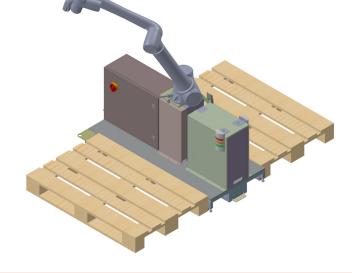


TM Palletizing System

Ideal solution for many industries:

- Life Sciences
- Healthcare
- Packaging
- Printing
- Food & Beverage
- Manufacturing



Application-Based Software

TMstudio Palletizing Wizard

- Customizable box, pallet size
- · Generate point file offline
- Custom box arrangement and sequence
- Palletizing simulation and collision detection

Software Packages for TMflow

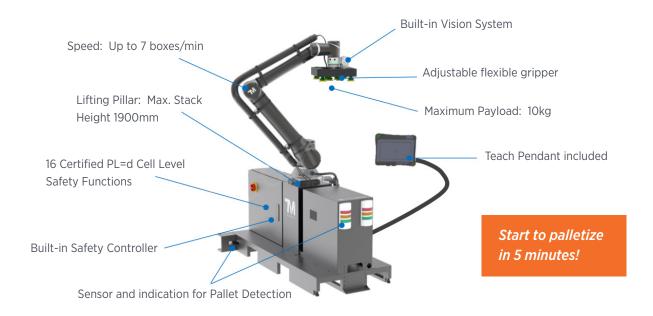
Main function

- · Calibration of pillar
- Main function based on file generated from TMstudio Palletizing Wizard and settings for the cell.

Flexibility for functional expansion by user

- Using customized gripper
- Detecting drop during movement with customized gripper.
- Having barcode function in top and side.
- Downward sensor detection before releasing the box.
- · Slipsheet application programming

TM Palletizing Operator — Overview



Specification	TM Palletizing Operator-TM12
Stack Height*1	1900mm
Maximum Payload*2	10kg
Maximum Pallet Speed	Up to 7 boxes/objects per minute
Certification	CE, Machine Directive 2006/42/EC,ISO 12100, EN 60204-1, ISO 10218-2 (partly completed machinery), ISO 13849-1, ISO/TS 15066
Safety Functions	16 cell level safety functions with 3rd Party certification PL=d according to ISO13849-1
Teach Pendant	10.1" capacitive touch screen, with ESTOP and Enabling Switch, Cable length: 5m, 2 USB ports provided
IP Rating	IP54 for Robot Arm, IP65 for Teach Pendant, IP 32 for Gripper, IP 32 for all other components
Interface	Safety Input: Emergency Stop: 1 x dual channel input Safeguard Pause: 5 x dual channel inputs Collaborative Mode: 4 x dual channel inputs Safeguard-Pause Output: 1 x dual channel output Safeguard-Pause Output: 2 x dual channel output Safeguard-Collaborative Output: 2 x dual channel outputs
Software	Offline programming & Simulation: TMstudio Palletizing Wizard Setting and Running: TM Palletizing Operator Software Packages
Eye in Hand (Built in)	1.2M/5M pixels, color camera
Eye to Hand (Optional)	Support Maximum 2 GigE cameras

^{*1:} Depends on the pallet pattern and box dimensions



^{*2:} For the reduced package not including the official gripper, the payload at robot flange is 12kg.