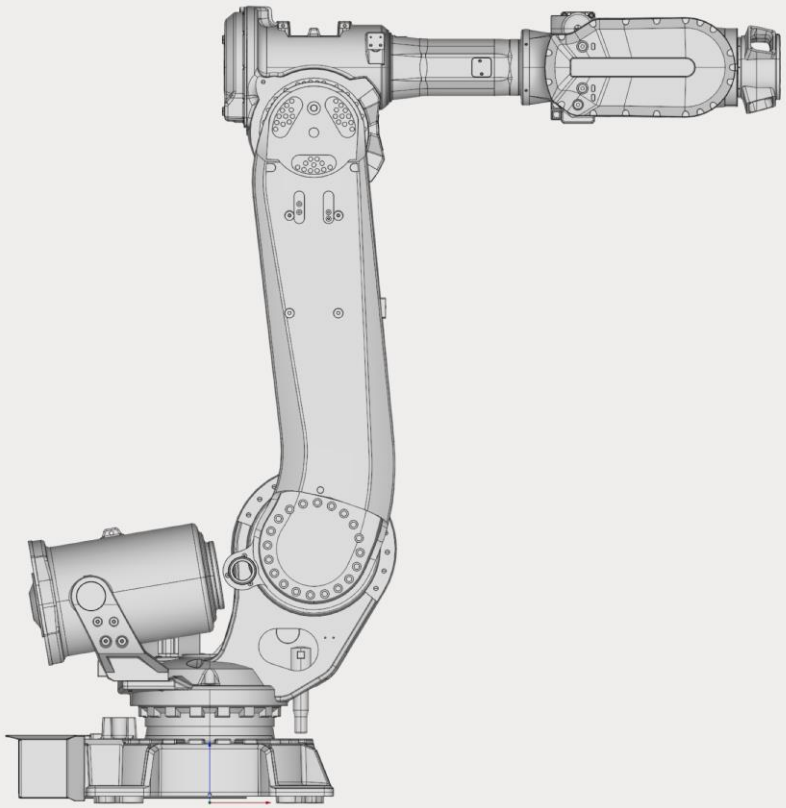
MachineMaker
version 1.0

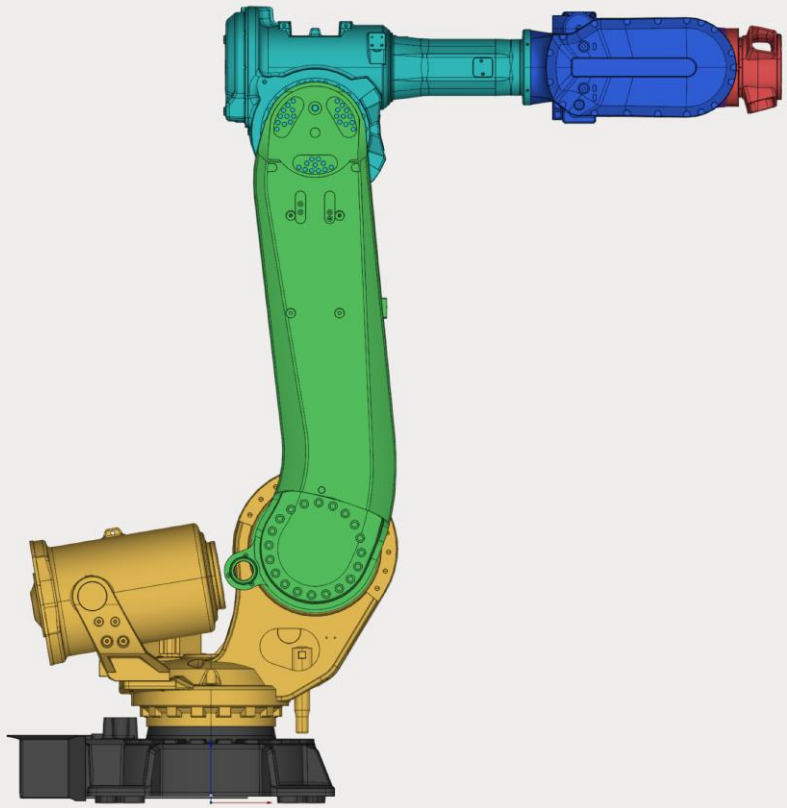


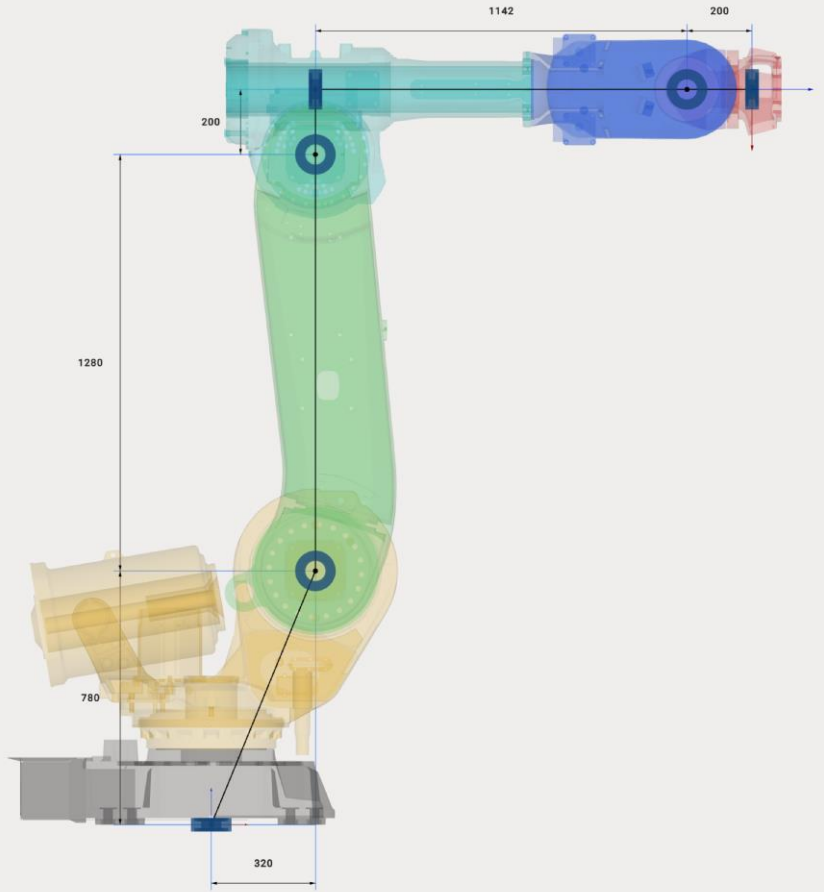
MachineMaker
version 2.0



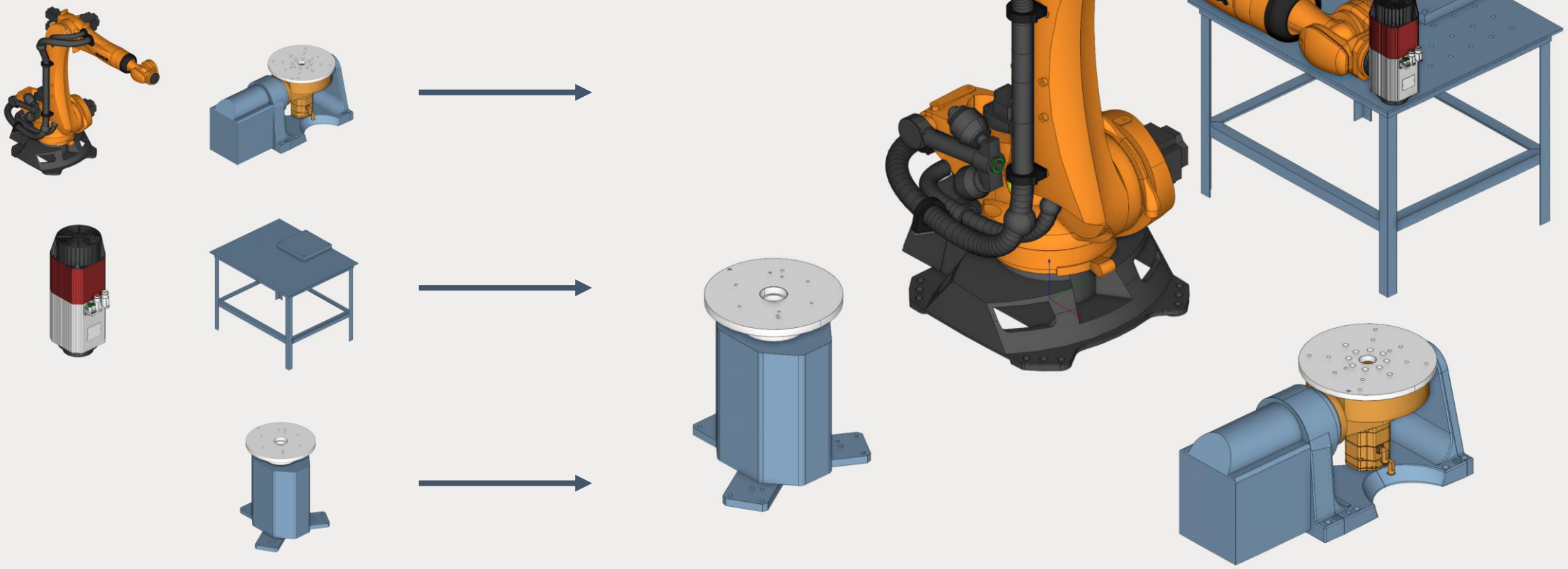
Concept



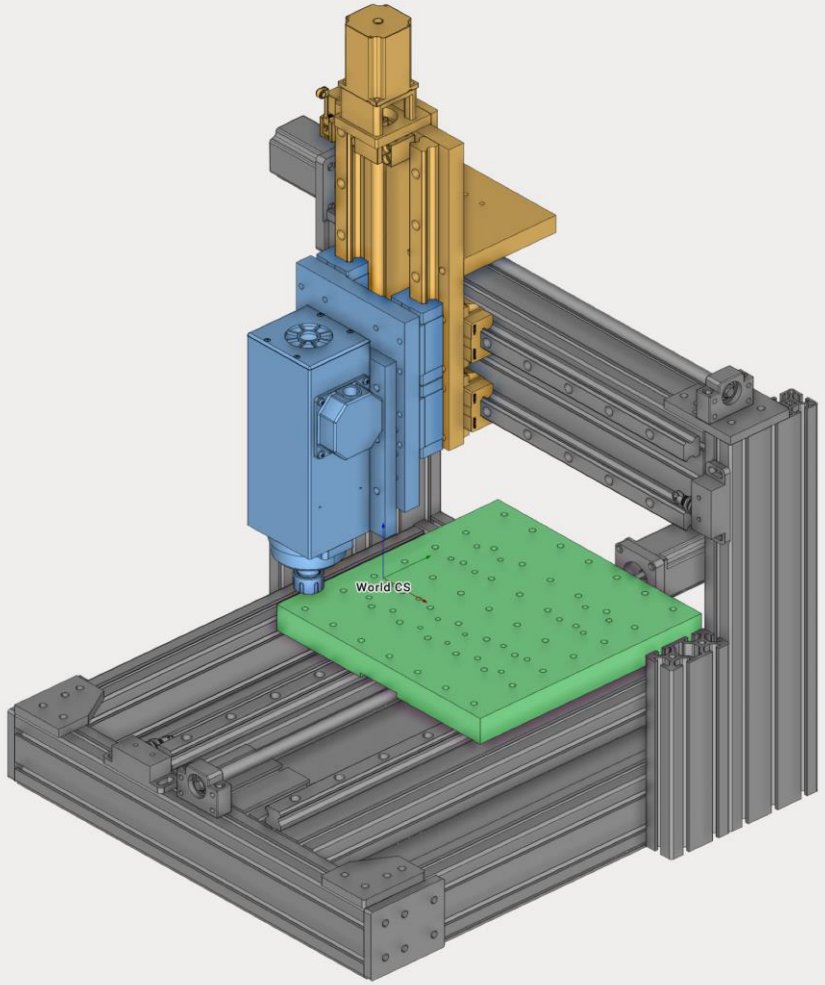


