Simplify complexity in CNC automation.

**Choose retrofitting for your existing machinery.** 

We'll guide you through.

CLAMP**BOOSTER** 

# his is the game changer for the automation of CNC machines.

## The challenge.

Simply ordering a robot and commissioning an integrator is not enough. Because: Who or what tightens the vise in a fully automated production process? And, who or what releases it again?

### The answer

The CLAMPBOOSTER handles it.

The CLAMPBOOSTER extends the robot's capabilities by adding drive for the CNC vises. This allows the robot to perform high-precision clamping operations with manual vises quickly and safely.

### 01 Preparing the vise



The CLAMPBOOSTER is positioned on two dowel pins on the vise during the tightening process, eliminating torsional forces and allowing the robot to work without load. Drilling holes for these two dowel pins is the only preparation of the vise that is needed.

### 02 Attaching to the roboter arm



With the cobot, the CLAMPBOOSTER is screwed between the ISO flange and the gripper. For industrial robots, mounting takes place directly on the tool flange of the robot arm.

### 03 Tightening the vise after having loaded the workpiece



Once the robot has placed the workpiece in the vise, the robot guides the CLAMPBOOSTER directly to the vise. The CLAMPBOOSTER closes the vise according to the configured torque.

### 04 Releasing the vise after machining



After the workpiece has been processed in the milling machine, the CLAMPBOOSTER opens the vise. As the final step, the robot unloads the workpiece and the production process starts again (see step 3).

The existing production process remains untouched and can be continued as usual - thanks to the fully automated CNC production provided by the CLAMPBOOSTER without manual components, working 24/7.

# his is the simple solution to complex automation by just adding one end of arm tool.

### Automation with fewer costs upfront.

**Existing machines? Manual vises or clamping systems? A machine without connections for pneumatic or hydraulic lines?** The CLAMPBOOSTER handles it all. Developed as an EOAT, it saves a complicated cost-intensive conversion of the machining center.

### Maximum efficiency without commitment to highly complex systems.

**Industrial robot** or **cobot? Various vise manufacturers, power-assisted systems? Using several vises on one machine?** No problem for the CLAMPBOOSTER. Interchangeable adapters make it compatible with almost all systems available on the market.

### Exact precision and intuitive operation.

1.95 kg? 10 x 10 cm? Yes, the torque of up to 100 Nm that the CLAMPBOOSTER can apply is enormous. It operates **without load on the robot**, attachment bolts in the vise eliminate torsional forces. The opening travel of the vise can be adjusted precisely by programming the spindle revolutions using a **software-based operating procedure.** 



individually adjustable torque, 5-100 Nm

# he CLAMPBOOSTER Plug & Play.

# **Technical Data**

Modell	CB-10
Individually adjustable torque	fully automatic and flexible adjustment of the pre-set torque from 5 - 100 Nm
Controlled opening width	adjustable based on the spindle revolutions on the vise
Very short closing and opening times	approx. 5 seconds
Operating mode	electric
Drive	spin socket, for different wrench sizes and head shapes of the vise spindle
Docking Plate	quickly interchangeable, compatible with vises from different manufacturers
Blow-off nozzle	integrated
Robot interfaces	analog/digital or Profinet
Software updates	online
Remote maintenance	integrated
Mechanics	no servicing needed
Weight	1.95 kg
Dimensions "Drive"	LxWxH 120mm x 100mm x 100mm
Connection	100 - 240V AC, 6-2.5 A, compressed air 5 - 6.5 bar

# The CLAMPBOOSTER Set

# <complex-block>

# Accessories





### www.clampbooster.de

A product by idee-werk. Made in Bavaria, Germany.