

# Fluid Dynamics

Heat Exchange Solutions since 1981

## Capability Presentation

Date: 17/02/2026



# Capability

Fluid Dynamics Pty Ltd, an Australian owned and operated company specialising in heat exchangers since 1981, is certified ISO 9001:2015 and can design and verify to most compliance standards including:

API 661 norms; AS1210; ASME 'U' Stamp; PED etc..

In over 40 years of operation Fluid Dynamics has built an enviable reputation for being able to design, manufacture, supply, re-engineer, refurbish, clean and test a huge range of heat exchangers at its fully equipped facility.

We carry a large range of stock and equipment for even the most complicated of projects with our product range being constantly extended and updated to include the latest designs.

As we are not tied to any single brand, we are completely unrestrained in what solutions we can offer – the best solution that suits our customers, not the 'solution' that suits the supplier

Our unique business model allows us to supply both OEM and aftermarket heat exchangers with custom designs, modifications, refurbishment, parts and service for almost any type of heat exchanger to suit our customers needs. Fluid Dynamics will always offer the best solution and the best quality at very competitive pricing - all backed up by a proud Australian company specialising in heat exchangers



# Heat Transfer

Fluid Dynamics has remained at the forefront of heat exchanger technologies since 1981. From our base in Melbourne, we offer the following services to our very broad customer base:



Fabrication & Service Facility



Ultrasonic Cleaning System



In House Inspection and Testing



Design, Sales and Service for new, replacement & rebuild of all heat exchangers



Accreditation to ISO 9001 SAI Global



Site Installation Capability



Site Inspection



Strategic supply partners to enhance our own manufactured heat exchanger technologies



HEAT RECOVERY  
Waste Heat Recovery  
Heat Recovery Consultancy



# Factory & Facilities

We have a dedicated team of fitters, welders and in house service technicians who know what is needed when it comes to your heat exchangers.

***With Fluid Dynamics your heat exchangers are in good hands.***

***When we receive your unit, our team will :-***

- Carry out initial inspection and detail findings
- Pre-clean the heat exchanger if required
- Carry out a preliminary pressure test and further assess the unit
- If instructed, contact you to discuss all findings in detail and advise our recommendations and what corrective actions should be taken.
- If instructed, clean the heat exchanger using our advanced ultrasonic cleaning system
- Fully refurbish and bring the unit back to sound operational condition on all parts
- Carry out final assembly; replace all seals and parts as required; carry out final pressure test and a close inspection. Document all findings and results are put into our final report.
- Finally, your unit will be dried, painted if instructed, packed and made ready for delivery.

# Most Types of Heat Exchangers

including:

- Finned Tube
- Shell & Tube
- Scraped Surface
- Gasketed Plate
- Double Wall Plate & Tubes
- Semi Welded Plate
- Fully Welded Plate
- Brazed Plate
- Aluminium Radiators
- Finned Coil
- Finned Tube
- Air Cooled Condensers
- Corrugated Tube
- Diffusion Bonded
- Printed Circuit
- Custom Build

# Heat Exchanger Industries Served

including:

- Power & Energy
- Coal, Oil & Gas
- Food
- Dairy
- Beverage / Brewery / Winery
- Pharmaceutical
- Refrigeration
- Marine
- Water & Wastewater
- Mineral & Mining
- Chemical
- Petrochemical
- HVAC
- Off & On Road
- General Process

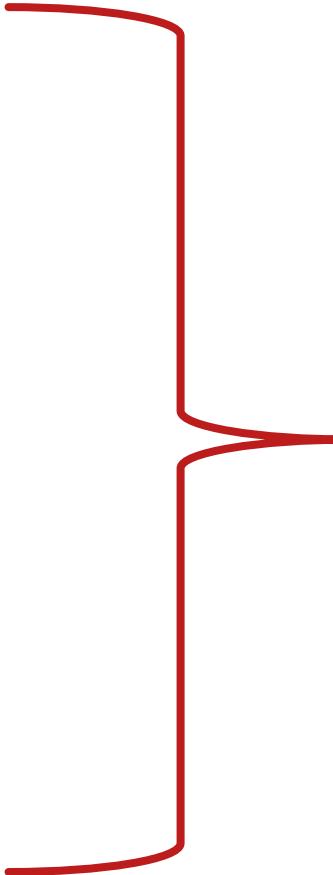
# Heat Exchange for following Processes

including:

- Hydrogen
- Energy
- Carbon Capture
- LNG
- Oil & Gas
- Intercooling
- After Cooling
- Flue Gas Cooling
- Waste Heat Recovery
- Desublimation
- Steam
- Lean Amine
- Biogas
- Air

# What Heat Transfer Application are you looking for?

- Heating
- Cooling
- Regeneration
- Pasteurisation
- Desuperheating
- 2 Stage Heating / Cooling
- Waste Heat / Energy Recovery
- Condensate Recovery
- Exhaust Gas Heat Recovery
- Evaporation
- Condensing



- **Fluid Dynamics**

If your application is not listed, then please ask.

# Gasketed Plate Heat Exchangers

OEM or our own **FluidEX®** Range

## Wide range

Modern / Efficient

## Industrial

Painted frames

## Hygienic

All stainless-steel frames

## Plate Materials

316, 304, Titanium,  
Hastelloy, Inconel, etc.

## Gasket Materials

HT NBR, HT EDPM, HNBR,  
Viton

## Capacity

1m<sup>3</sup>/h to 4,500m<sup>3</sup>/h

## 25bar

Max working pressure

## Operating Temps

-20°C to +190°C

## Standard Connections

DN25 to DN500

## Hygienic Dairy Fittings

Connections  
1" to 6"



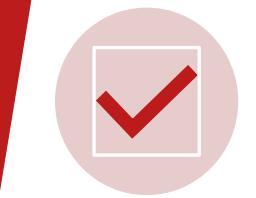


# Plate Heat Exchangers Spares & Service

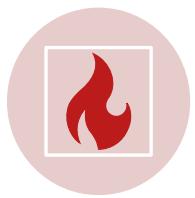
- Fluid Dynamics supplies high quality Plates & Gaskets for most models including:  
*APV, Alfa Laval, FluidEX, GEA, Vicarb, Mueller, Sondex, Tranter, Hisaka, Reheat, HRS, Sepak, AHTT, API Schmidt Bretton, Arsopi, Barriquand, Fischer, Funke, SWEP...*
- On-site service, gas testing and maintenance of your PHE units
- In-house cleaning and crack detection of plate packs
- Ultrasonic cleaning system for plates and associated components
- In-house refurbishment and rebuilding of plate heat exchangers
- Redesign and design changes for most ranges possible
- Swap out frames for many sizes with minimal modifications required
- Flexibility to offer tailored service and spares solutions to meet specific requirements and needs