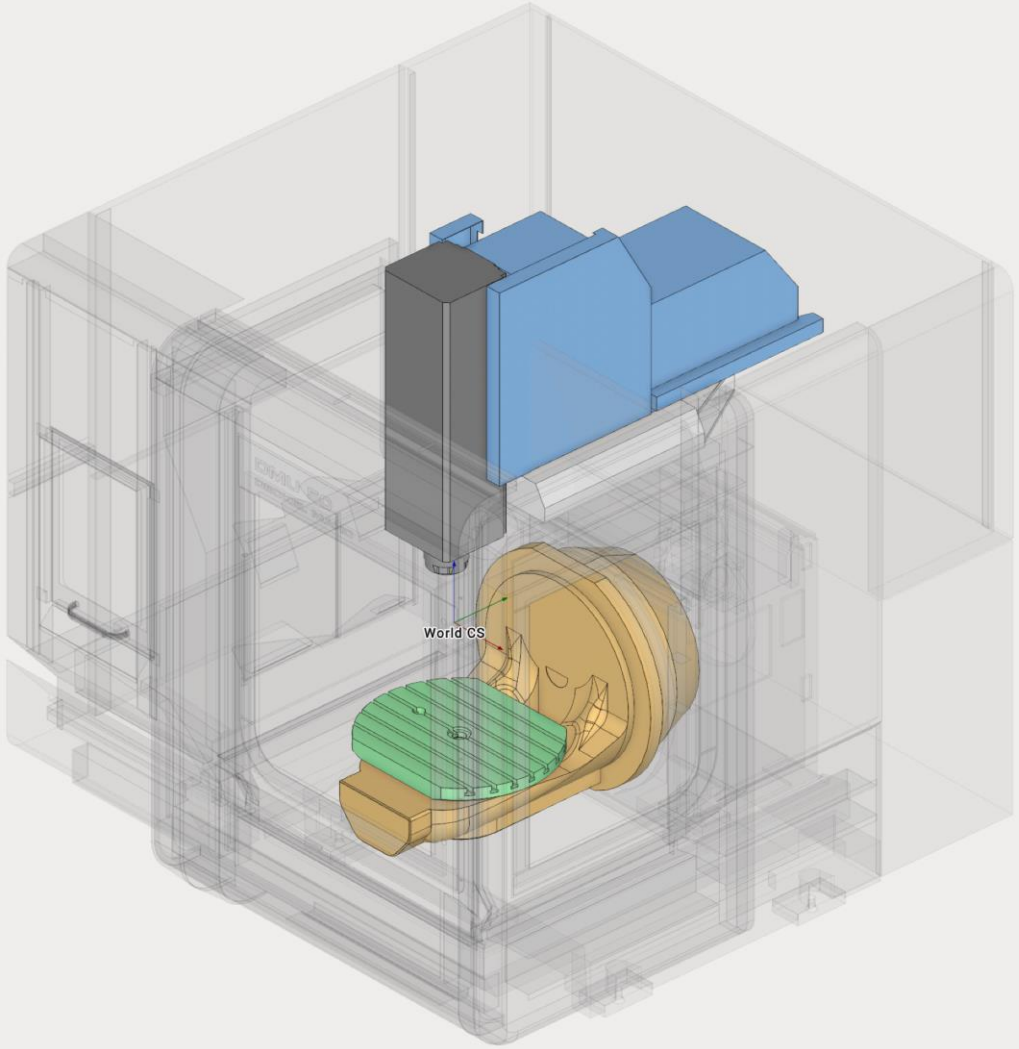


Concept

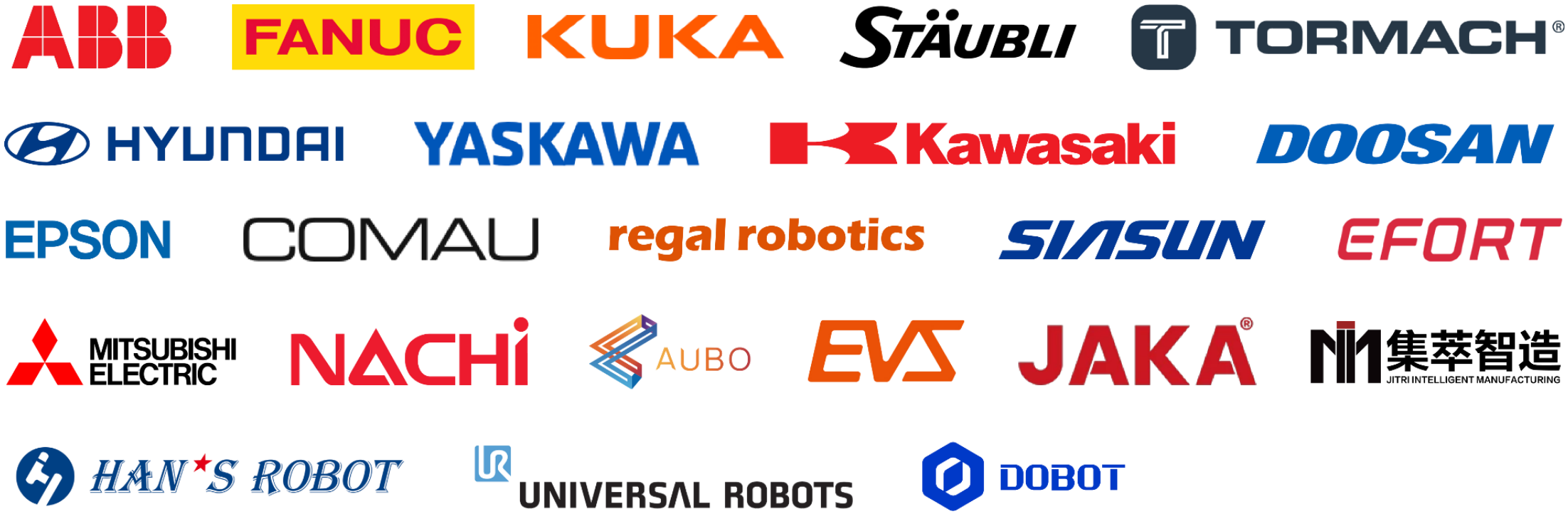


Milling machines



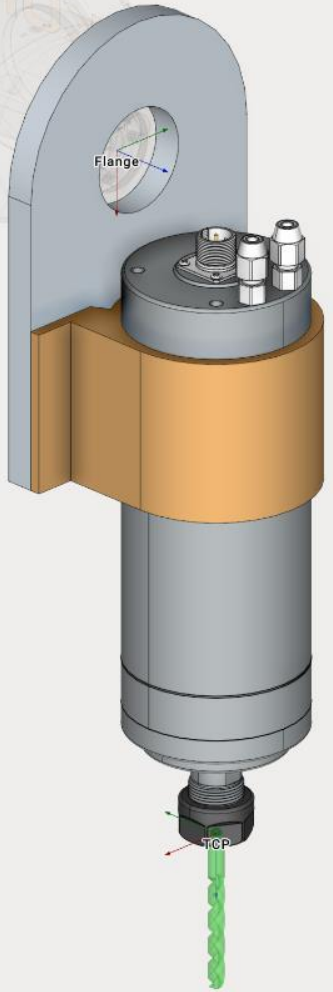


Library



700 ready-to-use mechanisms

TCP Calibration



MachineMaker

KR10_R1100-2

Robot cell

Send feedback

Model

TCP

Style

Calibration

314.7422	X	-90	A
0	Y	0	B
62.73891	Z	-90	C

Tool overhang 0

- [ ] Tool along X-axis
- [x] Visualize tool
- [ ] Transform end effector 3D model with TCP

Automatic data transfer Sync

Download MachineMacker App for scan QR-code and data transmission directly from the robot.

