



**AUSTRALIS**  
ENGINEERING

Smart thinking  
in motion

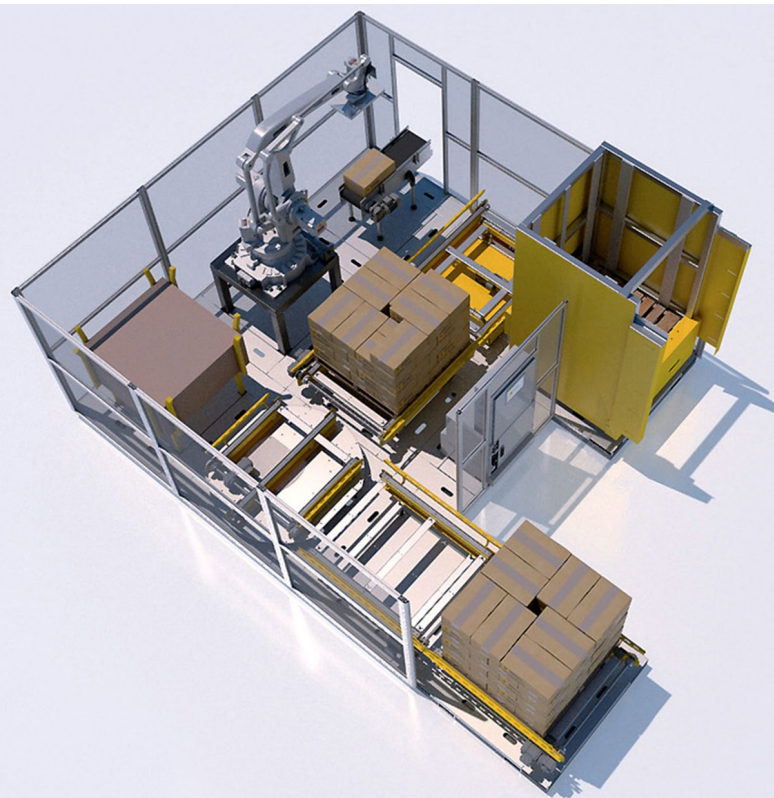
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**simPAL<sup>®</sup>**  
**Robotic**  
**Palletisers**

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# The genius of simPAL®



**simPAL® is a collaboration of smart software and smart hardware to allow for highly flexible palletising solution.**

Due to its modular nature, installation is expedited, reducing downtime and cost. A typical simPAL system can be brought to site, bolted down and connected quickly and easily. Each simPAL Tile module includes integrated wiring with quick interconnecting plugs and is self-contained with its own field IO module/s networked to the simPAL Controller for connection of sensors, pneumatics and motor controls. Integrated safety panels connect directly to the Tiles and include normal fence panels as well as access gates, which are safety interlocked.

simPAL software provides long term future proofing benefits. Without the need for complex programming, the user can easily generate new pallet patterns, enter new products and save new recipes. simPAL features an Automatic Pallet Generator that creates an optimised pattern or where there are multiple patterns available, allows the user to choose their preferred option.

**Support is key to the Australis service. All simPAL systems have online remote provisioning remote service and support.**



## A Modular Palletising System

- 10 different modules available
- Each module pre-wired to interconnect modules
- Easy to use touchscreen software features an Automatic Pallet Generator
- IIOT connected
- Multiple standard grippers available to suit many product types
- Robot capacities from 110kg to 450kg
- Designed to ship inside a standard shipping container

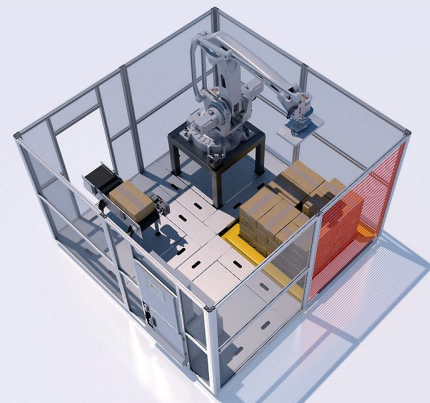
## Tailored solutions

simPAL uses 10 core function Tiles that are used to create a tailored palletising solution.

