

# MANUFACTURING

PROFILE

DESIGN  
MANUFACTURE  
DELIVER

UCi








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It all starts  
with our people.

# Introduction

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Team work, training and continual development.

UCI Manufacturing employs 50 team members, many of whom have been with UCI Manufacturing for over 10 years and are committed to manufacturing high-quality office solutions. UCI's main workstation manufacturing facility is located in Adelaide, South Australia. Occupying 10,000 square metres, the site incorporates leading global technology and processing.





## Continuous Improvement

UCI Manufacturing has a quality management system that is ISO 9001 Quality Management certified. Regular audits of the system provide input for continuous improvement in manufacturing processes and systems.

Producing such an extensive range of products with more than 2000 product options requires the use of a sophisticated manufacturing computer system (MRP).



### Our MRP System Helps Manage



Customer Orders



Production scheduling  
& Inventory Control



Purchasing & supplier  
management



Accounts receivable  
& payable





# Environment

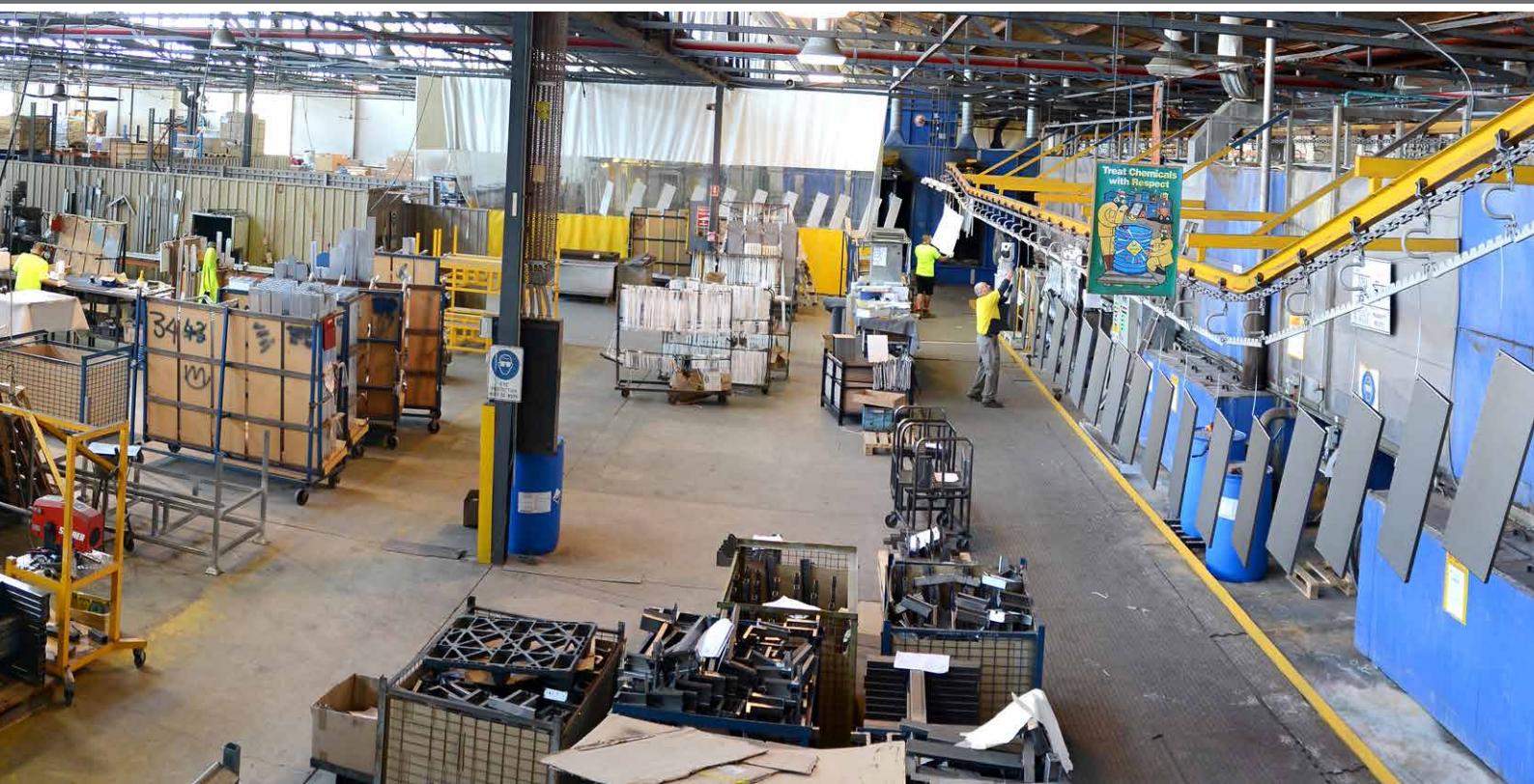
UCI Manufacturing is committed to the environment.