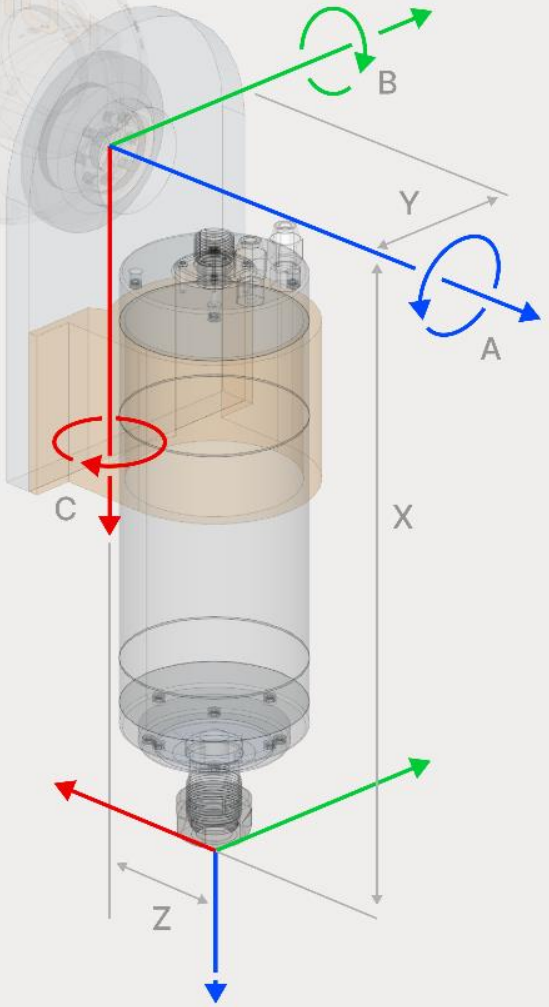
Google Play

App Store

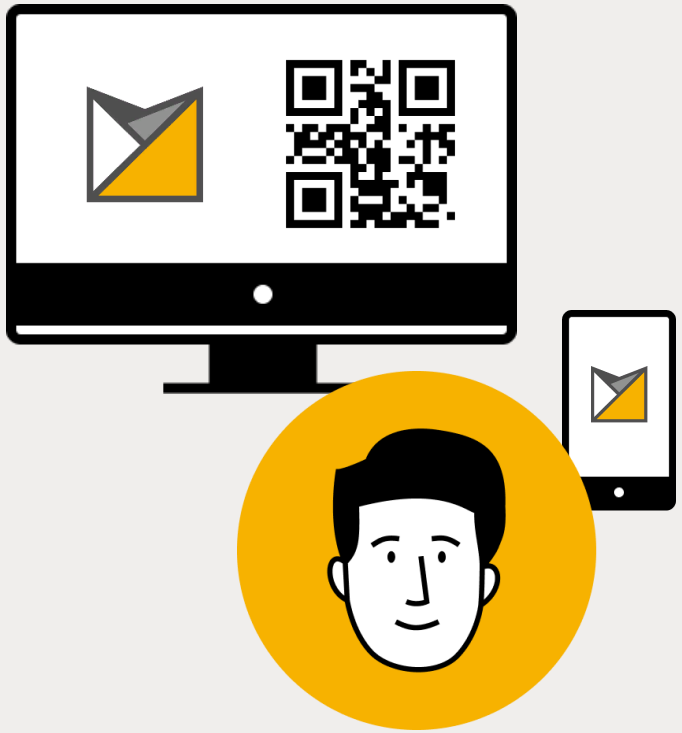
Cancel

Apply

TCP Calibration



TCP
calibration app



Model

TCP

Style

Calibration

314.7422	X	-90	A
0	Y	0	B
62.73891	Z	-90	C
Tool overhang		0	

- [ ] Tool along X-axis
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Automatic data transfer

Sync

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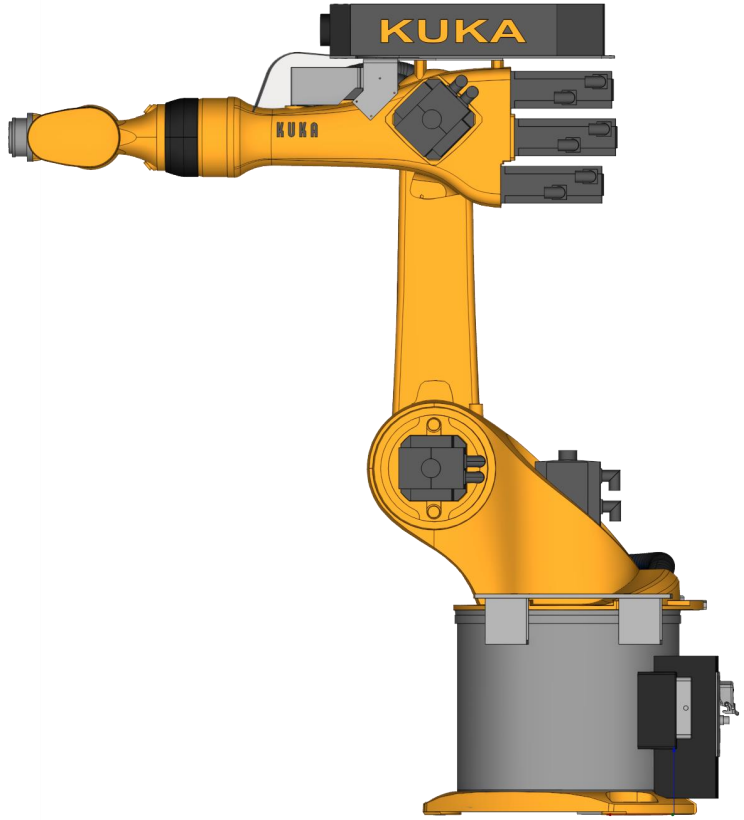
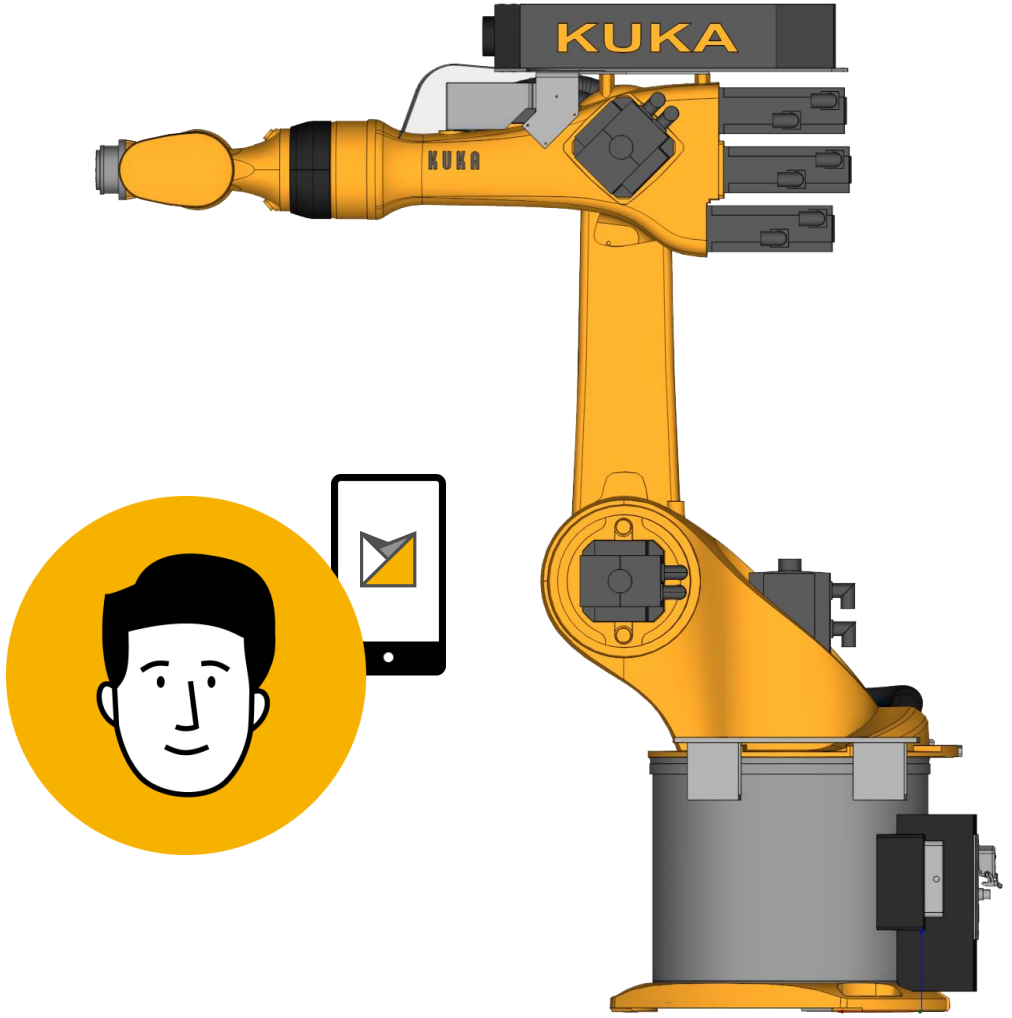
GET IT ON Google Play

