



MANUFACTURING WITHOUT SPECIALISTS

The first smart Machining Center for Rapid Prototyping.



## **OUR VISION**

VISION OVERVIEW

TECHNIC MACHINE SOFTWARE APPLICATIONS EXAMPLES

**DETAILS FFATURES** PLUG&PLAY

**OPERATIONS** CONTROLS SYSTEMS

#### AI-ASSISTED MANUFACTURING WITHOUT SPECIALISTS

Our intelligent plug-and-play machining center enables companies to set up their own manufacturing - without skilled personnel and with full supply chain sovereignty. From prototype to small batch production









#### HIGHLY COMPACT

#### Industrial 5-axis

machining center in size enables manufacturing of the fridge.

#### INTUITIVE

#### AI-assisted control

without specialists.

## **OVERVIEW**

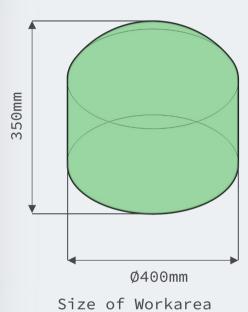


The LBR.one combines precision, flexibility, and ease of use for automated manufacturing in the smallest space.

01

VISION **OVERVIEW** 





02

TECHNIC MACHINE SOFTWARE APPLICATIONS EXAMPLES

- **Compact** 1  $m^2$  footprint, 80 cm wide, 5-axis machining.
- ▼ Maintenance friendly Slide-out cooling and chip system.
- ▼ Portable Integrated guides, Euro pallet dimensions.
- Ready to go Autonomous operation, web-based controls.

03

DETAILS FEATURES PLUG&PLAY

### **MATERIALS**









Plastics Aluminium

Steel

Stainless Steel

Titanium

04



## THE MACHINE

01

VISION OVERVIEW

02

TECHNIC MACHINE

SOFTWARE APPLICATIONS EXAMPLES

03

DETAILS FEATURES PLUG&PLAY



OPERATIONS CONTROLS SYSTEMS





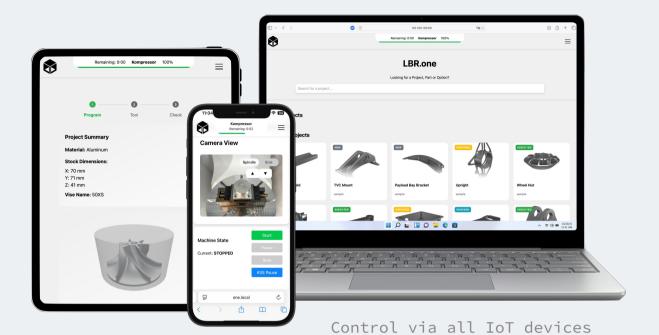
Integrated guide tunnels
Enable fast transport
using pallet jacks and
forklifts.



All-in-one machine, designed even to fit through office doors, includes integrated coolant system and tool changer.

# THE SOFTWARE





01

VISION OVERVIEW

02

TECHNIC MACHINE SOFTWARE

APPLICATIONS EXAMPLES



### **MODERN USER INTERFACE**

Say goodbye to outdated interfaces - our intuitive software provides smart operation, with AI support.



### **CLEAR FOCUS**

No cluttered screens – structured and user-friendly display of relevant information.



PLUG&PLAY



#### **SEAMLESS DATA TRANSFER**

Thanks to smart connectivity, USB sticks are a thing of the past – files can be transferred directly between machining center and PC.

04



## **APPLICATIONS**

01

VISION OVERVIEW





02

TECHNIC
MACHINE
SOFTWARE
APPLICATIONS
EXAMPLES

Whether prototyping, research, or small-scale production - LBR.one brings manufacturing processes directly into your company. No specialists, no external suppliers, no long wait times.

Thanks to the modular plug-and-play concept and our unique rental model, manufacturing can be scaled as needed.

03

**DETAILS**FEATURES
PLUG&PLAY



04

# **EXAMPLES**

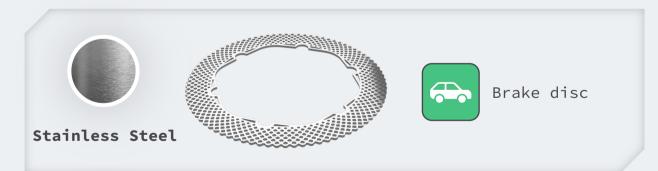




VISION OVERVIEW









02 TECHNIC MACHINE SOFTWARE APPLICATIONS

**DETAILS** FEATURES PLUG&PLAY



# **FEATURES**

01

VISION OVERVIEW

02

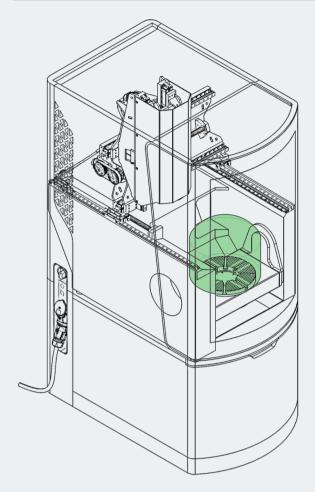
TECHNIK
MASCHINE
SOFTWARE
ANWENDUNG
BEISPIELE

