

Factory Fully Automated Solution

Problems with plant transportation

- Maturation of process automation, bottlenecks in transfer between processes, and difficulty in securing stable transportation personnel
- Layout change burden (production impact) and automation difficulties due to a wide variety of transported items

Heavy payload, omnidirectional movement, compact

- 1,000kg transportable, omni-wheel moving in all directions
- Greatly compacted with 1m×1m footprint

Lineup according to the transported object

- Rapidly transporting tractor cars and basket cars in AiTran Trailer
- Floor-mounted pallets can be scooped up with a AiTran Fork



AiTran Lift (Loading type)

Footprint of 1m×1m

- Reduced by 45% compared to conventional models, and just fits 1.1m×1.1m pallets
- Available approach direction with square footprint

Built-in full height 300mm(100mm lifting)

- Without changing the lift-up height of 100mm
25% less floor than conventional models and easier submersion into shelves and bogies

High-speed stable transfer

- 1.5 times faster than conventional models, with the shortest distance traveled in all directions
- Driven by four-wheeled wheels, it runs roughly on slanted or striped steel plates.



AiTran Trailer (Towing)

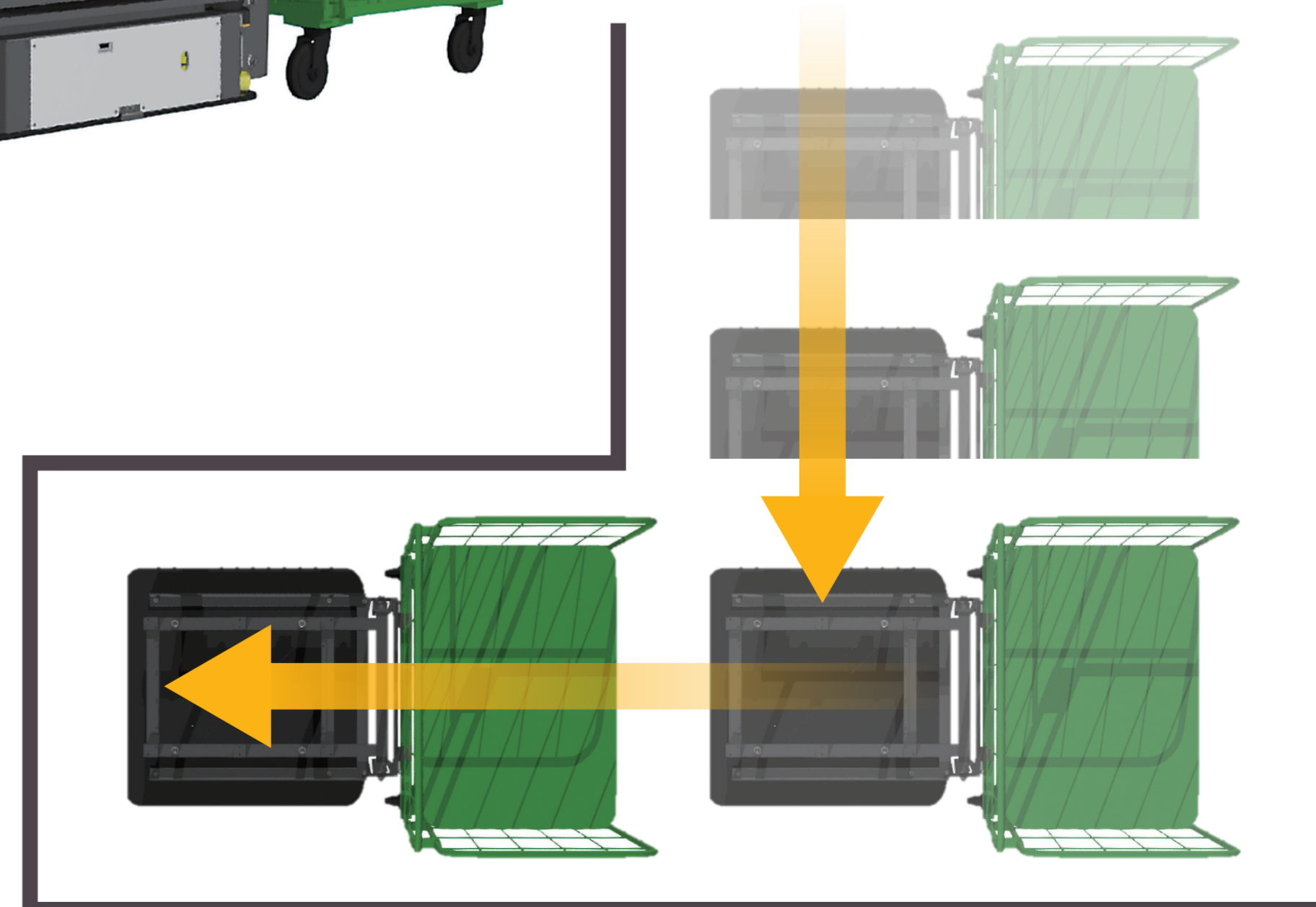
Transporting various buckets with a traction mechanism