# Fully Welded Heat Exchangers



SUITABLE FOR A  
WIDE RANGE OF  
APPLICATIONS



GAS TO LIQUID  
OR  
GAS TO GAS



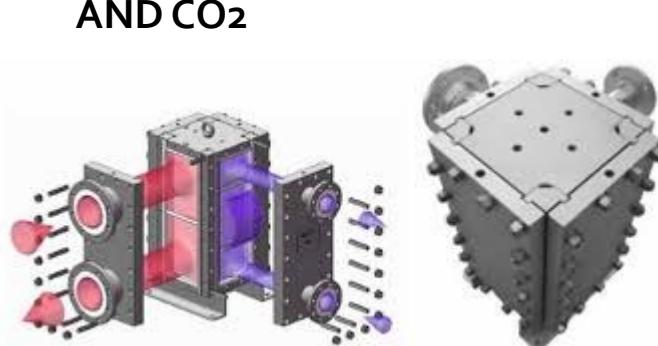
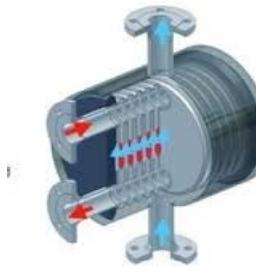
HIGH PRESSURE  
APPLICATIONS,  
VAPOURS AND  
REFRIGERANTS



ALUMINA  
SLURRIES OR  
SIMILAR  
PROCESSES,  
ELUATES ETC.



HAZARDOUS  
FLUIDS –  
CHEMICALS AND  
PETROCHEMICAL



# FluidEX® Brazed Plate Heat Exchangers

## Very large range

Suit almost any application.

## Brazing

Copper or Nickel

## Very compact

High Thermal Efficiency.

## Easy Installation

## Long life

Proven  
Durability & Reliability

## Corrosion Resistant

available

## Materials

316L, SMO254 plates, Cu  
& Ni Brazing

## Twin Wall Safety Plates

available

## Dedicated Oil Coolers

(DOC)



# Pumps & Valves

Fluid Dynamics provides sales and service for a wide range of pumps and valves used in modern production facilities supported by our experts who are on hand to provide service, spares and support to ensure efficiency and performance from all your equipment.

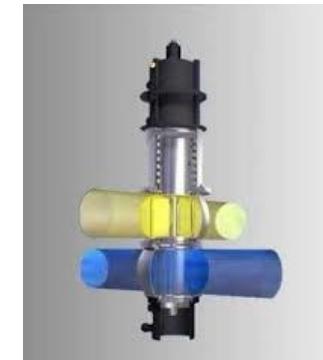
- Service, Repairs, Overhauls, Refurbishment on site or off
- Maintenance - General & Planned
- Plant Obsolescence Management
- Rotating & Spare Parts Replacement
- Plant Monitoring
- Training
- Sales

## Valves

Single and Double Seat Seal • Ball • Butterfly • Check • Mixproof

## Pumps

Positive Displacement • Centrifugal • High Pressure • Lobe



# Homogenisers & Buttermaker's

Fluid Dynamics now offers expert onsite servicing of Homogenisers and Buttermaker's and other similar equipment - Australia-wide.

Contact Fluid Dynamics' and have our team of expert service technicians provide annual wet-end servicing of all APV Homogenisers and Buttermaker's including drive-end inspection and oil and oil filter replacement.

## Services

- Service, Repairs, Overhauls, Refurbishment on site
- Maintenance - General & Planned
- Rotating & Spares Replacement
- Plant Management
- Plant Monitoring
- Training
- Sales





# HRS Heat Exchangers

- Fluid Dynamics is proud to be the sole partner for HRS Heat Exchangers covering Australia and New Zealand.
- The following 8 slides, provides a window into the products and services we can deliver to our customers across all industries

## HRS GLOBAL SALES LOCATIONS



## APPLICATIONS



ENVIRONMENTAL



FOOD & BEVERAGE



PHARMACEUTICAL



INDUSTRIAL



### Applications / Environmental

Anaerobic Digestion (AD) & Biogas  
Biodiesel  
Bioethanol  
Evaporation & Concentration of environmental waste streams  
Sludge Pasteurisation  
Sewage Treatment  
Wastewater  
ZLD (Zero Liquid Discharge)

### Applications / Food & Beverage

Beverages  
Dairy  
Fruit  
Plant Based  
Prepared Foods  
Soups & Sauces  
Vegetable  
Oils

### Applications / Industrial

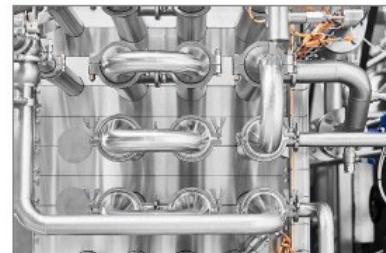
Fine Chemicals  
Palm Oil  
Petrochemicals  
Process Water  
Solvents

### Applications / Pharmaceutical

WFI  
Creams  
Gels  
Balms  
Lotions  
Waxes

## PRODUCTS | HEAT EXCHANGERS

Double Tube Heat Exchangers



Multi Tube Heat Exchangers



Annular Space Heat Exchangers



Scraped Surface Heat Exchangers



Plate Heat Exchangers



## PRODUCTS | SYSTEMS

### ENVIRONMENTAL SYSTEMS

Biogas Dehumidification Systems (BDS)

Concentration & Evaporation

Digestate Pasteurisation for  
Renewable Energy (DPS)

Concentration of Environmental Waste  
for Renewable Energy (DCS)

Zero Liquid Discharge (ZLD)



## PRODUCTS | SYSTEMS

### FOOD SYSTEMS

Pasteurisers/Sterilisers

Cleaning-In-Place & Sterilise-In-Place

Concentration and Evaporation Systems

DSI (Direct Steam Injection)

