Advanced Manufacturing

Hedweld are proud to provide engineering, metal processing and fabrication services to assist Australian manufacturers and businesses in maintaining global competitiveness.

Hedweld's new metal processing plant houses some of the world's most technologically advanced machinery to improve metal processing and manufacturing efficiencies, quality and cost.

Hedweld specialise in:

- Manufactured solutions to complex problems with the ability to make an idea a reality. From inhouse drafting, to machining and general fabrication, blast and paint through to delivery.
- High volume material processing utilising CNC machining, laser and plasma cutting of sheet metal, plate and structural sections. Providing reduced production lead times, consistent manufacturing quality and on time delivery.
- High and low volume manufacturing quantities, including prototype and research & development requirements.







Stay globally competitive

Australian manufacturers and infrastructure businesses can stay globally competitive due to Hedweld's:

- · Production of high-quality products and services
- · Investment in advanced technologies
- Growing skilled labour force

- Inhouse engineering and drafting capabilities
- Ability to provide unique and innovative solutions
- Repeatability

Hedweld Overview

Established in 1980 the Hedweld Group of Companies is a world leader in the design, manufacture and distribution of technologically advanced, innovative and specialised products & services for the agricultural, mining and construction industries. Hedweld's products offer customers high quality and improved safety with a focus on delivering significant productivity gains and efficiencies.

Hedweld's advanced manufacturing facility in Mt Thorley, NSW, also provides local metal processing services to the broader manufacturing and construction industries.

Australian businesses should no longer feel commercial pressure to send manufacturing work overseas.

Awarded the NSW Premier's Exporter of the Year for 2011, 2012, 2013 and 2015, Hedweld has maintained growth by adapting to meet customer needs. Hedweld currently exports to 34 countries.

Having been in the engineering, metal processing, fabrication and manufacturing business for over 35 years the Hedweld team has a wealth of experience, along with a broad mix of tertiary, technical and trade qualifications. We are committed to working with our customers to achieve the best outcomes.

Partnering

Hedweld is experienced in partnering locally and globally. Our partners include:

- Original Equipment Manufacturers (OEMs)
- Steel Manufacturers and Distributors
- Large Multinational Companies
- · Research Organisations and Universities
- · Open Cut Mining Companies
- Our international network of Agents and Distributors.

Repeatability and consistency

Experience our expertise in:

- ✔ Beamline Laser Processing
- ✓ Steel Plate Oxy & Plasma Cutting with Integrated Machining
- ✓ Laser Cutting
- CNC Machining and Turning
- ✔ Robotic Welding
- Pipe Bending and Rolling
- Guillotining and Cropping
- ✔ Press Brake and Panbrake
- ✔ Power Pressing
- Design and drafting solutions including prototypes, tooling and jigging.

Reduce costs & increase production output using robotic welding



Motoman MH50-80 Arc Welding Robot

- Dual welding cells can handle material up to 4750L x 2500W and 2050L x 2500mmW
- Equipped with 2 tonne rotators
- 350 A OTC welder



Hedweld's highly skilled engineers and robot operators will discuss your production needs, design an efficient process and jigging to ensure you get the most out of our 2 station robotic capabilities.



OTC Almega AX-V16 Arc Welding Robot

- 2 horizontal/flat bays to handle material up to 1000L x 1000W x 400H
- 1 vertical bay with rotator to handle material up to 1300L x 1000W x 200H
- 500 A OTC welder

In our experience, the welding robots have created a 30% to 70% cost reduction in the manufacturing process.



3D Beamline Laser Tube Cutter

- High speed, high accuracy processing of Pipe up to 400mm D, RHS & Structural steel sections up to 300mm square x 8m L
- 360 degree swivel cutting torch for full bevel & 3D cutting options
- Integrated Drilling, Tapping & Machining unit allows completion of parts in a single process



Kinetic K5600 Plasma/ Oxy Profile Cutter

- This is the first of its kind in the world and uses pass thru table technology
- 45 degree cutting capability on Plasma & Oxy torches allowing bevel &'K' cutting ability







Amada CO₂ Laser Cutter

- Enhances processing speeds and productivity in the thin to medium thick material range
- High degree of accuracy, quality and stable processing
- Clean cutting of stainless without contamination
- Good surface finish with minimal to no clean up required



Kinetic K4000 XMC Plasma Profile Cutter

- 1.6mm to 50mm steel plate plasma cutting up to 3.2m x 9m plate size
- Oxygen cutting option for plates up to 150mm thick
- 24 station automatic tool magazine offering drilling up to 100mm D (+/-0.1) & tapping up to 2"
- Eliminates the need for secondary machining processes thereby reducing the overall costs of profile cut parts





Okuma 4 & 5 axis machining centres

- 4-axis machining up to 1000 L X 200 D
- 1500 L x 600 W x 700 H machining window
- 5-axis simultaneous machining capability
- 600 L x 600 W x 400 H machining window
- 48 station automatic tool magazines







Okuma Space Turn LB300-M CNC lathe

- High production turning of smaller components
- 300 L x 250 D turning capability
- 60mm diameter spindle bore with automatic bar feed
- 12 automatic tool magazine with live tooling capability for machining slots, keyways, etc



Okuma Multus U3000

- 5-Axis high productivity, dual chuck, multi-function lathe and machining centre
- 1500 L x 650 D turning capability
- Single set up machining, reducing handing times by up to 40%
- Able to machine splines, bevel gears and keyways
- 5-Axis Auto Tuning System for increased accuracy and repeatability







More manufacturing capabilities



3 Dimensional CNC Mandrel Bender

- 3 Dimensional Siemens CNC Controller
- CNC length feed, rotation & angle bending
- Bending capacity: 76mm x 3mm OD x Wall thickness (mild steel)
- Bending radius range: 20mm ~ 200mm
- Bending angle range: 0 ~ 190 Degrees
- Effective Mandrel Length: 6000mm





Panbrake

- 3200mm x 4.0mm folding capacity for mild steel, (2mm for stainless)
- NC Digital Programmable controller, 99 stations each with sequence steps
- Intergrated ballscrew backgauge with rear roller transfer table



Press Break:

200 tonne X 3000mm L capacity



Traditional Tooling Power Presses:

• a 65 tonne press and an 80 tonne press

Lathe - Manual Turning:

• 350mm swing over bed/450mm swing over gap up to 3000mm L

Guillotine:

• 2400mm wide capacity, up to 6mm thickness

Radial Arm Drill:

• 1600 L x 1200 W x 1100 H drilling and reaming to 2"

Line Boring

• up from 30mm diameter

Innovation in Steel Storage - Hedweld Material Handling Station



Hedweld has designed and manufactured a Material Handling Station consisting of 11 cassettes, which accept material dimensions of 2400x6000mm, with thicknesses ranging from 6mm up to 50mm. This product offers:

- Improved safety by minimising manual handling issues
- Efficiency by reducing the storage space required and by centralising storage
- A simplified manufacturing sequence and work cell arrangement, saving time in accessing the materials utilised in the fabrication process
- The automation of the system of control over stock resources.

