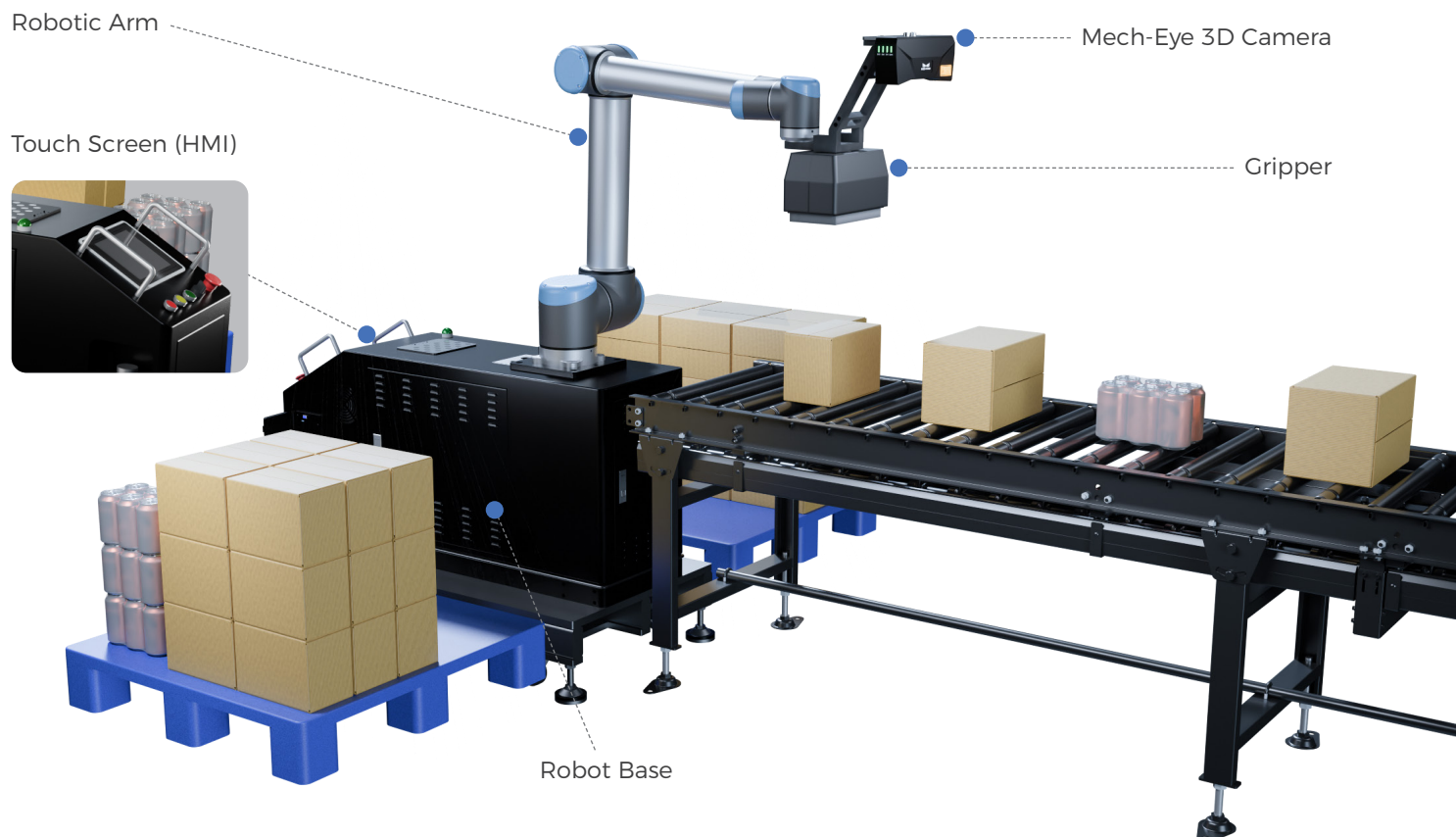


Mech-Station InstaDepal

AI & 3D Vision-Powered Robotic Station for Depalletizing & Palletizing

Mech-Station InstaDepal is an AI & 3D vision-powered robotic station for fully autonomous depalletizing and palletizing. Designed for smart logistics and flexible production environments, it integrates high-performance collaborative robots, the Mech-Eye high-precision 3D camera, advanced AI algorithms, and other modular components to deliver fast deployment, simplified operation, and maximum productivity with minimal effort.



