“Only Limited by Imagination”
Welcome to Robopod; a revolution in robotic automation technology.

Launched in 2015, Robopod’s unique suite of products provide the ultimate flexible and adaptable robotic automation solution.

Providing a standardised robotic platform that can be swiftly configured to meet your business needs, Robopod can be set up in hours not days seamlessly integrating into your manufacturing process.

From ultrasonic welding, assembly, laser marking, soldering to dispensing and pressing, the applications of Robopod’s products are endless, offering the very latest technically advanced cost-effective plug-and-play robotics.

Robopod can be used as a standalone machine or as part of an integrated smart factory. The latest innovation in the range, podconnect utilizes Automated Intelligent Vehicles (AIV), providing an integrated network with real time information and scalability.

With over 1000 years of engineering experience in design, build and delivering innovative automation solutions, our in-house team of Mechatronic experts are here to help your business.

Working together we can ensure quality, reliability, and right first-time products in a cost-effective manner.

The Robopod product range has been successfully integrated into a wide range of industries including medical, pharmaceutical, automotive and food, its versatility means that whatever the industry or requirement there is a Robopod product for you.

We look forward to exploring the endless opportunities within your business.

Richard Evans CEO
Robopod

Product Range

- Robopod: Robotic Automation
- Lasopod: Robotic Laser Automation
- Sonopod: Ultrasonic Welding
- Presspod: Pressing & Riveting
- Tendopod: CMM & Machine Tending
- Benchpod: Reconfigurable Assembly Bench

Podconnect
Introducing **Robopod** -
**The ultimate automation innovation**

An industry first! **Robopod**’s plug-and-play robotics provide a unique standardised platform offering endlessly adaptable solutions, with unrivalled performance and rapid payback.

**Robopod**’s unique modular design is infinitely flexible.
An exciting new concept, it does the work of an assembly line and handling personnel in a fraction of the time and cost.

It effortlessly adapts to different tasks, delivering extra speed, productivity and efficiency in response to changing markets. It’s an off-the-shelf solution and best of all, reusable.

"Only Limited by Imagination"
RoboPod

Your Machine Your Way

Standard:
- Staubli TX Robot Arm
- Robust Fabricated Chassis
- Full IPC/PLC Control
- Large Touch Screen HMI
- Full Safety Circuit
- Festo Pneumatic Kit

Applications:
- Buffing, Polishing
- Projection Welding
- Palletising, De-palletising
- Swaging, Pressing
- Assembly & Testing
- Ultrasonic Welding
- Vision Inspection
- Food Preparation

POD Size:
- 1500 x 1600 x 2100 mm
- 2000 x 2000 x 2100 mm

Integrated Technologies:
- Lasers
- Vision Systems
- Pick & Place
- Rotary Indexing Tables
- Through Conveyors
- Bowl Feeders
- Leak Testing
- Vision Inspection
- Ultrasonic Welding
- Precision Stages
- Single & Double Robotics
lasapod Plug-and-Play Laser Solutions

lasapod provides a unique standardised platform offering endlessly adaptable solutions, with unrivalled performance and rapid payback. It's a full laser system in a box.

lasapod is a standard, packaged robot laser cell that can be utilised for marking, drilling, surface treatment, cutting or welding. Compact and reconfigurable, lasapod offers a fast, flexible, efficient solution to an automated laser application.

lasapod comes in various sizes, can be integrated with 3 handling options, utilised in numerous industries and is able to process different materials.

