HEDWELD GROUP OF COMPANIES

HEDWELD ENGINEERING PTY LTD | MECENSOL mechanical engineering solutions | HEDWELD USA INCORPORATED

Advanced Manufacturing Capabilities

Hedweld is proud to deliver expert engineering, metal processing, and fabrication services that help Australian manufacturers and businesses stay competitive on the global stage.

Hedweld has been in the engineering, processing, and manufacturing business since 1980. Our modern facility in Mt Thorley, NSW, offers metal processing services to support other local manufacturers and construction businesses.

Hedweld has become a world leader in creating and delivering advanced, innovative products and services for the farming, mining, and construction industries. Our products are high quality, improve safety, and help customers work more efficiently and productively.

Our team are dedicated to helping customers achieve the best results. With our in-house engineering and drafting expertise, we can efficiently handle all aspects of your project under one roof, ensuring seamless project execution from start to finish.

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
- ✔ Design and drafting solutions including prototypes, tooling and jigging.

CNC Lathes

Harrison Alpha 1660XS

- To turn larger diameter components accurately, efficiently and cost effectively with a unique blend of manual and CNC capabilities
- Heavy duty lathe with large swing capacities
- High powered motor with a large spindle bore

Okuma Multus U3000

- 5-Axis high productivity, dual chuck and multi-function
- Single set up, powerful turning main spindle
- Full-function milling with the B-axis tool spindle and Y-axis off-center machining
- Able to machine splines, bevel gears and keyways

Okuma Space Turn LB3000 EX III

- High torque M spindle for greater multitasking speed
- High speed feeds & indexing for increased productivity
- Rigid slant-bed box construction for accuracy even in heavy cutting
- Automatic bar feeder for high productivity

Okuma Space Turn LB300-M

- High production turning of smaller components
- 60mm diameter spindle bore
- 12 automatic tool magazine with live tooling capability for machining slots, keyways, etc

LATHES	SWING OVER BED	SWING OVER SADDLE	MAX. OD TURN	MAX WORK LEN.	SPINDLE BORE	No. TOOLS ATC	ADDITIONAL FEATURES	NOTES
HARRISON ALPHA 1660XS CNC	660mm	460mm		3000mm	105mm	8	LONG BED LARGE DIA STEADYREST	NEW 2025
OKUMA MULTUS U3000 MULTITASKING CNC			650mm	1600mm	81mm	40	DUAL CHUCK MULTITASKING	
OKUMA SPACE TURN LB3000 EX III BMYC CNC	580mm	470mm	410mm	970mm	81mm	12	PROGRAMABLE STEADYREST & TAILSTOCK	NEW 2025
OKUMA LB300-M CNC			300mm	480mm	64mm	12		
COLCHESTER HARRISON M300 MANUAL	300mm	200mm	300mm	1000mm	40mm			

Machining Centres

Okuma 5 Axis MU-400VA

- 5-Axis Auto Tuning System for increased accuracy and repeatability which keeps complex, multi-face machining within tight tolerances
- Thermo-Friendly Concept uses intelligent design and control to compensate for temperature changes, maintaining precision over long machining runs without constant manual recalibration
- OSP-P control gives operators intuitive controls, advanced diagnostics, and open architecture to support customisation, automation and connectivity
- Single set up, reducing handling times by up to 40%

Okuma 4 Axis MB-66VA

- OSP-P300M control, a powerful system combining CNC control with an open PC architecture
- Thermo-Friendly Concept ensures both the spindle and machine frame manage thermal deformation effectively
- Robust double-column design, providing exceptional rigidity and stability combined with the rigid spindle it's built for both speed and strength
- Flexible 4-axis setup, allowing you to machine multiple faces or perform continuous rotary work, ideal for complex parts or reducing multiple setups

MACHINING CENTRES	MAX LENGTH	MAX WIDTH	MAX DEPTH	No. TOOLS ATC
OKUMA 5 AXIS MU-400VA	600mm	400mm DIA	400mm	32
OKUMA 4 AXIS MB-66VA	1530mm	660mm	660mm	32