I Series (Ice Crusher & Re-Melter)

Process Skids



## PRODUCTS | PISTON PUMPS

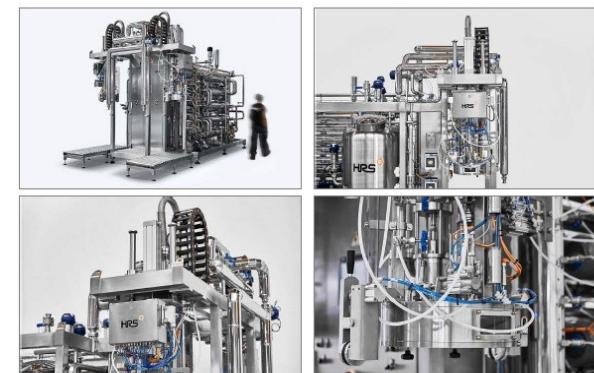
HRS BP Series piston pumps are hydraulically or pneumatically operated positive displacement pumps that transfers mechanical energy to pressure.



## PRODUCTS | ASEPTIC FILLERS

Aseptic filling ensures products remain safe, fresh and retain quality for up to twelve months, thus maintaining their taste, colour, texture and the essential nutritional values.

The HRS AF Series is a range of single and dual head aseptic fillers for use with 'bag-in-box' and 'bag-in-drum' type sterile packaging solutions.





## Kelvion Heat Exchangers

- Fluid Dynamics is proud to have been chosen as the partner to Kelvion for their complete range of heat transfer technologies across all industries covering Australia and New Zealand
- The following slides provides a window into the products and services we can deliver to our customers



## KELVION PORTFOLIO

Widest Thermal Solutions Portfolio in the Industry

Slide 8



### EVAPORATORS



### HEAT REJECTION & HEAT RECOVERY SOLUTIONS



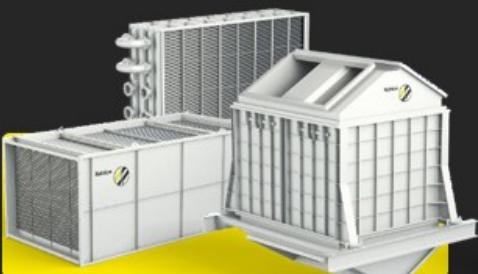
### PLATE HEAT EXCHANGERS



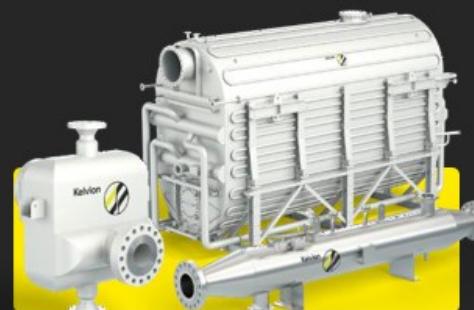
### ENGINE & GENERATOR COOLERS



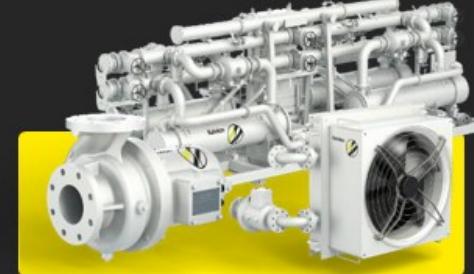
### COILS



### HEATING SOLUTIONS



### PROCESS HEAT TRANSFER SOLUTIONS



### TRANSFORMER COOLING SYSTEMS



Kelvion



**Fluid Dynamics**  
Heat Exchange Solutions since 1981

Diffusion Bonded  
Heat Exchanger

Kelvion K°Bond

## COMPACTNESS & PERFORMANCE BONDED TOGETHER



### DESIGN & FUNCTION

For decades, we have been supplying the oil & gas industry with reliable and efficient heat exchange technology for a wide range of applications. Our broad experience and knowledge of the market has enabled us to develop and enhance our product portfolio with innovations.

K°Bond, Kelvion's diffusion bonded heat exchanger, is ideal for applications involving extreme process temperatures and pressures. Combining design with welding expertise, K°Bond withstands pressures up to 1,000 bar and temperatures from cryogenic -200 to 600 °C, while providing significant savings in weight and footprint compared to common heat exchanger solutions.

K°Bond with its diffusion bonding technology is perhaps one of the most significant and game-changing solutions for projects with restricted space – May it be for offshore plants (e.g. as high pressure vaporizer) and reliquefaction on floating units.

### ADVANTAGES

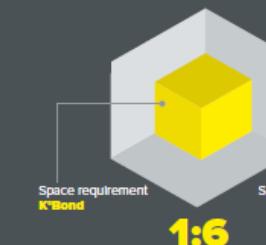
- PRESSURE RESISTANCE UP TO 1000 BAR
- WORKING TEMPERATURE RANGE FROM -200°C TO 600°C
- HIGH HEAT TRANSFER RATE THANKS TO FLUIDS PROXIMITY ALLOWING TEMPERATURE APPROACH UP TO 2°C
- LEAKAGE FREE AND SAFE
- HIGH RESISTANCE TO CYCLIC SERVICES
- UP TO 6 TIMES SMALLER THAN CONVENTIONAL S&T HEAT EXCHANGER

### K°BOND APPLICATIONS



**Fluid Dynamics**  
Heat Exchange Solutions since 1981

### K°BOND PERFORMANCE



Space requirement  
K°Bond  
1:6



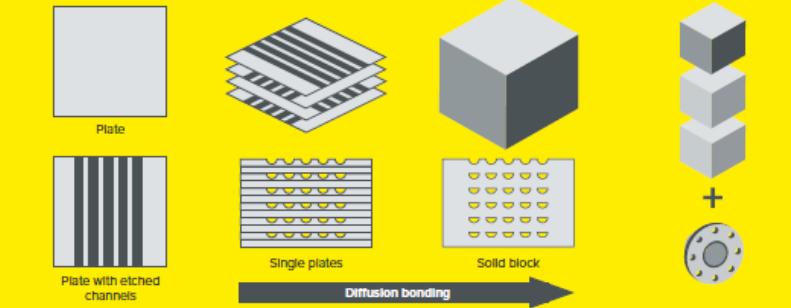
Space requirement  
Shell & Tube HX  
with same  
performance

### DIFFUSION BONDING

1. Patterns are designed for each service and chemically etched on stainless steel plates.

2. Etched plates are stacked and welded through diffusion bonding process, converting them into one solid block of metal (core).

