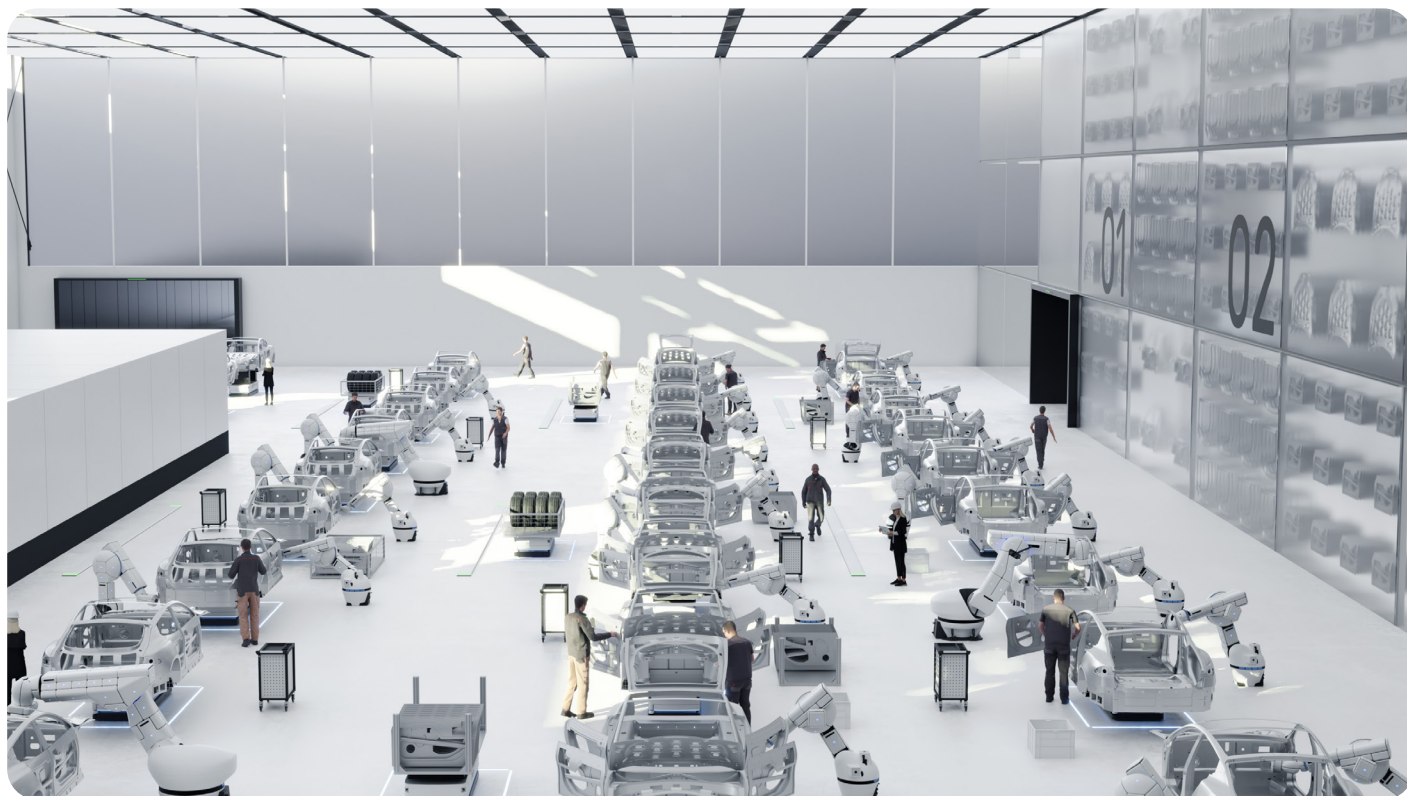


AIRSKIN® your Fenceless Experts

Unleash the full power of industrial automation



Speed:

Industrial robots equipped with AIRSKIN are up to 6 times faster than cobots while simultaneously offering high payload, reach, and precision.