Plug-and-Play Deployment

Unbox, power up, and tap the screen; deployed in minutes, not weeks.

All-in-One Platform

Reliable performance across multiple tasks on a single robotic station.

No-Code Operation & Simplified Tasks

An intuitive user interface designed for operators; no programming skills required.

AI & 3D Vision-Powered Flexibility

3D cameras and embodied AI enable the system to handle any object without per-SKU reprogramming.

Compact & Mobile Design

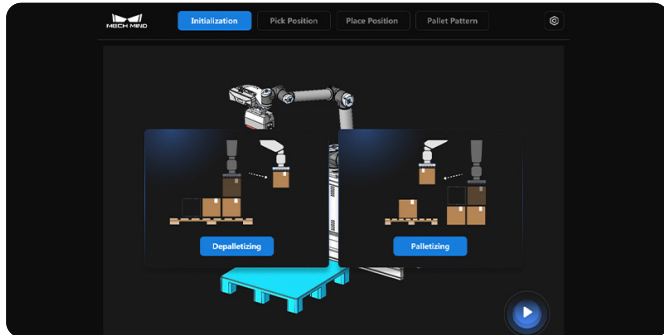
Compact footprint; easy to fit into tight spaces and relocate the robotic station as needed.

Modular & Production-Ready

Standardized, pre-assembled modules enable fast changeovers and easy maintenance.

Set Up Multiple Tasks Quickly and Efficiently Within 30 Minutes^[1]

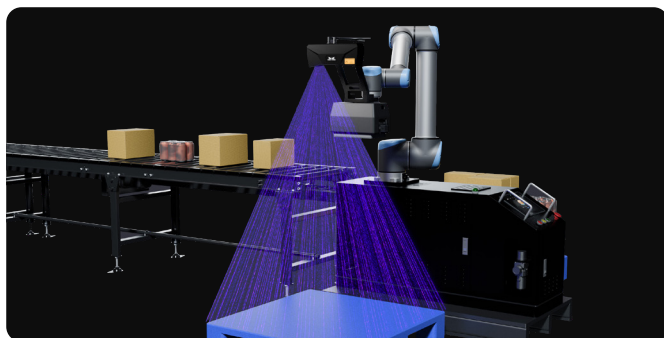
STEP 1 One-Click Initialization



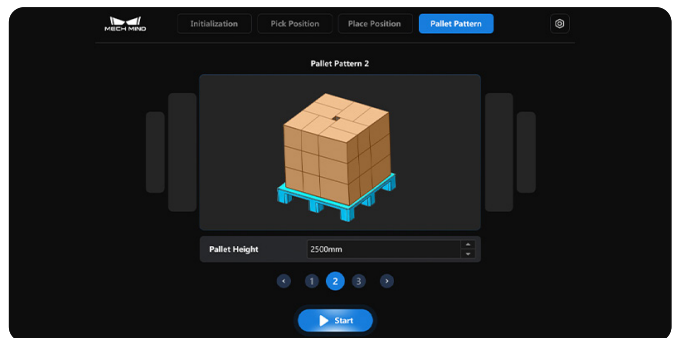
STEP 2 Pick Position Scan & Setup



STEP 3 Place Position Scan & Setup



STEP 4 One-Click Start



User-Friendly Human-Machine Interface (HMI)



Easy to Use: Intuitive menus and guided steps let you run the system without any programming—no coding required and no training needed.