Download on the App Store



TCP

calibration app



TCP

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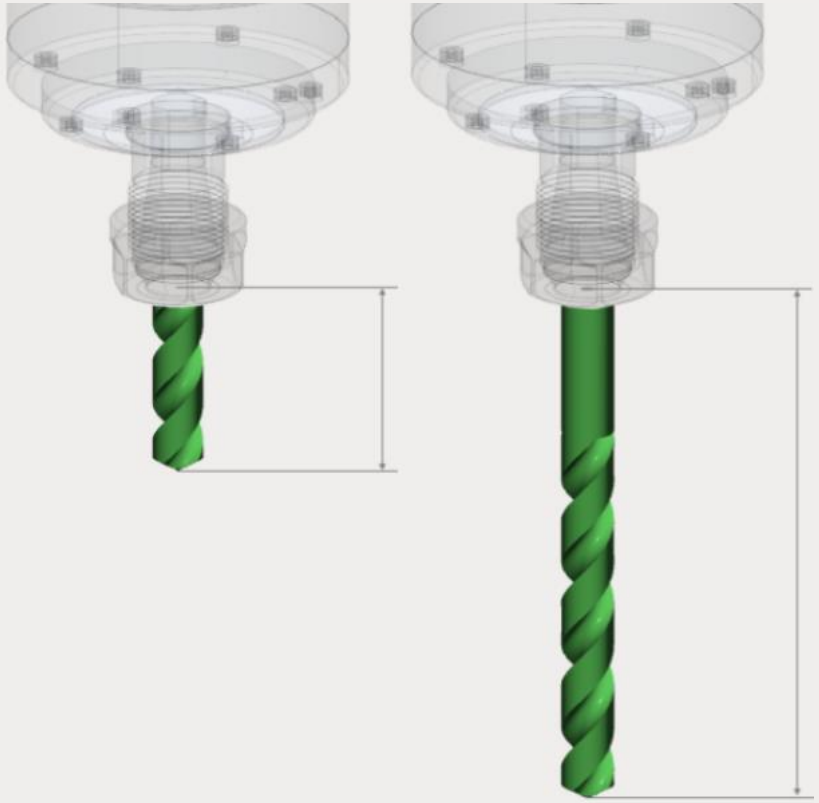
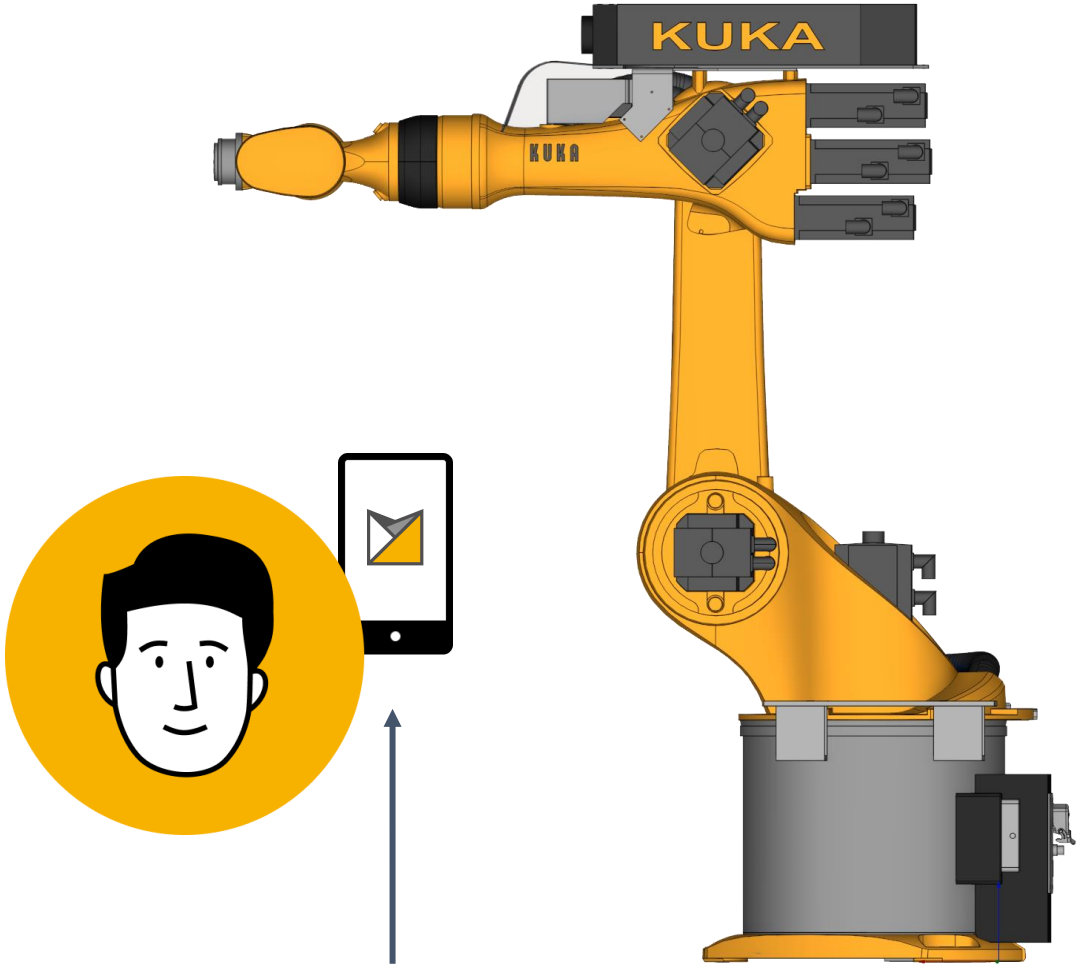