3. When required, multiple cores are welded together. Nozzles and headers are welded on cores to form final K°Bond.



Optimized  
in-house design software



Available in stainless steel  
304L & 316L



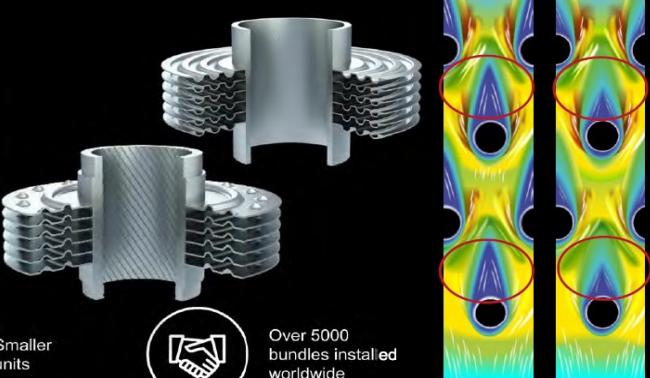
Designed as per ASME rules,  
CE-marked and / or U-stamped



## GROOVY & DIESTA ARE ABLE TO BOOST YOUR EFFICIENCY

### FIN SHAPE

- Reducing "dead zone" by air guidance
- Increasing turbulences on tube and air sides
- More than 20% increase of air side heat transfer coefficient at equivalent fan power and equivalent CO<sub>2</sub> emissions reduction



Kelvion  
patented  
technology



Smaller  
units



Over 5000  
bundles installed  
worldwide

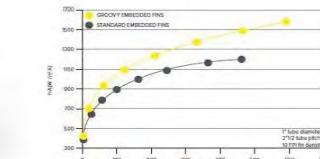


### AIR FIN COOLER ALU GROOVY TUBES

**Groovy embedded fins:**  
Fins are embedded on core tube

**Groovy extruded fins:**  
Fins are embedded on an aluminum sleeve covering the bare tube;  
Groovy extruded is a commercial name highlighting the benefit being equivalent to regular bimetallic extruded. It is not the result of an extrusion process.

**BIWA:**  
**Bimetallic Wrapped Aluminium finned tube**



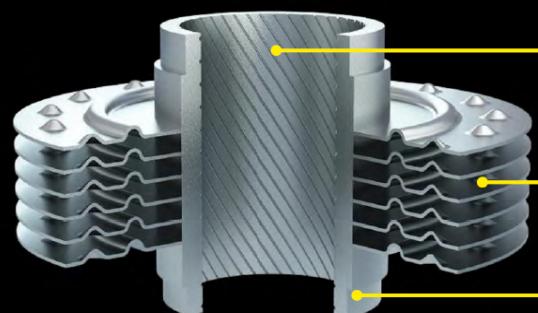
Groovy Fin: Groovy fins have a grooved profile allowing an improved air guidance. Their pinwinding and passive shape channels the air flow and increases the heat transfer coefficient. Groovy fins cause CO<sub>2</sub> savings by increasing the heat transfer coefficient and reducing the heat transfer area. 10% less electricity.

Whichever the performances, the Groovy fins will still provide the same reliability and robustness of the standard fins. Whichever the performances, the Groovy fins will still provide the same reliability and robustness of the standard fins.

A more detailed presentation on the Groovy and Diesta is available on request

## DIESTA TUBES - DESIGN

### DIESTA = Dual Internal & External Structured Tube for Air Fin Cooler



Enhanced internal tube surface using helicoidal structure

Enhanced external fin surface using grooves & dimples which increase turbulences & improve air distribution

Aluminum sleeve protection

### AIR FIN COOLER ALU DIESTA TUBES

**DIESTA finned tube:**  
Dual Internal & External Structured tube for Air Cooler

**DIESTA is bimetallic:**  
Fins are embedded on an aluminum sleeve covering the bare tube as per groovy Extruded.

**BIWA:**  
**Bimetallic Wrapped Aluminium finned tube**



TUBE MATERIAL	TUBE ID	INNER TUBE FINNED	FIN MATERIAL	FIN DENSITY
Outer tube (S31600 SA729 & SA326 Outer 4)	1 inch 25.4 mm (in accordance with API 664)	2.50 inch 1/2 inch (in accordance with API 664)	aluminum 930	10 g/m <sup>2</sup> (typ)

OPPONENT INTERNAL STRUCTURES ARE AVAILABLE FOR

Gas cooling

Condensation

Liquid cooling (incl. high viscous fluid  $Pr < 100$ )

DIESTA PRODUCTION PROGRAM

DIESTA DESIGN 1: standard design with plain fins

DIESTA DESIGN 2: CFD-optimization with plain fins

DIESTA DESIGN 3: CFD-optimization with dimpled fins

DIESTA DESIGN 4: CFD-optimization with helicoidal fins

DIESTA DESIGN 5: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 6: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 7: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 8: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 9: CFD-optimization with dimpled helicoidal fins

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DIESTA DESIGN 129: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 130: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 131: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 132: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 133: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 134: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 135: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 136: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 137: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 138: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 139: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 140: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 141: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 142: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 143: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 144: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 145: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 146: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 147: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 148: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 149: CFD-optimization with dimpled helicoidal fins

