

AMCell_small: pushing boundaries in industrial manufacturing

In additive manufacturing, also known as 3D printing, components of all different shapes, sizes and structures are manufactured by the precise application of meltable material in layers. For the fast, precise and cost efficient production of components or small cycles, the **AMCell_small** series delivers. The mobile training cell is perfectly suited for entry into the world of 3D printing. The complete package is aimed especially at academia: schools, universities and company training facilities.

AMCell_small

- Preconfigured
- Space saving
- Ai Build UI & software
- Industrial extruder
- KR AGILUS industrial robot
- Suitable for a variety of 3D printing tasks/applications
- POA

The AMCell_small package: created with the KR AGILUS, for a perfectly coordinated and preconfigured system. The AGILUS, our compact six-axis robot is designed for particularly high working speeds. It's reach and payload transforms the small robot into a precision artist. Together with industry leading polymer extrusion end-of-arm tooling, and AiSync software from partners Ai Build, the AMCell small is as versatile as it is cost efficient, enabling the delivery of complex geometries whilst providing a swift return on investment.

Features of the AMCell_small package:

Modular design for quick integration, installation & ease of use Perfectly matched extruder/hardware components Powerful 3D printing interface from Ai Build Based upon the popular ready2_educate cell footprint Space saving; fits through standard doorways & in typical passenger elevators

The package comprises:

Fully compliant mobile cell KUKA controller, smart pad, cables and software Industry leading end-of-arm extruder & periphery AiSync software & user interface from Ai Build



The KR 10 AGILUS achieves maximum repeatability and continuous precision.

KR AGILUS six axis robot

KR 10 AGILUS	KR10 R900/

Max. Reach	901 mm
Maximum payload	11.3 kg
Pose repeatability	±0,02 mm
No. of axes	6
Installation position (external of cell)	Floor, ceiling, wall, angle
Robot footprint	208 mm x 208 mm
Weight (robot only exc. controller etc.)	55 kg
Controller	KR C5 micro/KR C4 compact

Product matrix overview

AMCell small

Cell housing	541 mm
Power supply	AC 1x 200 V - 240 V
Compressed air	6 - 8 bar
Weight	390 kg
Height Width	1860 mm 1200 mm
Depth	900 mm / 880 mm without
Vision	Add-on option







AiSync

AiSync	Software & UI
Hardware requirements	PC or Tablet
Display size	Minimum 1920x1080
Supported input files	.obj, .stl, .step
Supported OS Supported Browser	Windows, Mac or Linux Google Chrome
Included in the AMCell_small	KUKA Postprocessor; KUKA digital twin; Multi-axis slicing; Support-free toolpaths; Collision detection; Thermal simulation; Visual programming
Add-on options	Real-time monitoring











Clients report AiSync™ building successful toolpaths 86% quicker, with failed builds decreased by 65%, parts 3x stronger and a 90% efficiency gain in overall build time.