TCP

calibration app



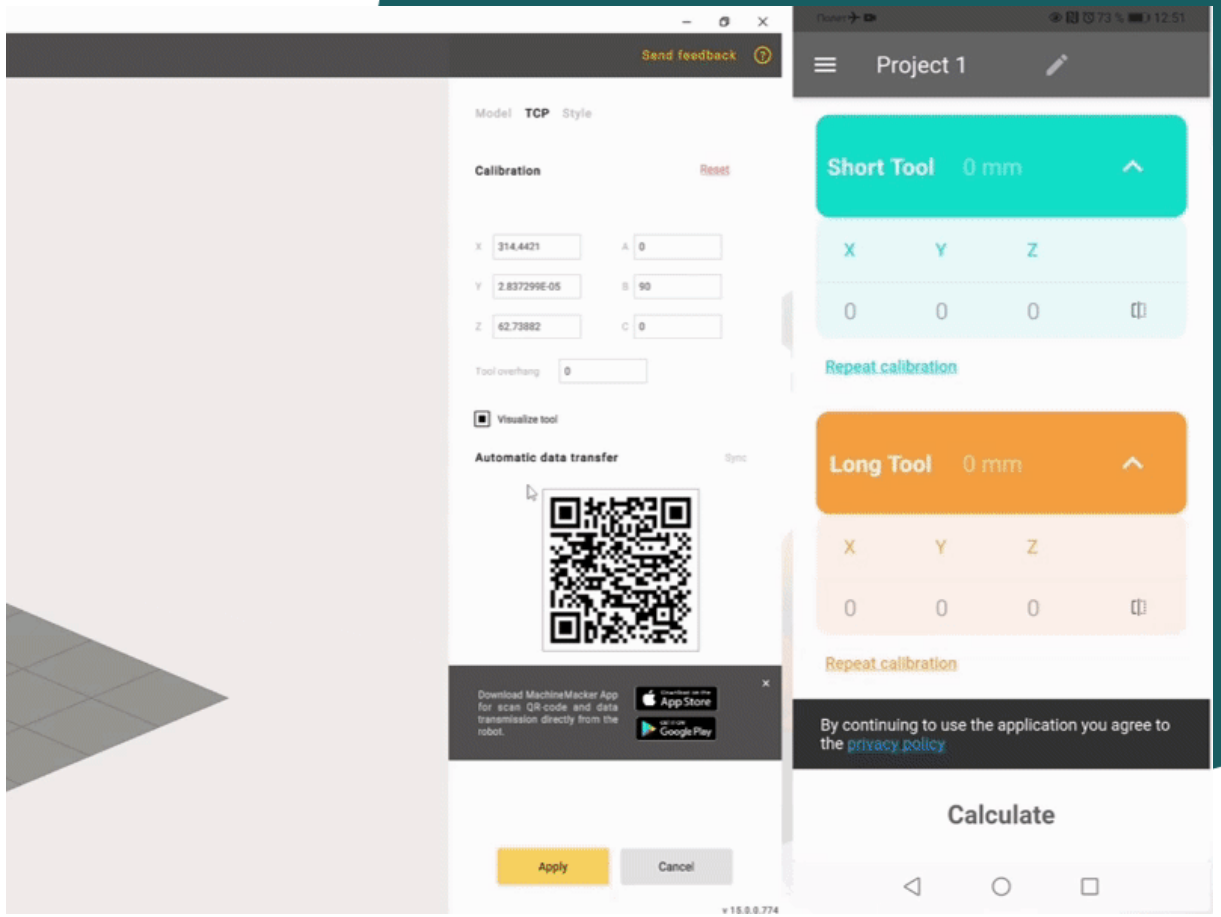
Calibrate TCP

(short tool) x y z

(long tool) x y z

TCP

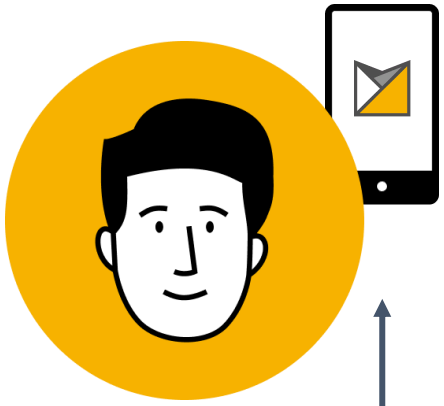
calibration app

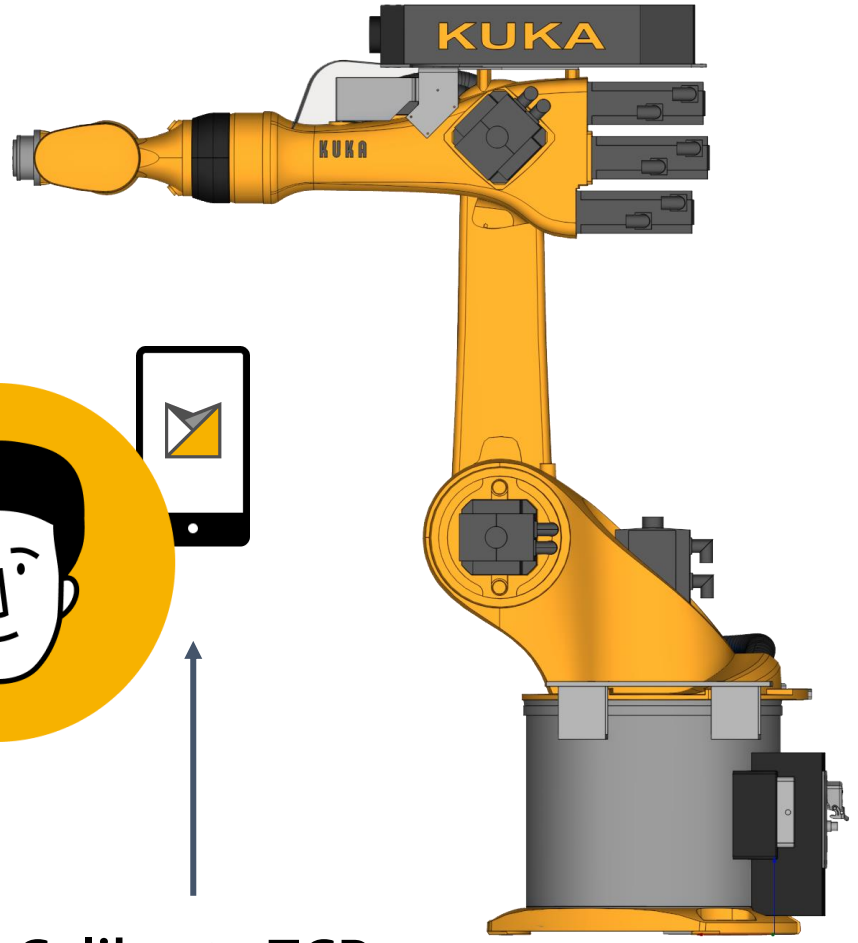


TCP

calibration app

TCP data: X Y Z A B C

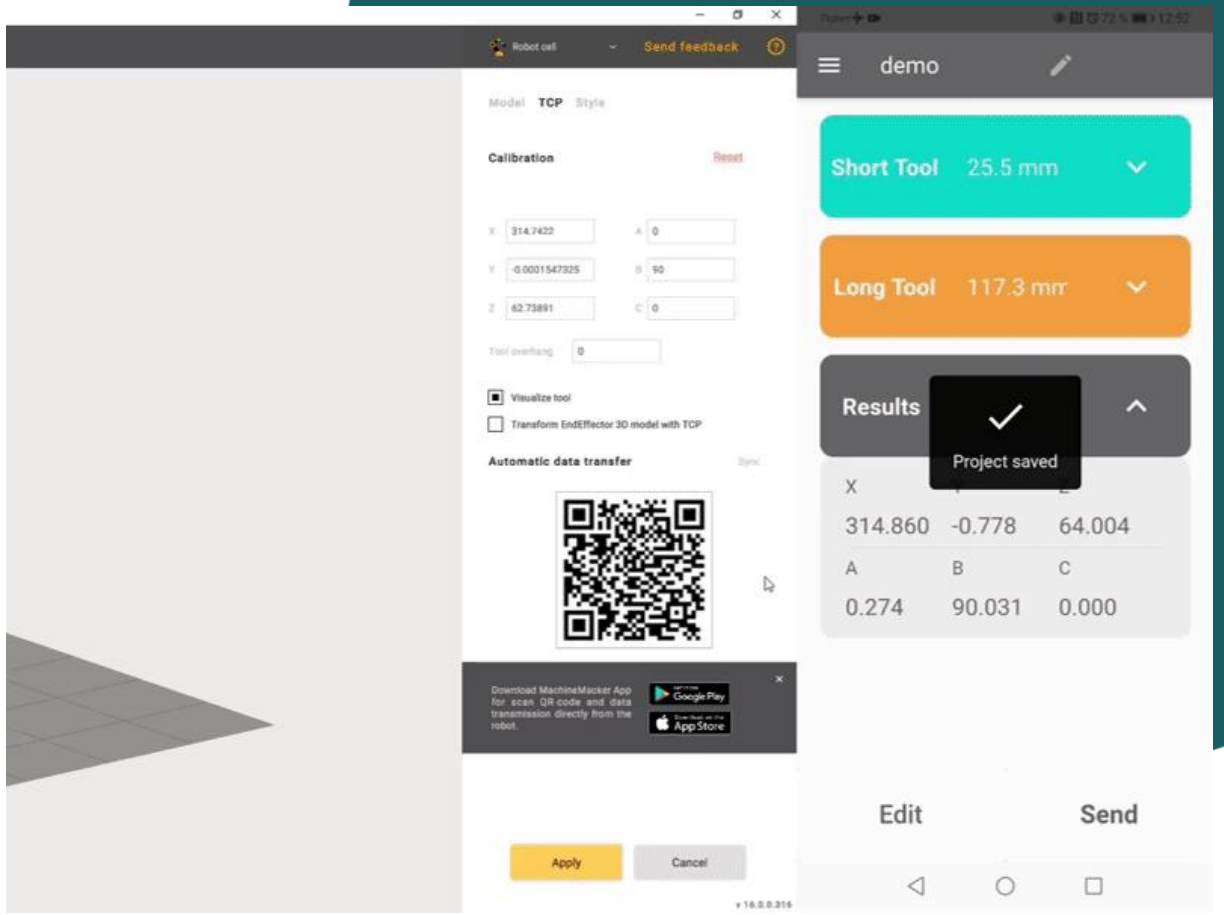