DIESTA DESIGN 150: CFD-optimization with dimpled

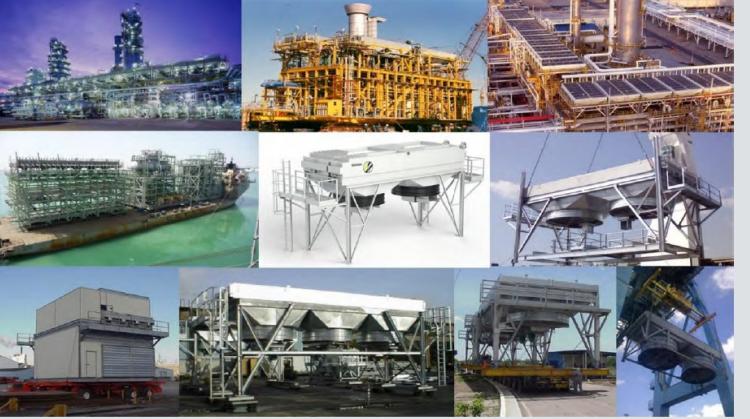


THERMAL  
SOLUTIONS



Heat Exchange Solutions since 1981

## AFC FORCED DRAFT



## AFC INDUCED DRAFT



Kelvion

## KEY FACTORS OF AIR FIN COOLER PERFORMANCE



FAN POWER  
CONSUMPTION



TUBES & FINS



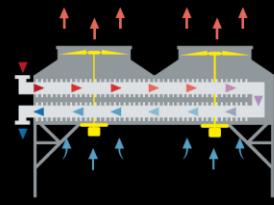
PILOT SIZE



AMBIENT  
CONDITIONS

Kelvion

## AIR FIN COOLER



### OUR EXPERIENCE



15 PATENTS  
SINCE 2007



OVER 120,000  
TUBE BUNDLES  
SOLD SINCE THE 1970'S

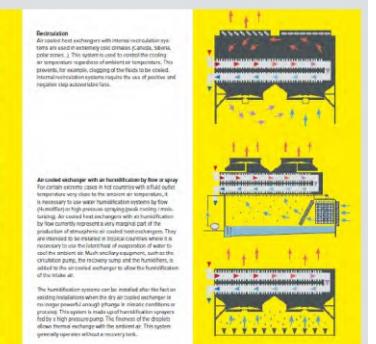
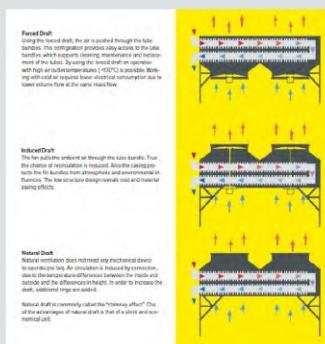
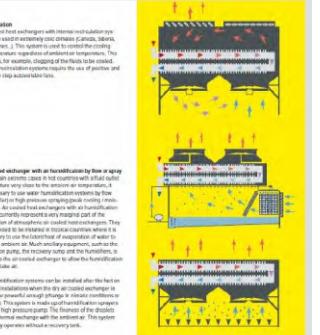
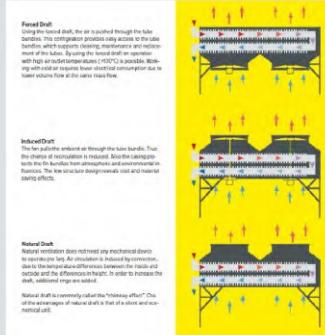


FIRST  
AIR FIN COOLER  
INSTALLED IN 1927

### WORKING PRINCIPLE

- Working Fluid / Refrigerant flows inside the tubes
- Ambient Air is forced / induced through tube bundles

## MULTIPLE AFC DESIGNS



Kelvion



Kelvion Thermal Solutions for

# CARBON CAPTURE & STORAGE

**Fluid Dynamics**  
Heat Exchange Solutions since 1981

25-27 Star Crescent Hallam  
Victoria 3803 Australia  
Local: 1300 58 58 59  
Int'l: +61 3 8786 4900  
E: sales@fluiddynamics.com.au  
W: www.fluiddynamics.com.au

## FLUE GAS COOLING



Rekuluvo/Rekugavo  
Flue Gas Cooling

## AMINE CO<sub>2</sub> REMOVAL SYSTEMS



Air Fin Cooler  
Lean amine cooler

## CCS BY DESUBLIMATION



Desublimators  
Direct exhaust gas capture

## CCS ABSORBER



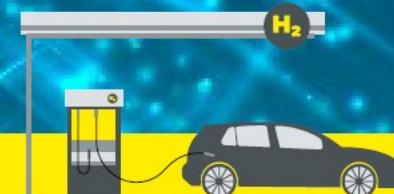
Cooling Tower  
Direct air capture

# Kelvion



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Victoria 3803 Australia  
Local: 1300 58 58 59  
Int'l: +61 3 8786 4900  
E: sales@fluidynamics.com.au  
W: www.fluidynamics.com.au

Cooling solutions for the entire value chain of  
**HYDROGEN**



## PRODUCTION & PRODUCTION UPSCALING



**Air Fin Coolers**  
High performance tube technology



**Desublimators**  
Unique technology for carbon capture



**Cooling Towers**  
Smallest footprint



**Heat recovery**  
Wide range & experience

## DISTRIBUTION



**K°Bond**  
Diffusion bonded heat exchanger  
with highest pressure resistance

## INTEGRATED SOLUTIONS & UTILIZATION (FUEL CELLS)



Customized and  
integrated solutions  
beyond heat exchangers

# Bar and Plate (Aluminium & Copper)

- Large stock of components carried at all times
- Ability to custom build to just about any size
- Aftermarket units are a specialty – quicker, cheaper and stronger than OEM
- Replacement / Renewal of existing core
- Cooling systems can be fitted with 12v/24v DC, 3 phase hydraulic and Pneumatic motors,
- Shrouds, mounting base, stone guards can also be supplied
- BSP port sizes and locations are fitted to individual requirements
- High performance for heavy duty hydraulic and lubricating applications
- Maximum working pressure 26bar
- Service, Testing, Repair and Ultrasonic Cleaning
- Serving all industry sectors