All Robopod’s can be engineered in either mild steel or 316 stainless steel

Experience in achieving GAMP5 compliance
Standard:
- Staubli TX2 Robot Arm
- Robust Fabricated Chassis
- Full IPC/PLC Control
- Large Touch Screen HMI
- Full Safety Circuit
- Festo Pneumatic Kit
- CCTV Process Monitoring

Applications:
- Marking
- Welding
- Cutting
- Surface Treatment

POD Size:
316 Stainless Steel:
- 1700 x 1500 x 2100 mm

Steel Painted:
- 1500 x 1600 x 2100 mm
- 2000 x 2000 x 2100 mm

Laser Cutting Materials:
- Metals
- Plastics
- Ceramics
- Composite Materials

Laser Types:
- CO2
- Fibre
- Disc
- Micro

Medical Laser Marking
Re-configurable Solution for Ultrasonic Welding

Integrate your sonopod with second operation functions such as: - Poke yoke checks, Clip fitting, De-gating, Dot marking, Labelling & Vision

sonopod - Reconfiguring Ultrasonic Welding

Pre-packaged ultrasonic welder modules offer quick-to-market economical, multi-point welding. These standard flexible modules from the Robopod range can be quickly customised to suit a host of plastic welding applications.

The experienced engineers at Robopod have already supplied many machines for staking, spot welding, energy directors and hedge-hog weld preparation. Our team of experts can provide knowledge and experience to your plastics assembly projects.

Ultrasonic welding is a highly efficient way to permanently join plastic components together to form an assembly. High frequency energy is transferred through the sonotrode to vibrate the surfaces into a molten state in order to form a strong welded joint.

All Robopod’s can be manufactured in steel or 316 stainless steel suitable for the medical device and pharmaceutical industries.
Technology Explained

Standard:
- Robust Fabricated Chassis
- Bolster assembly for Inline sonotrodes
- Full IPC/ PLC Control
- Large Touch Screen HMI
- Festo Pneumatic Kit
- Generator
- Ultrasonic controls
- Acoustic guarding
- Short delivery times
- Expert inhouse support

Applications:
- Joining plastic components
- Cleanly cutting a range of materials

POD Size:
- 1100mm x 1000mm x 2100mm
- 1600mm x 1000mm x 2100mm
- 2200mm x 2200mm x 2100mm
- Can be configured in steel or stainless 316

Configurations:
- Add sonotrodes to suit your product for ultrasonic welding.
- Change nest tooling for future products.
presspod - Innovation for flexible component pressing and riveting solutions

Driven by customer demand for flexibility, presspod is another innovation from the Robopod portfolio.

It offers a standard solution that can be integrated with a wide range of pressing & riveting options & equipment.

The numerically controlled positioning table inside presspod can be used to move a rivet or press tool in X & Y axis to cater for the different product variants in your range.

Robustly manufactured to stand up to a challenging environment, presspod provides state of the art control function and data collection options at your fingertips.

presspod follows the same reconfigurable philosophy as all of the Robopod range. Protecting your investment time and time again.

Use podconnect to link your pod’s and get them talking your language giving you the information you need.
Technical Specification

Standard:
- Robust Fabricated Chassis
- Full PLC Control
- Large Touch Screen HMI
- Safety Circuit
- Short delivery times
- Expert inhouse support

Applications:
- Pneumatic - Press
- Hydropneumatic - Press
- Hydraulic - Press
- Orbital - Riveting

POD Size:
- 1500 x 1600 x 2100 mm
- 2000 x 2000 x 2100 mm

Configurations:
- Two Position Rotary Table
- Slide Shuttle Table
- Poke-Yoke Inspection
- Vision Inspection
- Quick Change Part Nest Tooling
- Data Collection & Transfer
- NC Table Positioning

Automotive bush flaring
The latest innovation for machine tending, tendapod, removes the reliance on manual tending enabling manufacturing and metrology machines to be fully optimised.

Optimising a machine’s capability can greatly increase its speed and productivity resulting in an enhanced return on investment and providing a step closer to achieving lights out manufacturing.