Calibrate TCP
(short tool) x y z
(long tool) x y z

TCP

calibration app

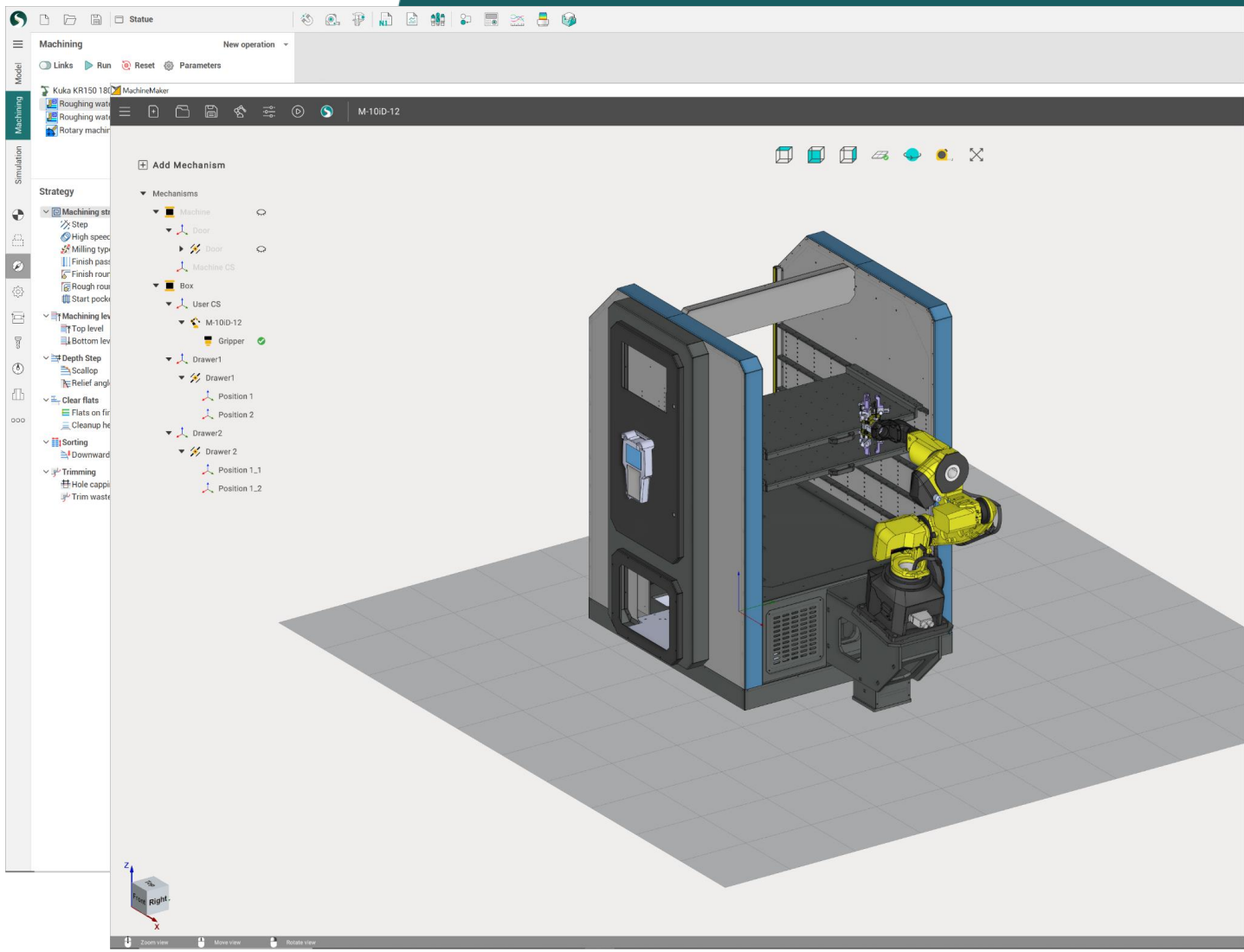


Customers love it

4 000 MachineMaker users worldwide

New features

- Optional axes
- Turn-Mill machines
- Swiss-type machines
- Interactive Simplifier