- Towing and transporting various distribution items used in factories, such as towing carts and cage carts



Omnidirectional movement by omnifoil

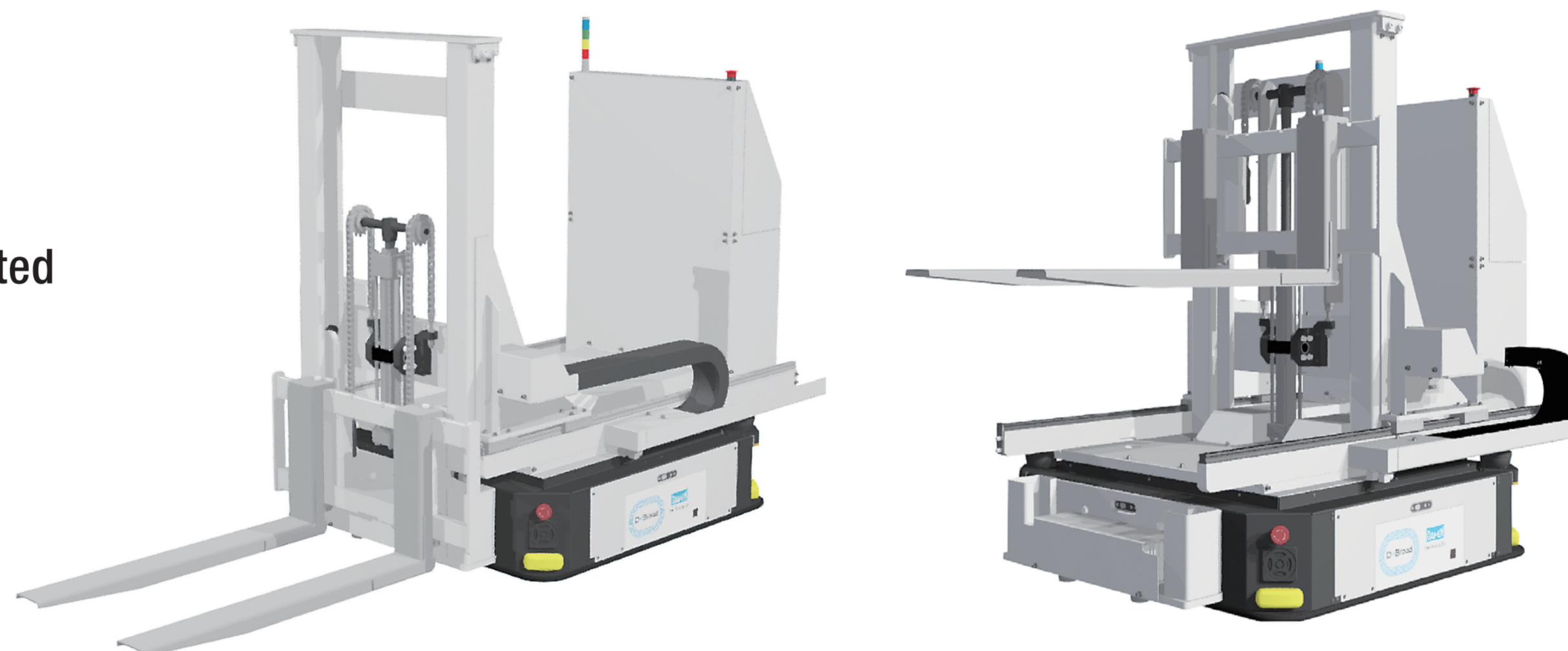
- Carts can be brought in at the dead end as well, freely for diagonal movement and horizontal movement.