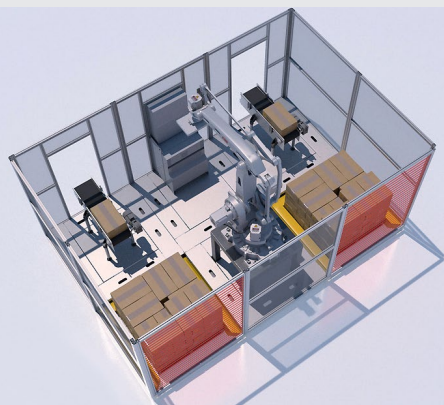
- **simPAL Controller**
- **Robot and gripper**
- **Product Infeed Conveyor**
- **Pallet Conveyor**
- **Pallet 90 degree transfer**
- **Pallet turntable**
- **Pallet layer/slip sheet magazine**
- **Pallet Magazine and destacker**
- **Pallet floor positioning jig**
- **Blank tile**

## simPAL® examples

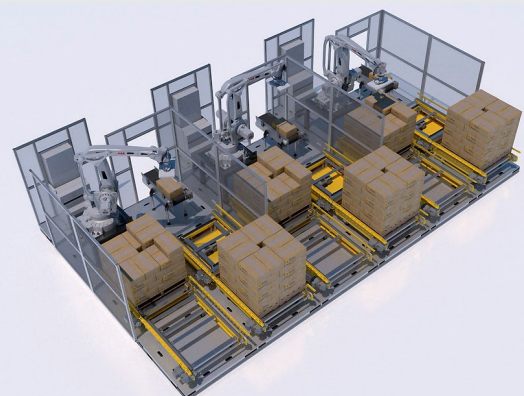
simPAL Tiles can be combined in many different configurations. As production needs change, the same system can be reconfigured and extended by adding additional simPAL Tiles.



**Single Pallet simPAL**  
replaces hand stacking



**Dual Pallet simPAL**  
flexibility for multiple products or continuous palletising



**Multi-robot simPAL**  
multiple products and multiple lines at higher speeds

# simPAL<sup>®</sup>

## 10 Different Modules Available

### Pre-wired Modules

Each simPAL Tile includes integrated electrical and data wiring within the base module. We even use quick connections to ensure rapid field deployment.

### Pallet Generating Software

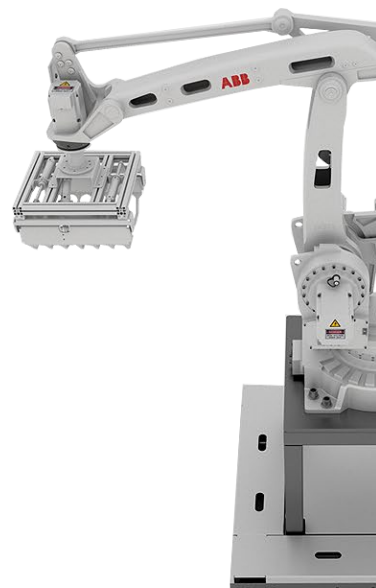
simPAL includes an on-board pallet generator that easily allows you to create new pallet patterns using the user friendly HMI touch-screen.



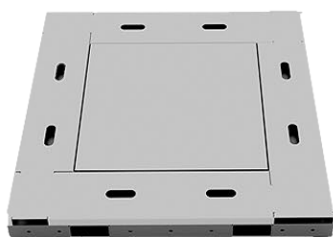
Control Panel



Pallet Conveyor



Robot



Blank Module



Slip Sheet Frame



Infeed C



## Multiple Gripper Types

Engineered to accept standard grippers including Box Grippers, Bag Grippers, and Bucket Grippers.

Fully customised grippers are also available.

## Integrated Safety

Safety fencing attaches directly to each base module. Light curtains are available for product infeed, pallet infeed and pallet removal.