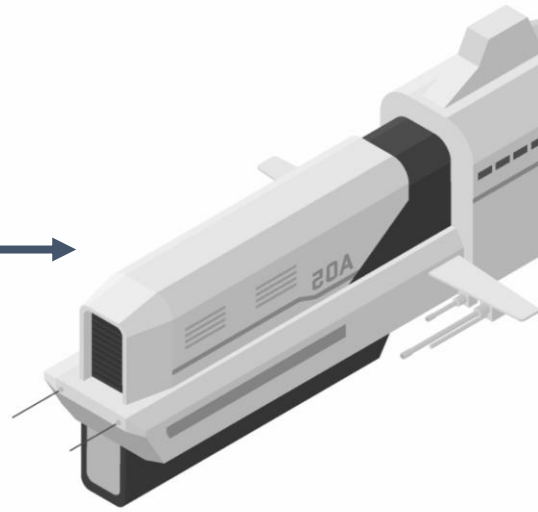
History

XML — 2007

MachineMaker — 2012

MachineMaker 2.0 — 2021

2023

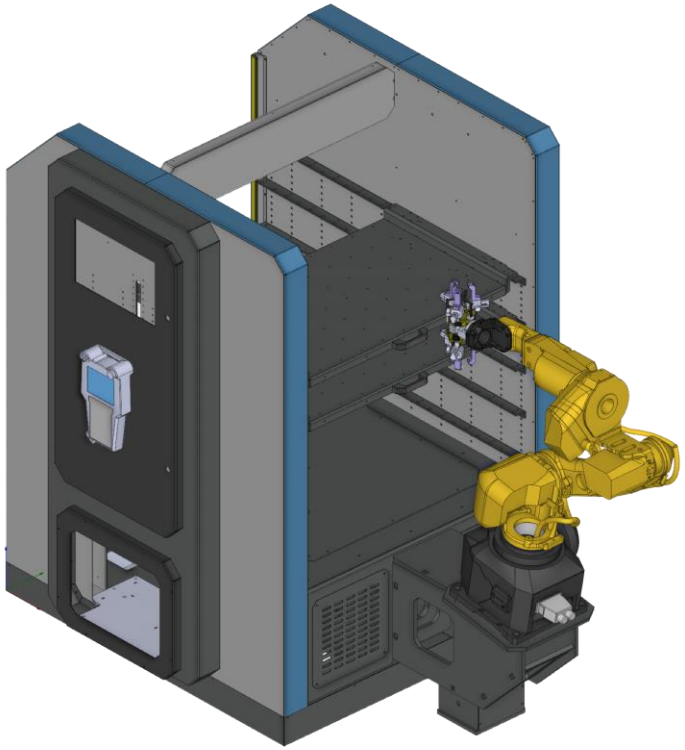


Dreams:

MachineMaker for the Machine Makers

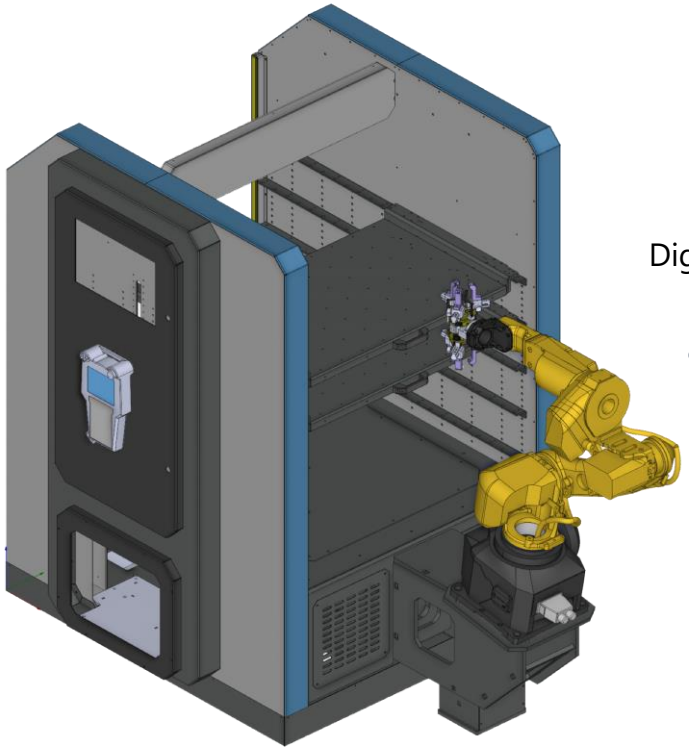
Real robot cell

Digital twin



Dreams:

MachineMaker for the Machine Makers



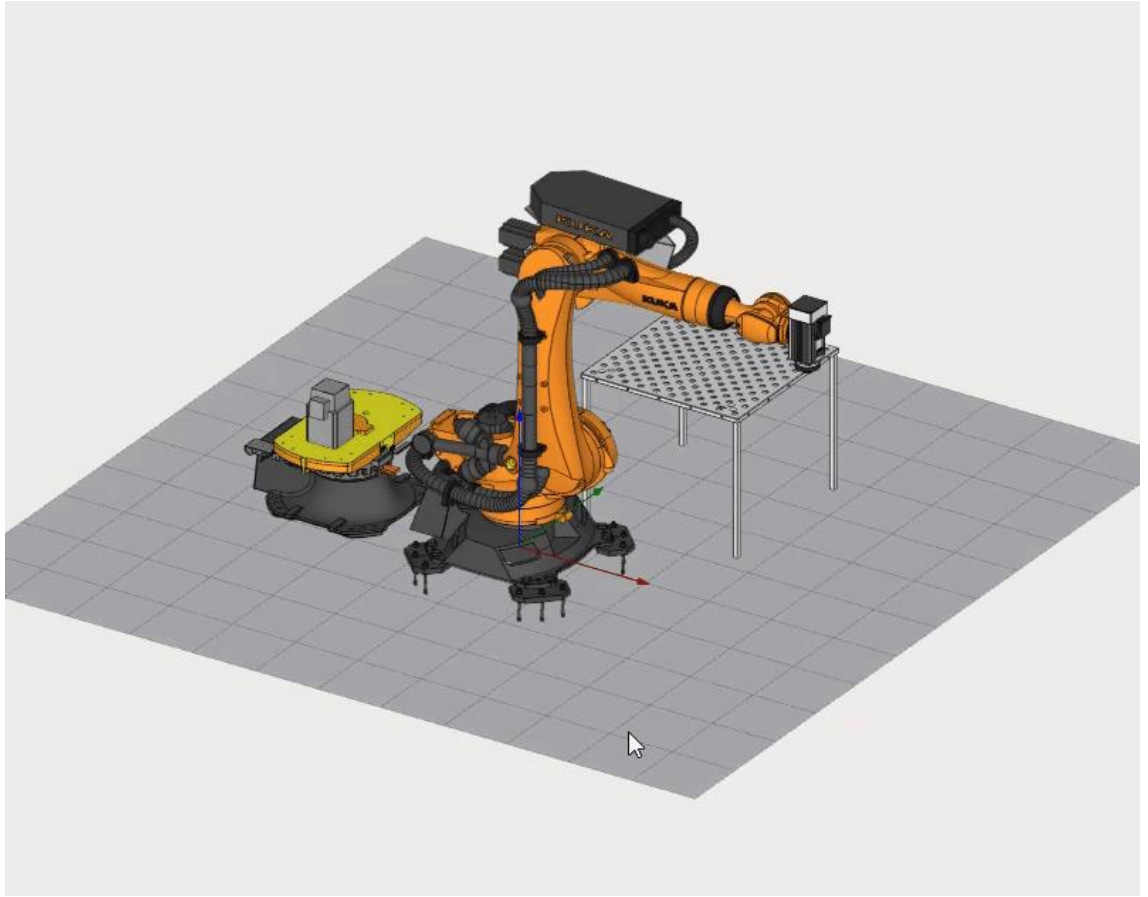
Digital twin

Real robot cell

Dreams:

Robot cell creator

- 700 ready-to-use mechanisms
- 20 vendors
- Create any custom mechanisms



Dreams: VR

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