AiTran Fork (Forked type)

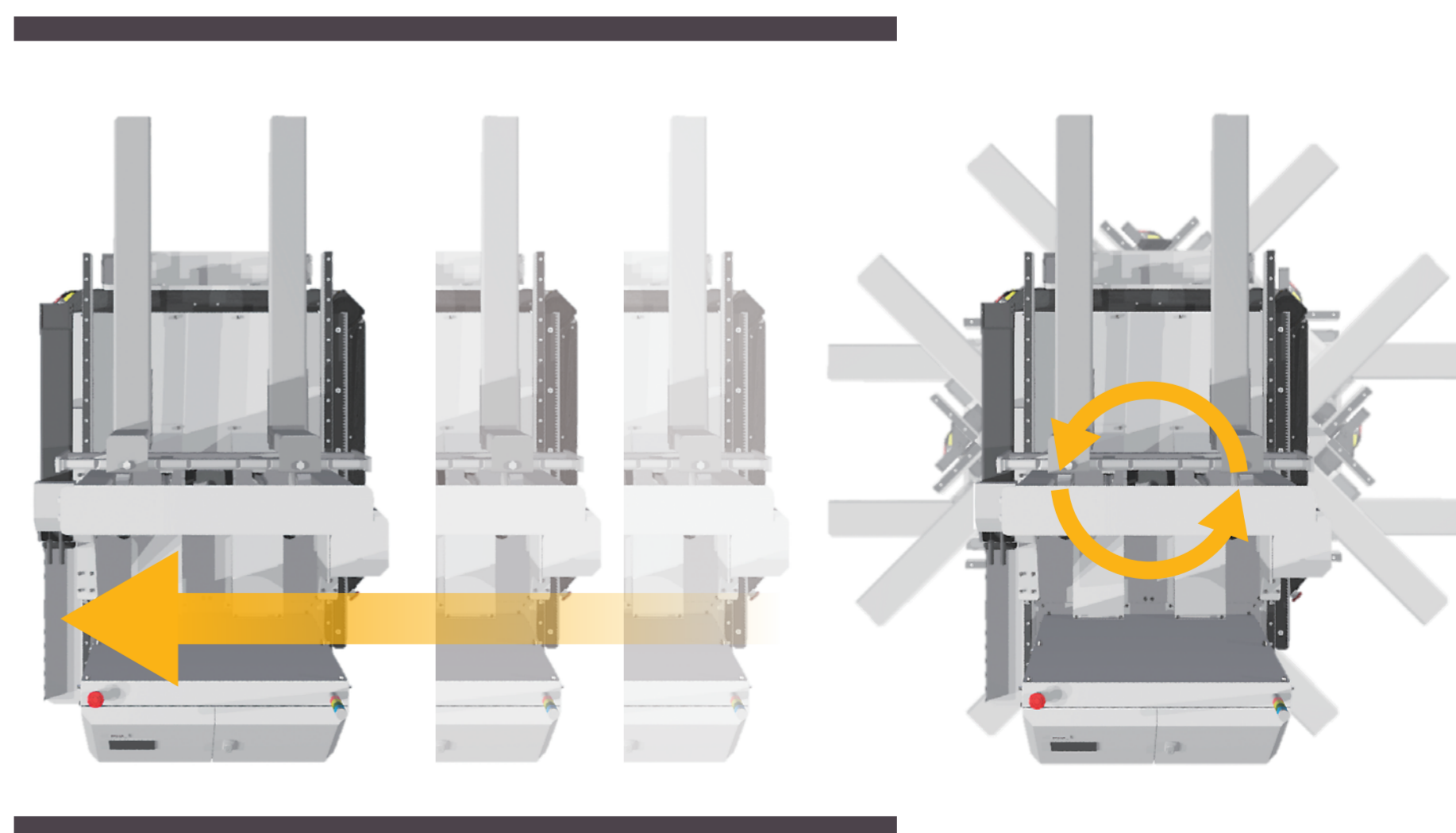
Equipped with fork structure

- Floor pallets and cages are scooped up and transported
- Without the need for a pedestal to diving



Omnidirectional movement by omnifoil

- Approach with minimal movement even in a narrow space that allows lateral movement without turning or attitude conversion



AiTran New Function Lane Trace

Driving along a division line

- Driving in a place without targets that can be detected by the sensor
- Can run by recognizing existing division lines in the factory
- Drive line can be added easily with line tapes on the market because no magnetic tape is required.