# Oil Cooler Solutions

**Fluid Dynamics is your one stop solution for automotive and industrial oil coolers**

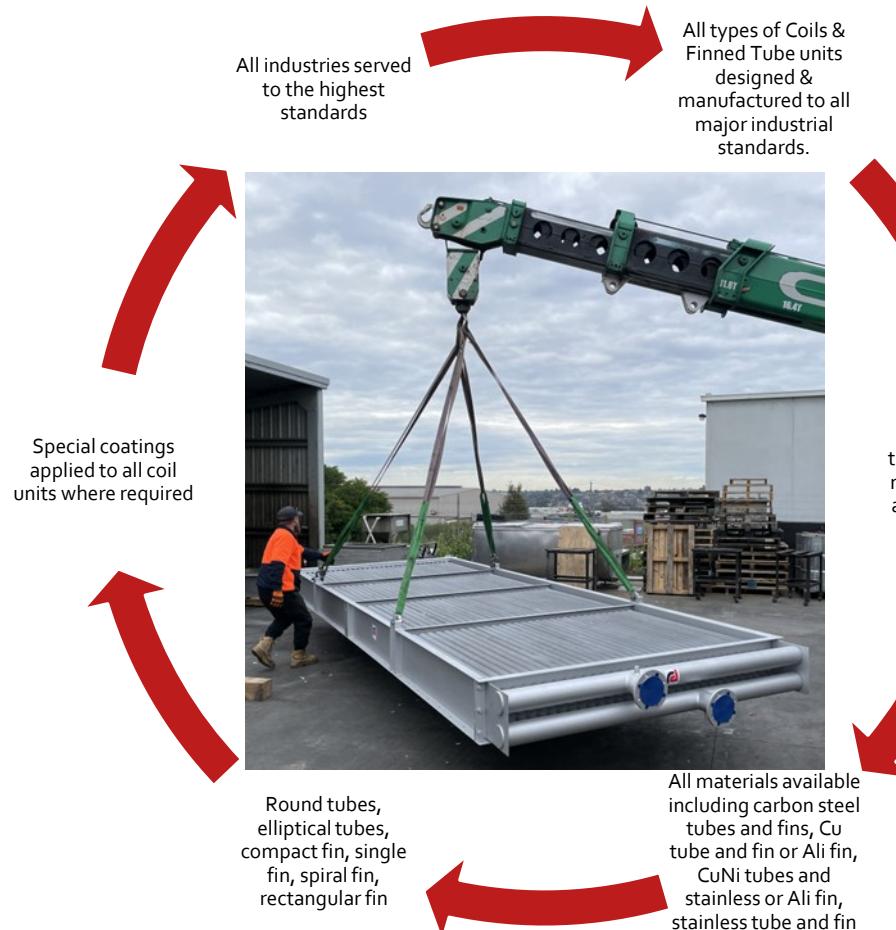
Fluid Dynamics is an Australian owned and operated company specialising in a wide range of heat exchangers.

- Full service for oil coolers including ultrasonic cleaning, testing, repair re-engineer and replacement.
- Large range of stock and equipment for even the most complicated projects.
- Supply of OEM and aftermarket oil coolers ensuring the best solution, the best quality, and very competitive pricing.



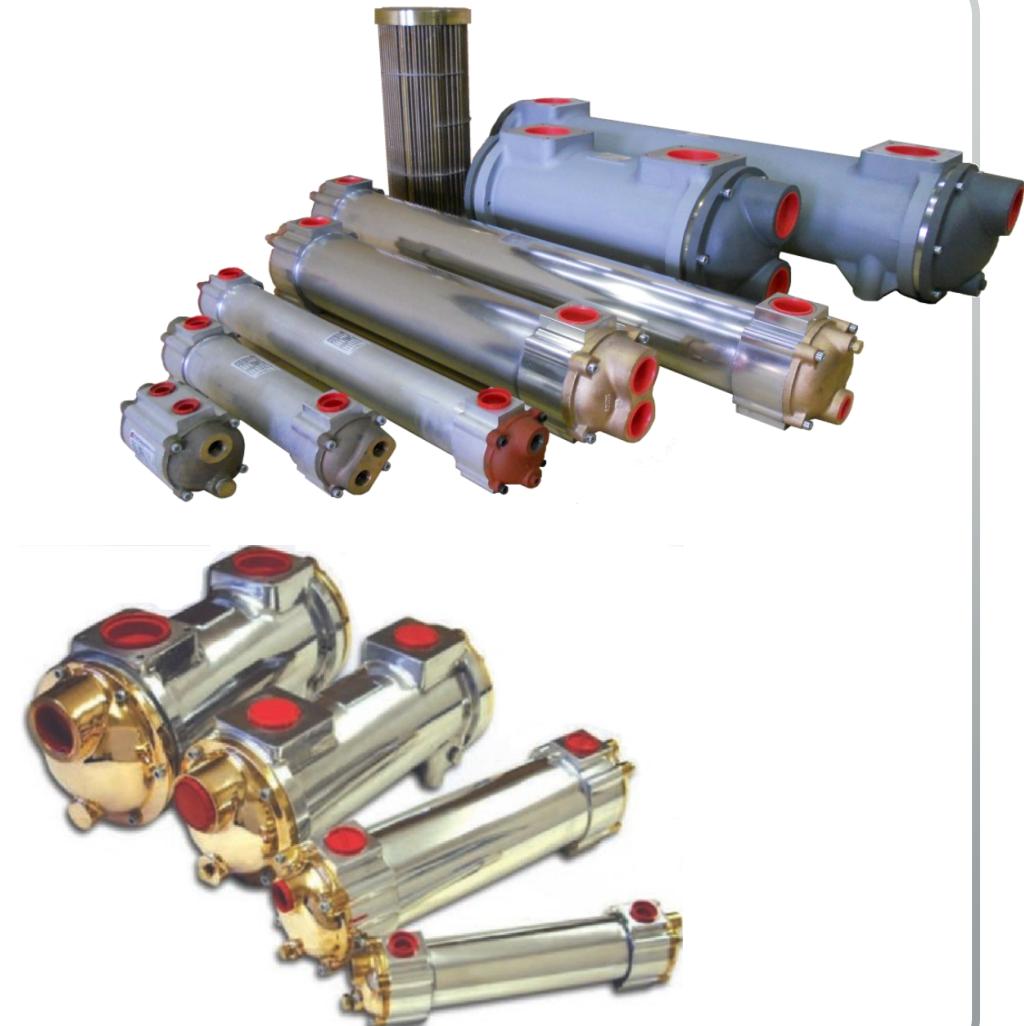
**Fluid Dynamics - for all your oil cooler needs**

# Coil & Finned Tube Heat Exchangers



## Shell & Tube (off the shelf)

- Fluid Dynamics has been synonymous with shell and tube heat exchangers for over 40 years
- One of Australia's largest Stockists of shell & tube oil coolers, Custom Build, transmission oil coolers & water to water coolers. Most standard ranges are available ex stock
- We offer a full range of services including like for like replacements, new units, repairs, testing, service and ultrasonic cleaning, new tube bundles, repairs to existing tube bundles and re-tubing. All carried out in our well-equipped Hallam factory
- Ideal for many applications – marine, industrial, on-road & off-road etc.