Space:

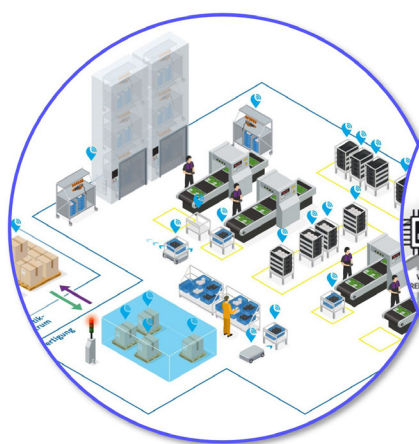
By removing fences and light curtains, up to 90% of the floor space is saved.

Flexibility:

AIRSKIN is mounted directly on the robot, allowing the space around the robot to remain free and usable.

Safety:

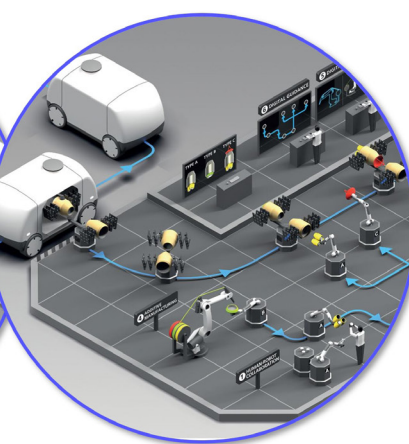
The PL e, Cat. 3 / SIL 3 certification ensures a higher safety standard than any other cobot. AIRSKIN is also the only solution that includes protection for the workpiece.



"The fenceless robot system can handle almost double the payload at 10 times the speed of other collaborative systems in the market for boxes, baskets and trays"



"This new, cooperative form of working without protective fencing is possible because the latest generation of robots are sensing"



"Human-robot collaboration calls for fenceless operation"




Mercedes-Benz



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AIRSKIN - The future of fenceless automation



AIRSKIN is a robotics safety technology developed at TU (Technical University) Vienna - a [soft safety skin](#) (pads mounted on the robot) that enables industrial robots to work directly alongside humans without the need for fences.

Industrial robots equipped with AIRSKIN can be up to 6 times faster and 12 times stronger than cobots while retaining all the advantages of industrial robots: [payload capacity](#), [reach](#), [precision](#), and [robustness](#). Additionally, they provide the [highest level of safety](#).

With the AIRSKIN technology, not only robots [but also AGVs](#) (Automated Guided Vehicles), [End-of-Arm-Toolings](#) (EoATs), and all other moving machines [can be secured](#). This means that with AIRSKIN, the [open and flexible productions](#) of the future can already become a reality.

With AIRSKIN's Fenceless Experts, we provide unique expertise in fenceless, collaborative robotics, and automation. All of AIRSKIN's Fenceless Experts are certified with [CMSE](#) (Certified Machinery Safety Expert) training and collectively possess [over 100 years of experience](#) in the field of fenceless automation.

General Contractor

However, the company not only offers its innovative product AIRSKIN and the necessary safety services but also increasingly acts as a [general contractor](#) for leading industrial companies in the field of fenceless automation in Europe. Seize this unique opportunity [to make your automation as flexible and open as possible](#).

AIRSKIN Product Portfolio

AIRSKIN for KUKA

- KUKA Agilus-2: 6-10 kg Payload and 900-1100 mm Reach
- KUKA Cybertech-2: 8-22 kg Payload and 1610-2010 mm Reach
- KUKA Iontec: 20-70 kg Payload and 2100-3101 mm Reach
- KUKA Quantec-2: 120-300 kg Payload and 2700-3100 mm Reach

AIRSKIN for FANUC (starting october 2024)

- FANUC R-2000iC: 125-210 kg Payload and 2655-3100 mm Reach

Details provided about the properties and usability of the products are purely for informational purposes and do not constitute a guarantee of these characteristics.

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AIRSKIN for Stäubli (direct purchasing from Stäubli)

- TX2touch-60: 3,7-4,5 kg Payload and 670-920 mm Reach
- TX2touch-90: 7-14 kg Payload and 1000-1450 mm Reach

AIRSKIN Modules

Modular Add-On Solution - You can select the shape and thickness that suit your application. Easily mountable to a secure solution with magnets.