In 2005 we became one of the first workstation manufacturers to implement an environmental management system (EMS), in 2006 our EMS was ISO 14001 Environmental Management certified.

## Key elements of our EMS:

- Design and manufacture of environmentally conscious products.
- Design for disassembly, for ease of recycling.
- Waste management and minimisation by recording and reviewing landfill waste monthly to continually reduce landfill waste through recycling.
- Constantly reviewing energy consumption and investing in energy saving machinery and lighting.
- Replacement of hazardous substances with sustainable alternatives.
- Eliminating VOCs (Volatile Organic Compounds).
- Communicating these values to staff, suppliers and customers.

All new products are independently environmentally certified by Good Environmental Choice Australia (GECA) to GECA 28-2010 v2 Furniture and Fittings (GBCA recognised Level A) standard.



## Design Studio

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UCI's design team includes industrial designers, mechanical engineers and industry specialists, leading to new and intelligent products, focusing on ongoing product refinement.

We're one of the few Australian workstation manufacturers that can design from concept to finished product, utilising the latest in design technologies.

- 3D CAD
- 3D Printing
- CAM
- 3D Rendering

As part of the design process, all new products are tested in house to Australian standards ensuring our products stand the test of time. New products are then independently tested externally by AFRDI.

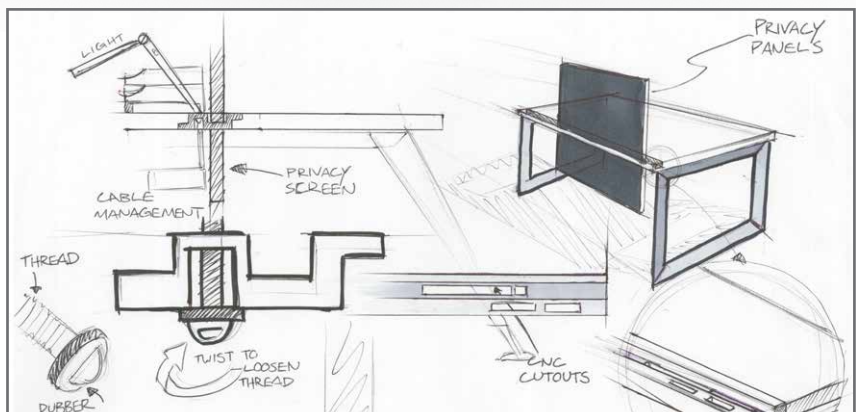
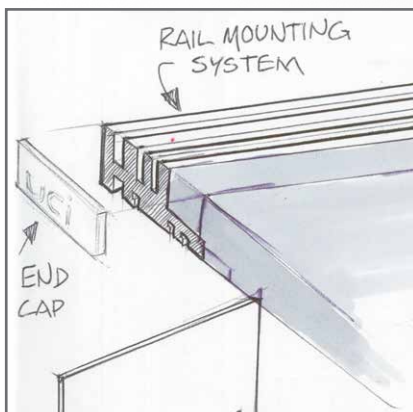
Our in house design and manufacturing team provides the capability to customise standard product to suit a client's specific requirements. Customisation design times are reduced from months to days.

Our design team understands that sustainability is critical and considers the environment at the design stage. Alternative packaging methods and recyclable packaging materials are incorporated into the design process minimising landfill from product delivery and installation.





All design starts with  
a conceptual idea;  
these concepts are  
then further refined  
using 3D CAD and  
3D rendering.



# Manufacturing Technology

UCI Manufacturing differentiates itself from the competition by keeping all manufacturing processes in house.

While many Australian manufacturers are outsourcing processes and services to survive, UCI Manufacturing is investing in new technology; having recently purchased the latest in sheet metal fabrication equipment and robot welders.

Keeping control of all manufacturing processes in house provides greater flexibility when it comes to customisation and helps reduce lead times.

Staying in touch with new technology helps streamline design time lines for delivering new product to market and allowing short lead times on customised product.

## **In-house manufacturing capabilities include:**

- CNC punching
- CNC bending
- CNC routing
- CNC knife cutting
- CNC cold saws
- Welding
- Spot welding
- Powder coating
- Robot welding



## Robot Welding



Greater Weld  
Accuracy



Improved Weld  
Quality




Improved Welding  
Capability



Increased Welding  
Capacity



A Panasonic robotic arm is shown in the process of welding a metal component. The arm is white and black, with the Panasonic logo clearly visible. It is holding a welding torch that is emitting a bright blue light and a shower of orange sparks. The background is a blurred industrial setting.

Repetitive welding  
functions are processed  
using robot welders  
to maintain cost  
competitiveness.