Real-Time Visibility: The HMI displays exactly what InstaDepal sees and does—live status, camera feeds, and clear alerts.

Flexible Changeovers: Instantly switch SKUs or pallet patterns with a tap on the touchscreen. Visual previews keep changes fast, predictable, and low-risk.

Deploy Anywhere. Move Anytime.

The compact, mobile station is designed for fast relocation and space-efficient deployment.



Mobile Station

InstaDepal features a flexible design that can be relocated by hand for short distances or by a forklift or pallet jack for longer relocations.

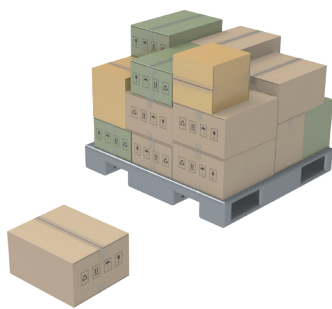


Compact Footprint

InstaDepal is engineered for space efficiency, with a compact footprint that integrates into any production environment.

[1] Time to setup varies by on-site conditions, within a narrow range.

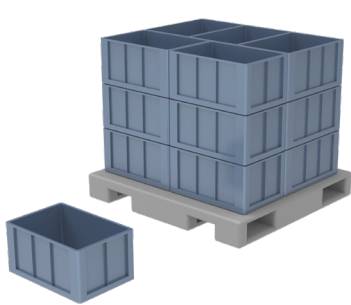
Depalletize and Palletize with Mech-Station InstaDepal



Cases/cartons



Sacks



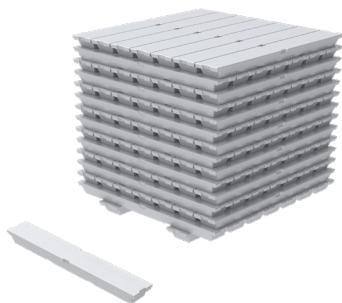
Totes



Shrink-wrapped goods



Kegs/barrels

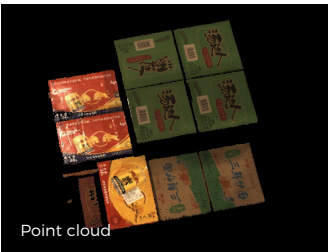


Metal parts

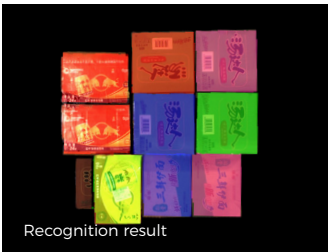
Equipped with 3D Vision for Reliable Pick-and-Place

Powered by the Mech-Eye high-precision 3D camera and advanced AI algorithms, InstaDepal obtains high-quality point clouds for objects with varying materials and shapes, enabling flexible handling of multiple SKUs.