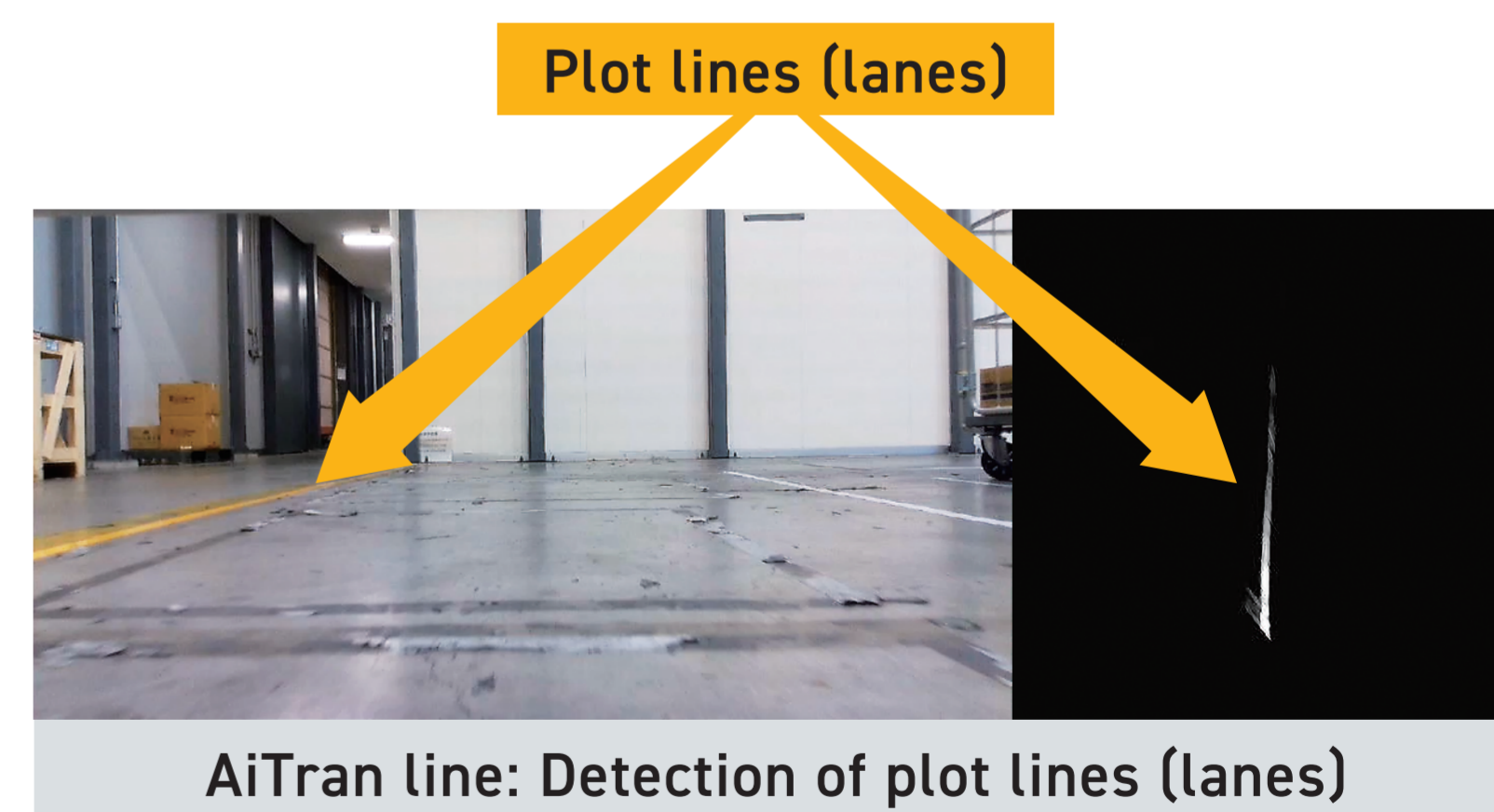


Compatible with various lot lines

- Detection of lot lines based on various colors
- Capable of handling changes in light in the morning and night

Compatible with omnidirectional movement

- If multiple cameras are mounted, the direction can be changed while maintaining the posture



The Extra-long Reach Medium Class Robot FD-V25L

Overwhelming reach of 3m

- Automation of a wide range of tasks without a slider

High-speed operation

- Contributes to shorter tact time with the highest operating speed in the same class