Laser/Kinetic Cutting Equipment

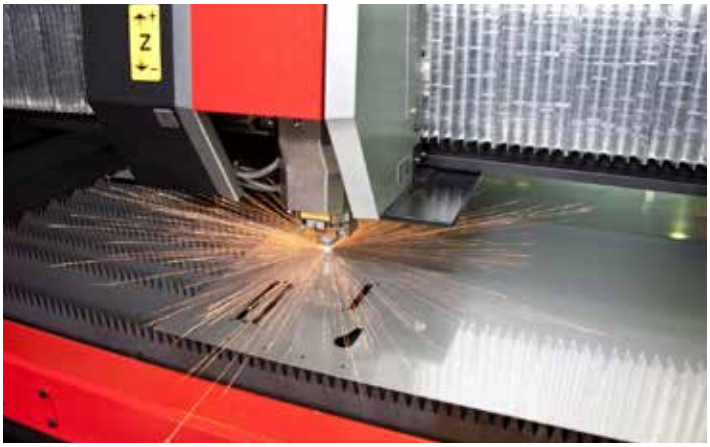
Kinetic K5600XMC

- Plate Dragga pass-through table system, where the material is pulled through a stationary gantry. This design facilitates continuous processing, allowing for efficient handling of long plates and streamlined workflow
- 45 degree cutting capability allowing bevel & 'K' cutting ability
- Oxygen cutting option for plates up to 150mm thick
- Automatic tool magazines offering drilling, tapping, counter sinking and counter boring

Kinetic K4000XMC

- Combines plasma cutting, oxy-fuel cutting, drilling, tapping, and milling into one machine
- Accommodates a wide range of material thicknesses and types
- Automatic tool magazines
- Eliminates the need for secondary machining processes thereby reducing the overall costs of profile cut parts

PLATE PROCESSING MACHINES		MAXIMUM THICKNESS (mm)						
	MAX SHEET SIZE (mm)	PLASMA CUT	LPG OXYCUT	DRILL	C/BORE C/ SINK	TAP	No. TOOLS ATC	ADDITIONAL FEATURES
KINETIC K5600 PLATE DRAGGA CNC	2500x6000	60	150	To Dia 50mm (2")	To Dia 50mm (2")	To M24 (1" UNC)	24	PLASMA BEVEL / K PREP + MILLING
KINETIC K4000 FLAT WATERBED CNC	3000x9000	50	N/A	To Dia 50mm (2")	To Dia 50mm (2")	To M24 (1" UNC)	24	



Amada CO2 Laser Cutter

- High-speed oxygen-assisted cutting process that employs smaller nozzle sizes which reduces processing times
- Features a lightweight Y-axis carriage with a low centre of gravity, combined with high-torque motors and a helical rack drive system
- Highly tuned oscillator, designed to deliver a higher beam density. This enhancement improves surface roughness and cutting quality, particularly beneficial for processing thin to mid-thickness materials

FLAT BED LASER		MAXIMUM THICKNESS (mm)		
	MAX SHEET SIZE (mm)	CARBON STEEL	STAINLESS STEEL	ALUMINIUM
AMADA 3015 CO2	1525 x 3050	16	12	6

Stocked Plate Specification

With a wide range of materials and thicknesses in stock, we're equipped to process orders quickly—minimising lead times and keeping your projects on schedule.

NOMINAL THICKNESS (MM)	GR250	GR350	BIS80	FLOOR PL	GALV	304 GR S/S	316 GR S/S	5005 GR ALU
1.5	YES	N/A	N/A	N/A	INDENT	YES	YES	INDENT
2	YES	N/A	N/A	N/A	YES	YES	YES	INDENT
2.5	YES	N/A	N/A	N/A	YES	INDENT	INDENT	INDENT
3	YES	YES	N/A	YES	YES	YES	YES	YES
4	YES	INDENT	N/A	INDENT	INDENT	INDENT	INDENT	INDENT
5	YES	YES	N/A	INDENT	INDENT	INDENT	INDENT	INDENT
6	YES	YES	INDENT	YES	INDENT	YES	INDENT	YES
8	YES	YES	INDENT	INDENT	N/A	INDENT	INDENT	INDENT
10	YES	YES	INDENT	YES	N/A	YES	INDENT	N/A
12	YES	YES	YES	N/A	N/A	YES	INDENT	N/A
16	YES	YES	YES	N/A	N/A	N/A	N/A	N/A
20	YES	YES	YES	N/A	N/A	N/A	N/A	N/A
25	YES	INDENT	YES	N/A	N/A	N/A	N/A	N/A
28	INDENT	N/A	N/A	N/A	N/A	N/A	N/A	N/A
32	YES	INDENT	INDENT	N/A	N/A	N/A	N/A	N/A
36	INDENT	N/A	N/A	N/A	N/A	N/A	N/A	N/A
40	YES	INDENT	INDENT	N/A	N/A	N/A	N/A	N/A
45	INDENT	N/A	N/A	N/A	N/A	N/A	N/A	N/A
50	YES	INDENT	INDENT	N/A	N/A	N/A	N/A	N/A
55	INDENT	N/A	N/A	N/A	N/A	N/A	N/A	N/A
60	INDENT	INDENT	N/A	N/A	N/A	N/A	N/A	N/A
70	YES	INDENT	N/A	N/A	N/A	N/A	N/A	N/A
80	INDENT	INDENT	N/A	N/A	N/A	N/A	N/A	N/A
90	INDENT	N/A	N/A	N/A	N/A	N/A	N/A	N/A
100	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A
110	INDENT	N/A	N/A	N/A	N/A	N/A	N/A	N/A