- Flat Modules: from 200x100H0 till 400x200H0
- Edge Modules: from 200x160x100EH0 till 90x400x90EH0

AIRSKIN Safetyflange

Mechanical Collision Sensor - Triggered by mechanical activation of the AIRSKIN® pad. Based on the proven AIRSKIN pressure-sensitive skin technology, the [AIRSKIN Safetyflange detects tool and workpiece collisions to safely stop the robot](#).

- Safetyflange 10 - 10 kg payload
- Safetyflange Pro - 15 kg Payload
- Safetyflange Pro Core (without AIRSKIN Pad) - 15 kg Payload
- Safetyflange 20 - 20 kg Payload



AIRSKIN Cellcore

AIRSKIN Cellcore combines an industrial robot and controller on a base, and the integrated AIRSKIN allows fenceless operation. Depending on the project, AIRSKIN Cellcore can be ordered as [standalone-application](#) or can be integrated into larger projects.

AIRSKIN Safety Services

Beyond its standard products for the robotics industry, AIRSKIN also offers safety services, such as [customized risk assessments](#), [training programs](#), [CE marking](#), and [ongoing support](#), reinforcing its commitment to comprehensive safety solutions.



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Quantitative Cost Savings

AIRSKIN vs. Fence

Fence Solution	Costs [€]	Costs [€]	AIRSKIN
Fence Solution including Installation, Programming, etc	21 450	20 600	AIRSKIN for the KUKA Cybertech including installation, programming, etc.
Machine Relocation for Fences (optional)	10 000	3 000	Laser Scanner or Radar
Safe Interfaces for AGVs/AMRs	8 000	0	Safe Interfaces for AGVs/AMRs
Required Space	15.5 m2	1.9 m2	Required Space
Indicative Total Costs	39 450	23 600	Indicative Total Costs

40% Cost Savings with AIRSKIN

Output advantages

AIRSKIN vs. Cobots

Minipal® Bobot from Columbia Okura

The miniPAL® is a collaborative palletizing robot featuring the UR10e robot

Cobot Palletizer CPA-20 from Segbert

Movable 6-axis robot suitable for human-machine cooperation – the larger version for dynamic palletizing and depalletizing

Application	Robot	KUKA Cybertech with AIRSKIN
UR + miniPAL	UR10e	
Working Hours per day	8	8
Working Days per Year	250	250
Number of Packages per Pick-Up	1	1
Payload per Pick	8	14
Number of Picks per Minute	5	10
Payload per Minute	40	140
Payload per Hour	2 400	8 400
Payload per Day	19 200	67 200
Yearly Advantage of Solution with AIRSKIN & KUKA	-12 000 000	12 000 000

Application	Robot	KUKA Cybertech with AIRSKIN
Segbert Cobot Palletizer CPA-20	Yaskawa HC20	
Working Hours per day	8	8
Working Days per Year	250	250
Number of Packages per Pick-Up	1	1
Payload per Pick	18	14
Number of Picks per Minute	6	10
Payload per Minute	108	140
Payload per Hour	6 480	8 400
Payload per Day	51 840	67 200
Yearly Advantage of Solution with AIRSKIN & KUKA	-3 840 000	3 840 000



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Rolling-in car door planking

Customer: Volkswagen Sachsen

Problem: The process was performed manually by a worker. During manual pressing, it was difficult to ensure a continuous force. Furthermore, the working posture combined with the necessary force was not considered ergonomic.

Solution: A constant rolling action performed by 2 KUKA Cybertech-2 with AIRSKIN ensure a controllable and constant pressure. Workers are freed up for additional tasks.

Installation: 2022 in Germanys



Volkswagen



Motor block identification

Customer: Magna

Problem: The identification number of the engine block must be read out. However, the system had to be integrated in a confined space. a fenced-in solution was out of the question due to the limited space available. At the same time, absolute safety had to be guaranteed.

Solution: A KUKA Agilus-2 with AIRSKIN, was realised with the smallest possible footprint of 30x30cm. The cable routing was routed from the ceiling.

Installation: 2020 in Austria



AMR with robot and AIRSKIN

Customer: Skoda

Problem: Need for a mobile robot that can has enough reach (>1,6m) and payload (20kg) for mobile assembly, pick & place and machine tending tasks.

Solution: A KUKA Cybertech with AIRSKIN, Safetyflange 20 and special gripper for mobile applications.

Installation: 2022 in Czech Republic



SKODA



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