Tightly stacked cases

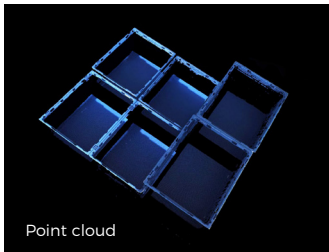


Point cloud

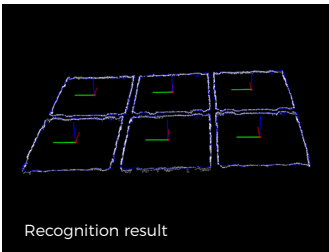


Recognition result

Tightly packed totes



Point cloud

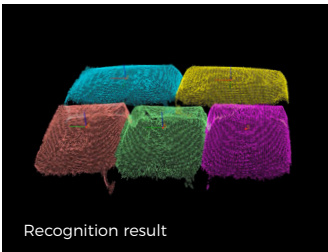


Recognition result

Deformable sacks

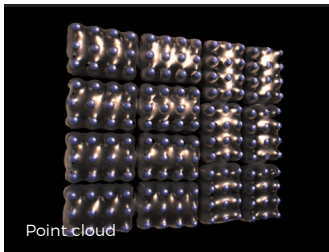


Point cloud

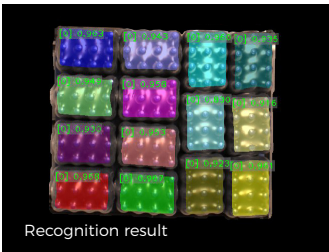


Recognition result

Transparent shrink-wrapped bottles



Point cloud

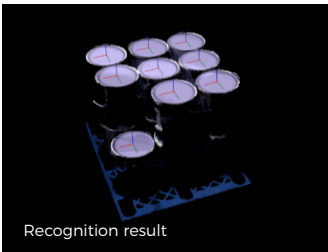


Recognition result

Reflective metal kegs



Point cloud

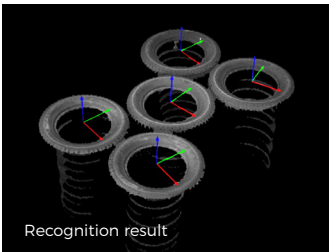


Recognition result

Large dark tires



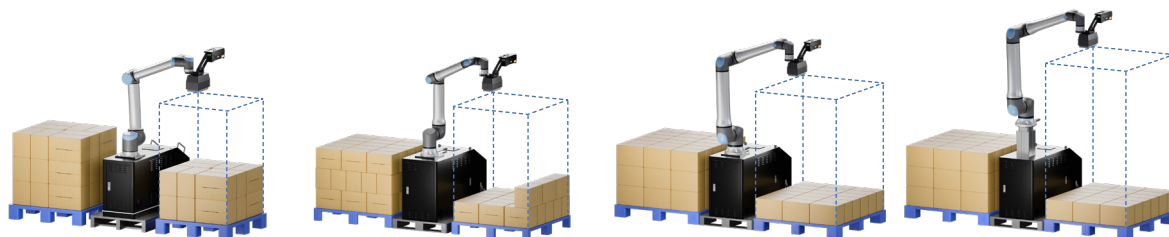
Point cloud



Recognition result

Mech-Station InstaDepal SERIES

Modular Palletizing & Depalletizing
Built on standard modules



Model	InstaDepal 10	InstaDepal 15	InstaDepal 20	InstaDepal 20 P (Integrated Lift Table)
Max Payload	5 kg	10 kg	18 kg	18 kg
Reach				
Cycle Time	Up to 12 cycles/min	Up to 9 cycles/min	Up to 9 cycles/min	Up to 9 cycles/min
Max Pallet Height	1500 mm	1500 mm	2000 mm	2500 mm
Num of Box Patterns	Unlimited	Unlimited	Unlimited	Unlimited
Pallet Size	800 x 800 mm	1000 x 1000 mm	1200 x 1100 mm	1200 x 1100 mm
Far FOV	800*450 mm @ 1.0 m	800*450 mm @ 1.0 m	800*450 mm @ 1.0 m	800*450 mm @ 1.0 m
Footprint	1200 x 800 mm	1200 x 1500 mm	1200 x 1500 mm	1200 x 2000 mm
Power Supply	220 V 50 Hz (60 Hz)	220 V 50 Hz (60 Hz)	220 V 50 Hz (60 Hz)	220 V 50 Hz (60 Hz)
3D Camera	Mech-Eye PRO S-GL	Mech-Eye PRO S-GL	Mech-Eye PRO S-GL	Mech-Eye PRO S-GL
Cobot Model (Optional)	UR 12e	UR 15	UR 20	UR 20

Additional Options

Pallet positioning sensor	Infeed conveyor	Safety fence	Multiple pallet types	Multiple gripper types
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Standard specifications for reference only—more models and configurations are available to meet your requirements.



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