# Shell & Tube-Custom Build

- One our key strengths is our ability to design, re-engineer, manufacture, refurbish, test, clean & and repair all types and sizes of shell and tube heat exchangers
- We provide heat exchangers for all applications
- Built to the highest standards and using the best quality materials
- We can provide new tube stacks built to exact standards to fit into your existing shell as well as manufacture the entire shell and tube exchanger



# Special Project Heat Exchangers

At Fluid Dynamics we pride ourselves in our skills and ability to provide solutions for almost every project.

- Hydrogen Coolers
- Thrust Bearing Coolers
- Large Transformer oil Coolers
- Generator Coolers
- Large Cooling Coil Systems
- No matter what the requirement Fluid Dynamics can provide the correct technology and solution to match it



# FluidEX®

## Corrugated Tube Heat Exchangers



Highly efficient all stainless-steel shell and tubes with other materials available



Twice the heat transfer coefficient of smooth tube heat exchangers



Working temperatures up to 550°C



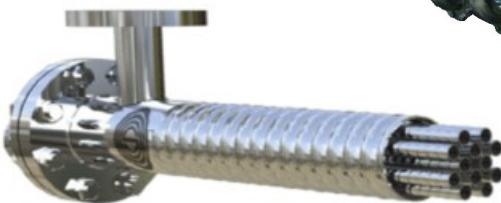
Hard start through to multi-start corrugation designs for different fluids



Suitable for almost every feasible hygienic or industrial application



Ideal for shear-sensitive, viscous or highly viscous products



# Ultrasonic Cleaning

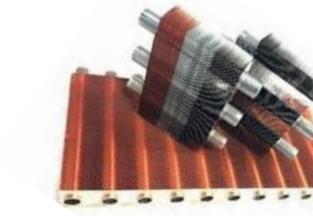
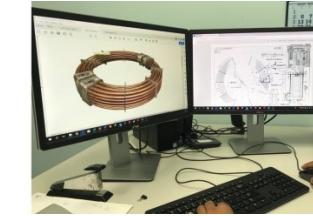
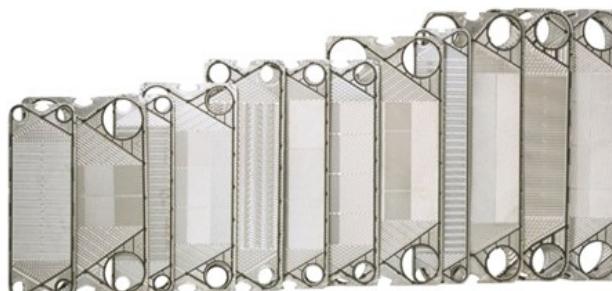
- Our Ultrasonic Cleaning System uses special fluids (not harsh acids).
- Huge industrial sized tank
- Although it operates normally at 50°C to 60°C our system can heat to 90°C if required.
- When combined with the power of ultrasonics the system effectively removes carbon, rust, oil, epoxies, scale etc..



# Heat Exchanger Spares

## OEM & **FluidEX**<sup>®</sup>

- Spare or Replacement Custom Heat Exchanger Re-Builds
- Spare or Replacement Tube Bundles & Tube Nests
- Spare or Replacement Tube Plates (blanked or pre drilled)
- Spare or Replacement Aluminium Cores
- Spare or Replacement Finned Tubes – (most types)
- Replacement Spare Parts for all plate heat exchanger makes including complete plate packs
- Replacement Brazed Plates, SWEP, SONDEX, APV, WTT, FUNKE etc.

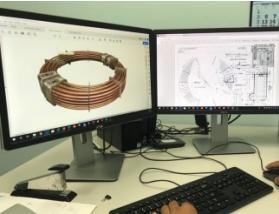
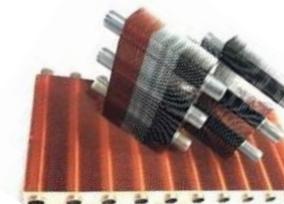
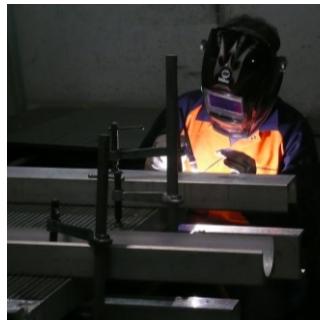


# Heat Exchangers - In House Servicing

- In house Cleaning, Testing, Inspection & Repair of almost any type of Heat Exchanger:

*Shell & Tube; Steel, Copper & Aluminium Radiators & Oil Coolers; Finned Coil; Finned Tube; Aluminium Bar & Plate; Thrust Bearing Coolers; Hydrogen Coolers; Condensers; Evaporators; Fin Pack Units, Fin Coil Units, Charge Air Coolers, Generator Coolers, etc.*

- Custom Heat Exchanger Builds and Re-Builds
- Replacement Tube Bundles and Cores
- NDT - Eddy Current; Ultrasonic and Borescope
- Camera inspections of tubes and internal surfaces
- Material analysis
- Replacement Spare Parts
- Redesign and Design Engineering Services including site laser scanning and 3d modelling



# Servicing & Maintenance on Your Site

Fluid Dynamics has an experienced and well-equipped team of professional heat exchanger service technicians covering all States in Australia and at your call.

## Cleaning, Testing, Inspection & Repair

The list of what we can do on your site is extensive and includes:

- Gas Integrity Testing
- Inspection and Evaluation
- Inline Chemical Cleaning
- Installation and Removal
- Re-gasketing
- Replacement of Spare Parts
- Replacement of Plates and Plate Packs
- Complete Heat Exchanger Builds and Re-Builds
- Repair and Re-builds of Tube Bundles
- Finned tube removal and replacement
- Leak Detection
- Borescope Inspections
- Material & Failure analysis
- Non Destructive Testing - Eddy Current, Ultrasonic etc.
- Waste disposal etc.