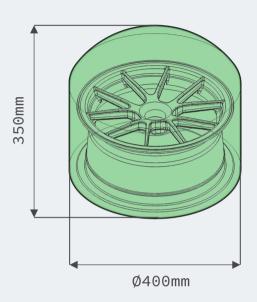
03

DETAILS FEATURES PLUG&PLAY

04

OPERATIONS CONTROLS SYSTEMS





More information available on the website



Dimensions (L W H)	1350 x 800 x 1980mm
Weight	ca. 1.500 kg
Machine table	With integrated T-slots and zero-point clamping system
Travel paths (X Y Z)	400 x 500 x 350mm
Work area (Ø H)	Ø400 x 350mm
Spindel power	17kW (S6) with 30.000 rpm
Spindel camera	2 megapixel with self cleaning
Process monitoring	Vibration speed sensor and force measurement technology
Feed rate	30m/min
Tool changer	80 slots with HSK-E 40 holders
Control terminal	27" Multi-Touch Display
Power connection	32A CEE three-phase current
Coolant System	Approx. 80L
Chip bin	Approx. 60L
Compressed air	Energy-efficient integrated air supply units

# PLUG-&-PLAY





01

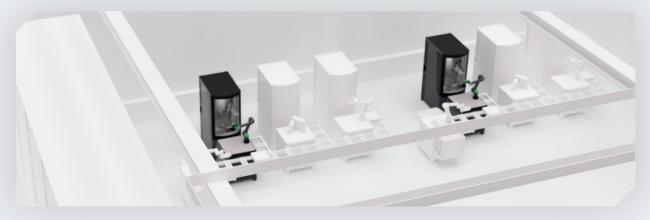
VISION OVERVIEW

02

TECHNIC MACHINE SOFTWARE APPLICATIONS EXAMPLES

#### MILLING AS EASY AS 3D PRINTING

Plug-and-play, ready for immediate use, and individually scalable, with flexible rental and purchase options.



Flexible scaling & interconnection of multiple machines.

03

DETAILS FEATURES PLUG&PLAY

04



# CONTROLS

01

VISION OVERVIEW

02

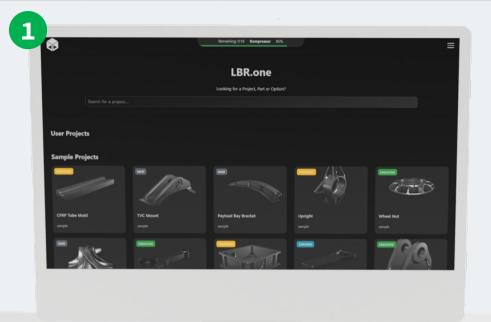
TECHNIC MACHINE SOFTWARE APPLICATIONS EXAMPLES



**DETAILS**FEATURES
PLUG&PLAY

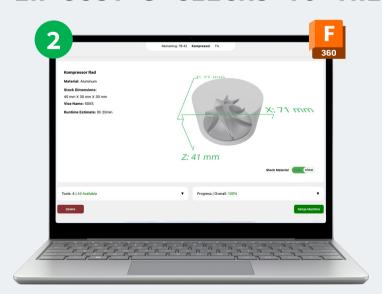
**04** 

OPERATION
CONTROLS
SYSTEMS

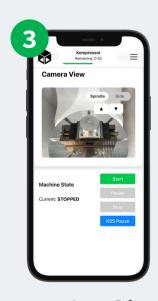




### IN JUST 3 CLICKS TO THE FINISHED PART



Simply transfer files via drag & drop or our Autodesk Fusion add-in to the machining center and Confirm the setup and tools.



Augmented Reality
then helps position
the part inside the
machine.

# **SYSTEMS**









Automatic tool changer



Only three-phase connection required

01

OVERVIEW

02

TECHNIC MACHINE SOFTWARE APPLICATIONS EXAMPLES

The **coolant system** ensures continuous process cooling, while the tool changer with **80 positions** allows smooth operation.

Thanks to **integrated compressed air units**, the machining center remains completely autonomous.



03

DETAILS FEATURES PLUG&PLAY

04
OPERATION

CONTROLS **SYSTEMS** 



LBR Engineering UG

CONTACT



www.lbr-manufacturing.de



contact@lbr-manufacturing.de