Reduction  
in Lead-Times

## Powder Coating

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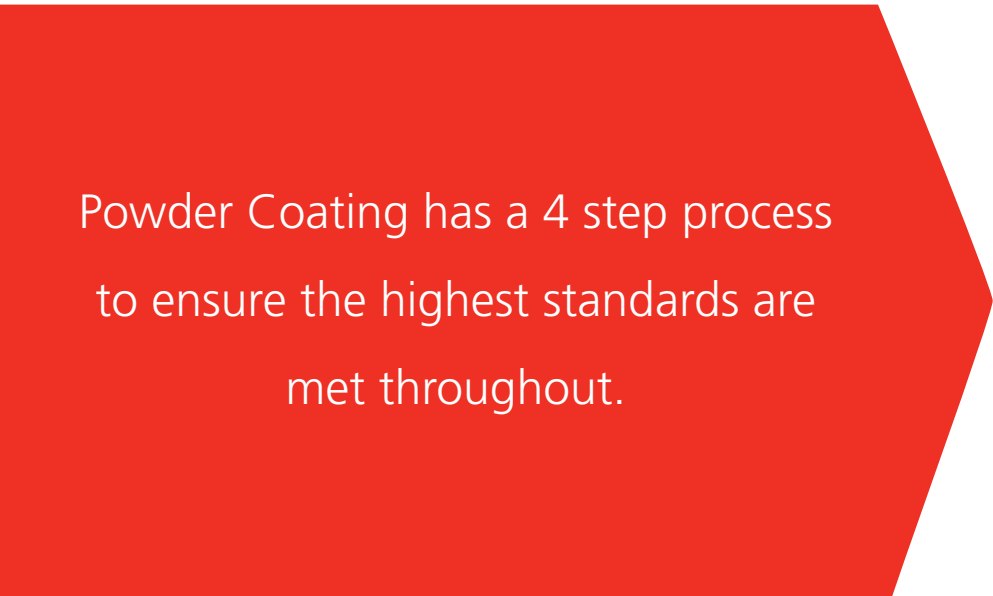
Powder coating is a coating that is applied as a free-flowing, dry powder.

The main difference between conventional liquid paint and powder coating is that the powder coating does not require a solvent to keep the binder and filler parts in a liquid suspension. The coating is applied electrostatically and is then cured under heat to allow it to flow and form a “skin”.

The powder may be a thermoplastic or a thermoset polymer. It is usually used to create a hard finish that is tougher than conventional paint.

Our powder-coat line is unique as the key design focus was minimising the impact on the environment. UCI Manufacturing worked together with environmental consultants to achieve some fabulous environmental savings.

- **80%** savings in water usage (through recycling its water).
- **40%** reduction in energy consumption (through an innovative curing oven design).
- **90%** reduction in chemical concentration levels used in the online pre-treatment process.
- Our paint booths have a cyclone filtration system which is used to **reclaim / reuse** all over sprayed powder. **(this reduced waste powder going to landfill by 68%)**
- In-house powder coating provides UCI clients with endless choices of colour in **short lead times with no minimum quantity**, unlike most imported products.



Powder Coating has a 4 step process  
to ensure the highest standards are  
met throughout.



## 1. PRE-TREATMENT

We have a 5 stage online pre-treatment used to remove dirt and grease. The final wash stage uses demineralised water to provide a spot free rinse achieving an automotive standard finish.



## 2. PAINT BOOTHS

We have 2 methods of powder coat application. Manual hand spraying for low volume colours and automated robot spray guns for high volume production runs.



## 3. CURING OVEN

The curing process typically takes 10 minutes at 180 degrees Celsius. The curing oven uses pressurised curtains of air to keep heat in the oven and reduce energy consumption.



## 4. LOAD & UNLOAD

Our powder coat line is more than 150 meters in length and travels at more than 2 meters per minute.



Our Highly  
experienced team  
work towards  
producing a quality  
product.





# Upholstery Processes

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## All Upholstery done in-house

UCI Manufacturing has a dedicated upholstery department meaning all upholstery is done in-house. This enables our customers the freedom of choice to specify any type of commercial screen fabric on their workstation partition and privacy screens.

Recently UCI launched a modular system of upholstered seating and panelling for offices and public spaces. This range also provides customers with the freedom of choice to select their own choice of commercial upholstery fabric.



# Assembly Processes

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## Vast range of product options

UCI has a vast range of workstations with varying methods of adjustment starting with technician height adjustable, then user height adjustable and electronic sit to stand.

Once all of the components have been powder coated, they make their way to the assembly department where the transformation takes place. Over 80 different elements come together to create an adjustable workstation frame using specialised assembly tools. Due to this vast range of product options, the assembly process is a highly skilled hands on process.







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