## Rapid Deployment

simPAL is designed to ship within a standard shipping container. With its modular design, integrated electrical and data wiring and our innovative simPAL operating system, a simPAL palletiser can be deployed rapidly at virtually any site world-wide.



Plinth



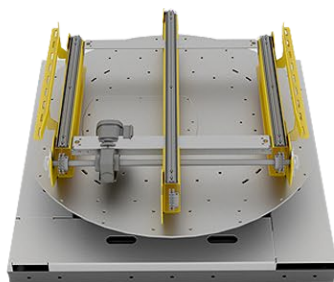
Destacker



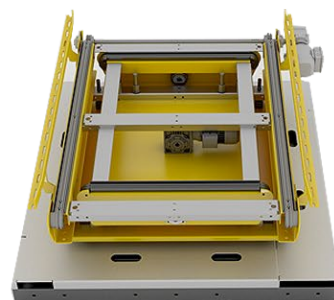
Floor Stacker



Conveyor



Turntable



Pop-up Transfer



# simPAL® Mini cobot palletiser

The simPAL® Mini cobot palletiser is a combination of smart software and smart hardware creating a highly flexible, cobot palletising solution.

simPAL Mini features a collaborative robot by Techman Robots. Utilising a collaborative robot on the simPAL Mini Palletiser means we use minimal floor space - just 270mm wider than the pallet.

simPAL Mini includes advanced vision-based QA which utilises the in-built 5MP camera on the TM Robot allowing the cobot to read bar codes and QR codes to simplify palletising operations.

To ensure operator safety, TM Robot's have inbuilt safety features meaning they operate without the need for guards. This is an important cost and space saving benefit and enables simPAL Mini to be deployed in the smallest footprint possible.

## simPAL® Mini overview:

- Collaborative robot palletiser. Uses TM12 12kg, 1300mm reach cobot or TM14 14kg, 1100mm reach cobot
- Single or Double pallet configuration
- Integrated vision system with 5MP camera easily identifies bar codes and QR codes for product recognition
- Standard vacuum gripper suitable for a range of carton sizes and weights. Other grippers optional
- Palletise up to 6 cycles/ minute subject to box size
- Integrated infeed conveyor
- Cost effective replacement for manual palletising
- Fast set-up and operation
- Easy to programme and operate using either our simPAL software or TM-Flow software on the cobot

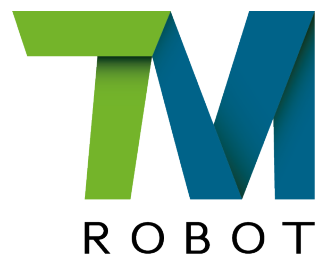


## Operating System

The heart of any simPAL® system is our software. Developed in-house and building on more than 15 years of palletising experience, our simPAL software allows new products to be palletised easily without additional and expensive programming.

simPAL software provides future proofing benefits. Without the need for complex programming, the user can easily generate new pallet patterns, enter new products and save new recipes. simPAL features an Automatic Pallet Generator that creates an optimised pattern or where there are multiple patterns available, allows the user to choose their preferred option. The user can also create their own custom pallet pattern direct on the touch screen in a matter of moments.

Coupled with the lead to teach capabilities of a Techman cobot and its own on-board TM-Flow software, programming a simple pick and place with simPAL Mini can be achieved in less than 5 minutes.



### Official TM Robot Distributor

Australis Engineering are official Australian distributors and integrators of TM Robot collaborative robots. Australis are certified to offer Basic and Advanced TM Robot training.



**AUSTRALIS**  
ENGINEERING

# The smart choice

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Contact us today to discuss  
your next palletising project

**Australis Engineering Pty Ltd**

ABN 52 002 646 620

Phone: +61 2 9707 5888

Email: [sales@australiseng.com.au](mailto:sales@australiseng.com.au)

25 Harley Cres, Condell Park,  
NSW 2200, Australia

[australiseng.com.au](http://australiseng.com.au)