Specifically designed to be as compact as possible (less than 1m² footprint) tendapod can easily fit onto any shop floor and within an hour be fully operational. tendapod’s unique modular draw system is ‘AIV compatible’ and allows pallets or trays of components to be loaded even during operation, ready for the 6-axis robot to load and unload from your machine or CMM. It effortlessly adapts to different tasks and can be integrated to carry out secondary tasks.

tendapod can be utilised to tend two machines at once, offering greater flexibility and double return on your investment.
Configurations

Standard:
- Staubli TX2 Robot Arm
- Robust Fabricated Chassis
- Full IPC/PLC Control
- Large Touch Screen HMI
- Full Safety Circuit
- Festo Pneumatic Kit
- podconnect ready

Applications:
- CMM Tending
- Machine Tending
- Grinding Machine Tending
- Non-Contact Inspection Systems Tending
- Production Line Tending

Configurations:
- Single Side Tending
- Twin Side Tending
- Feed Line with Guided Vision
- Conveyor In/Out Feed
- Tending in Temperature Controlled Environments

Post Tending Process Options:
- De-burring - Buffing
- Gauge loading
- Air Blasting of Tooling
- Re-orientation of Components
- Rejection of Component to Bin
Interchangeable Plug & play fixture nests with expandable I/O are re-configurable for a range of technologies including, scanners, printers, machine vision and many more for your application.

Portable & Reconfigurable Assembly Bench

Intelligent, ergonomically designed, adjustable and portable

benchpod - An Intelligent Approach to Manual Assembly

benchpod Systems are at the heart of our new range of semi and fully configurable assembly solutions.

An intelligent DC screwdriver with torque & angle feedback ensures a “no faults forward” assembly of your product.

All workstations use the same PC Based control system and 18.5-inch Touchscreen interface.
Standard:
- Display OEE Performance.
- Display cycle time and part output.
- Instructional Videos embedded into HMI
- Sequence display
- Interchangeable fixturing
- Plug and Socket connections for fixtures
- Facility for Additional I/O on plug & play fixtures
- Supermarket kitting for child parts
- Ergonomic work height
- Manual and spares Documentation accessed via HMI
- Remote communication for Diagnostics
- Data gathering - Integral database for logging of all data
- Data logging including operator log in and auto log out after shift
- Overhead lighting

Applications:
- Bench assembly
- Poke-yoke fixturing
- Intelligent screw driver assembly
- No faults forward poke-yoke assembly
- Scanners & Printers

POD Size:
- 1,000mm (w) x 1000 (d)
- 1,800mm (w) x 1000 (d)
At the Centre of Our Vision

Automated Logistics of your products to where they are needed on-time every time!!

Automated Intelligent Vehicle (AIV) are at the heart of Robopod’s vision of the future smart factory.

Incredibly intelligent podconnect does not require facility modifications and operates autonomously. podconnect works collaboratively with people and can reroute its own path if obstructed, to arrive at its destination in the most efficient time and path as possible.

The podconnect network also connects your manufacturing plant with a flow of information across your Robopod products, bringing real time plant performance to your fingertips.

podconnect can be configured several ways to carry, push or lift your products to their chosen destination.
Software:
- Enterprise Manager – Allows Up To 100 AIVs to be controlled
- Close loop feedback to all manufacturing processes
- Real time status of all machines
- Configurable performance dashboards
- Infinitely expandable network of machines
- Data capture of all key manufacturing & component data

Configurable Options:
- Side Scanners for increased width capacity
- Acruity to use ceiling lights for navigation

Positional Accuracy:
- Standard positional accuracy (+/- 50mm)
- Positional Accuracy with HAPS (+/- 10mm)

Possible Configurations:
- Conveyor system
- Lifting unit with Conveyor
- Trolley Push System
- Shelf system With Manual Door

AIV Models:
- LD 60 - 60KG Weight Capacity
- LD 90 - 90KG Weight Capacity
Servitization

Customer Satisfaction

**sales**
All our machines are underpinned by a high-level of support & service, providing customer satisfaction.

**design**
Through collaboration our concepts are supported by PFMEA and Proof of Principle.

**operations**
On time delivery & build quality are key aspects focused on during the build of RoboPod products. It’s our attention to detail that ensures our high level of repeat business.

**controls**
We listen & work with our customers to tailor our controls interface with customer requirements.
"Thought leaders in Automation"
"Only Limited by Imagination"