YES	Typically held in stock at Hedweld engineering
INDENT	Not typically held in stock but readily procured
N/A	A thickness not normally stocked at suppliers or Hedweld may not have the capability to process

3D Beamline Laser Section Cutter

Mazak Fabri Gear F-G400

- 3D laser head that allows for high-accuracy cutting and joining of complex shapes from various angles and directions
- Utilising a powerful fiber laser, it delivers high-speed cutting while maintaining energy efficiency
- Integrates various machining processes, including transportation, cutting, bevel cutting, drilling, tapping and punching, all completed in a single process
- 360 degree swivel cutting torch for full bevel & 3D cutting options

3D LASER - SECTIONAL PROCESSING	MAX LENGTH	MAXIMUM THICKNESS (mm)			SECTION SIZE (mm)				
	MAX SECTION LENGTH	CARBON STEEL	STAINLESS	ALUMINIUM	PIPE	RHS/SHS	PFC	ANGLE, EQUAL OR UNEQUAL	UB,UC
MAZAK FG400	9000	16	10	8	20 TO 406 OD	20X20 TO 300X300	TO 250PFC	TO 250X250	TO 203X203

Bending Equipment

Durma 200T Press Brake

- NC Digital Programmable controller, 99 stations each with sequence steps
- Integrated ballscrew back gauge with rear roller transfer table

LVD 80T Press Brake

- Multi axis CNC back gauge
- Turbo hydraulics for high-speed bending
- Numerous configuration choices
- Large selection of tooling for complex parts

Steelmaster Pan Brake:

- Full hydraulically operated bending and clamping beam for efficient heavy duty operation
- Bending angle of 0-125°

PRESSES			EXAMPLES - MATERIAL x THICKNESS (mm) x LENGTH (mm) x INTERNAL RADIUS (mm)			
	MAX LEN	MAX FORCE	EXAMPLE 1	EXAMPLE 2	EXAMPLE 3	NOTES
LVD 80T CNC PRESS BRAKE	2000mm	80t	GR250 x 4PL x 2000 x 4 IR	GR350 x 6PL x 1200 x 6 IR	316S/S x 6PL x 1200 x 6 IR	FULL CNC
DURMA 200T PRESS BRAKE	3200mm	200t	GR250 x 6PL x 3000 x 6 IR	GR250 x 12PL x 1600 x 12 IR	BIS80 x 10PL x 1000mm x 10 IR	CNC FUNCTIONS
PAN BRAKE	3200mm		GR250 3PL x GR250 x 3000 x 3 IR	304S/S x 2PL x 3000 x 2 IR		

Robotic Equipment

Advanced Robotic Welding Capabilities

Our facility features state-of-the-art Yaskawa / Motoman Robotic Welding Cells, enhancing our capacity to deliver high-precision, high-productivity fabrication services.

These advanced systems can rotate and weld components up to:

- 3,000mm wide
- 10,000mm long
- 10 tonnes in weight

Key Features and Benefits:

- Cloud-based programming interface
- Enables rapid job setup, reduces downtime, and lowers project costs.
- Laser seam finding and tracking technology
- Ensures accurate weld bead alignment and consistent weld quality—even on complex or variable surfaces.
- Improved weld precision and repeatability
- Minimises rework, increases reliability, and supports high-volume production with tight tolerances.

Our robotic welding capability is ideal for fabrications where quality, efficiency, and repeatability are critical. Partner with us to streamline your manufacturing process and achieve superior results.

HEDWELD GROUP OF COMPANIES

Manufacturers and Suppliers of: SAFE-AWAY® Trilift® Milbrotec

Innovation in Steel Storage - Hedweld Material Handling Stations

Are you a fabricator, profile plate cutter or heavy equipment manufacturer looking for efficient and safer materials handling?

We were, but couldn't find a suitable solution.

So, Hedweld has designed and manufactured a range of Material Handling Stations to improve safety, minimise manual handling and automate stock control.

These products offer:

- Efficiency by reducing the storage space required and by centralising storage
- Improved safety by minimising manual handling issues
- 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.

The Large Material Handling Station consisting of 11 cassettes, which accepts material dimensions of 2400x6000mm, with thicknesses ranging from 6mm up to 50mm or 7,235kg per cassette.

The Small Material Handling Station consisting of 2 stacks of 10 cassettes, which accepts material dimensions of 1500x3000mm, with thicknesses up to 60mm or 2,000kg per cassette.

Contact us is you wish to discuss options.

Through innovation we provide improved safety and efficiency

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