Various applications

- Welding and handling tooling mountable with payload 25kg



Robot With Built-in Cable FD-B100

High portability and built-in cable

- Suitable for handling applications with a 100kg of portable weight
- Built-in cable prevents interference and large degree of freedom in robot posture

High-density installation possible

- Interference between robots is also suppressed with a built-in cable
- Optimum Arm Structure Design for Slim

High-speed operation

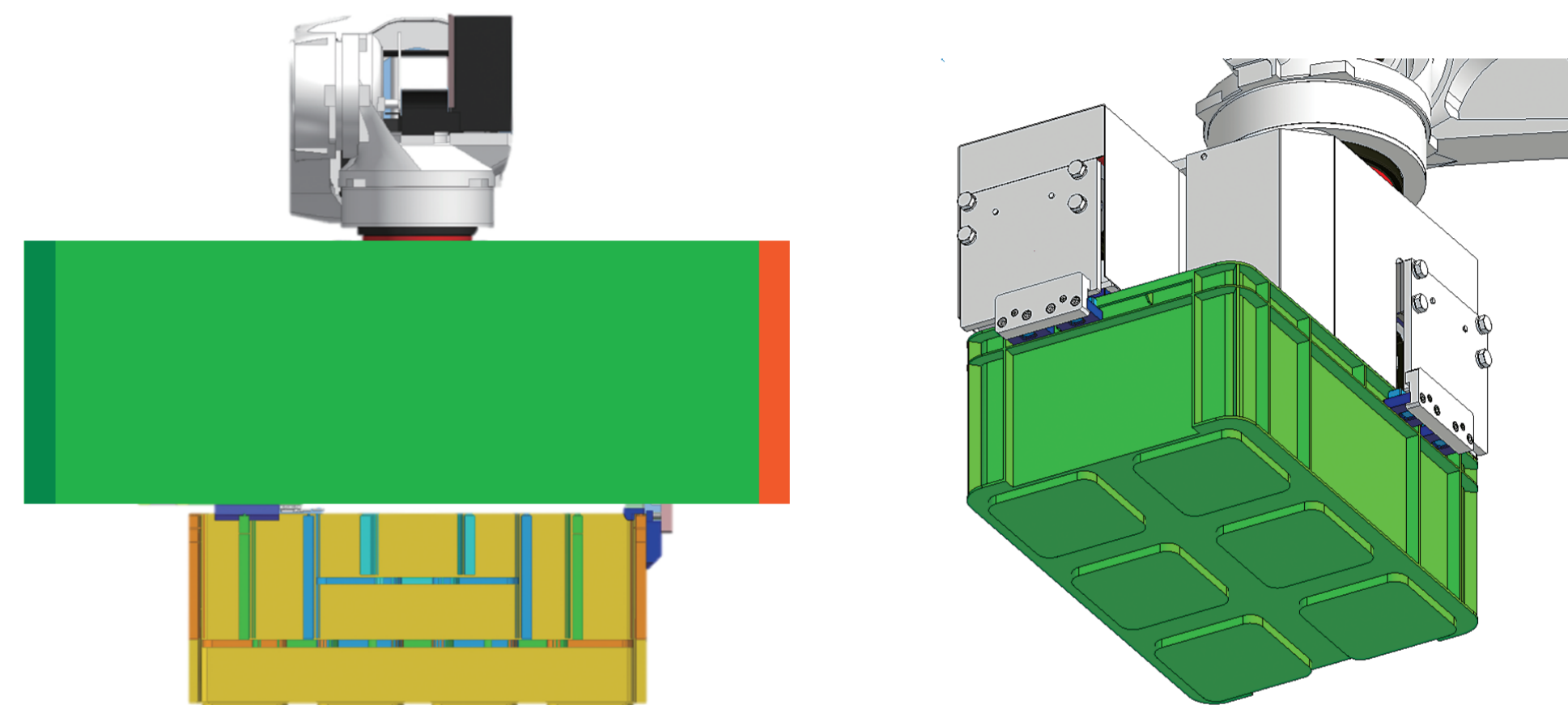
- Achieves the best-in-class operation speed and contributes to shortening takt time



Hand for Robot Container

Compatible with containers of different sizes

- Chuck position shift function allows for picking containers of different sizes without tool changes
- The shape of the chuck jaws allows chucking regardless of the orientation of the container.



Picking is possible even in tight containers

- The shape of the robot hand allows picking/placing of closely placed containers