## All Heat Exchangers

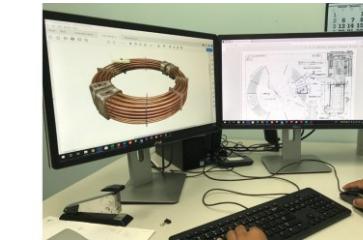
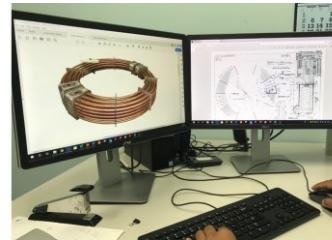
Shell & Tube; Finned Tube; Finned Coil; Thrust Bearing; Plate (Gasketed, Welded and Semi-Welded); Aluminium Radiators etc.

## All Applications

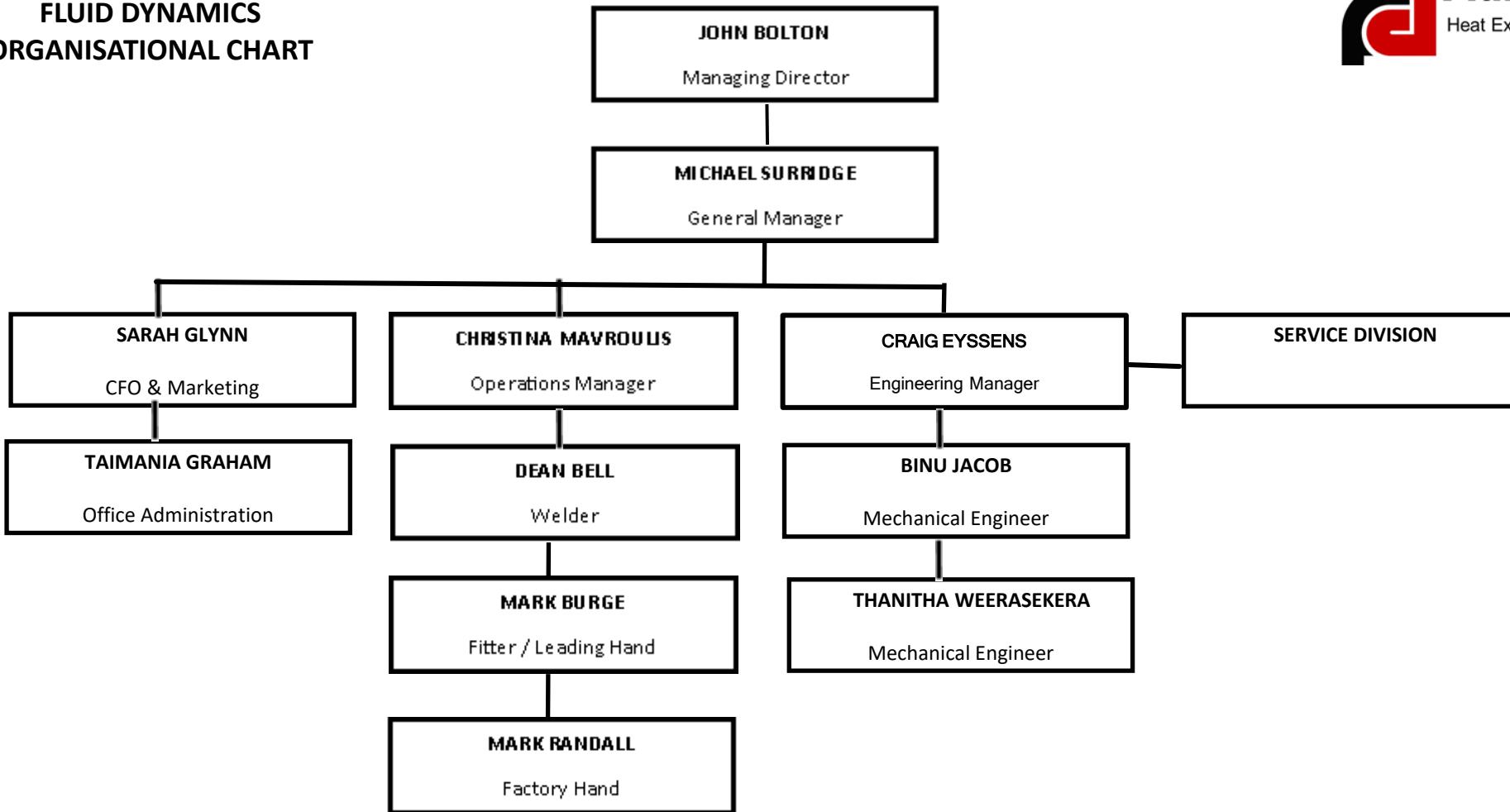
Oil, Air and Water Cooling & Heating; Condensers & Evaporators; Generator Air Coolers; Refrigeration; Steam

# On Site Service

- Cleaning, Testing, Inspection & Repair of almost any type of Heat Exchanger:  
*Shell & Tube; Oil Coolers; Finned Coil; Finned Tube; Thrust Bearing Coolers; Plate and Shell & Tube Condensers & Evaporators; Coolers, Generator Coolers, etc.*
- Plate Heat Exchanger Builds and Re-Builds
- Replacement Tube Bundles and Re-builds
- Inline chemical cleaning, waste disposal
- Camera inspections of Shell & Tube internal tube nests and internal surfaces
- Offsite Material and Failure analysis
- Replacement Spare Parts, Replacement Plate Heat Exchanger Plate Packs
- Offsite cleaning and testing of Plate Heat Exchanger plate packs,
- Redesign and Design Engineering Services including site laser scanning and 3d modelling
- Onsite Inspection and Evaluation of your heat exchanger including but not limited to : Finned Tube Air Coolers, shell & Tube, Plate Heat Exchanger (Gasketed, Welded or Semi Welded), Custom Coolers such as Bearing Coolers etc.



## FLUID DYNAMICS ORGANISATIONAL CHART



# Some of our Valued Customers:



# Fluid Dynamics Contacts

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- **Mike Surridge:** General Manager – Mobile: +61 (0) 419 504 575  
email: [msurridge@fluidynamics.com.au](mailto:msurridge@fluidynamics.com.au)
- **Craig Eyssens:** Engineering Manager & Service Mobile: +61 (0) 438 466 093  
email: [ceyssens@fluidynamics.com.au](mailto:ceyssens@fluidynamics.com.au)
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email: [accounts@fluidynamics.com.au](mailto:accounts@fluidynamics.com.au)

## Head Office & Factory :

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Local: 1300 58 58 59

Int'l : +61 (3) 8786 4900

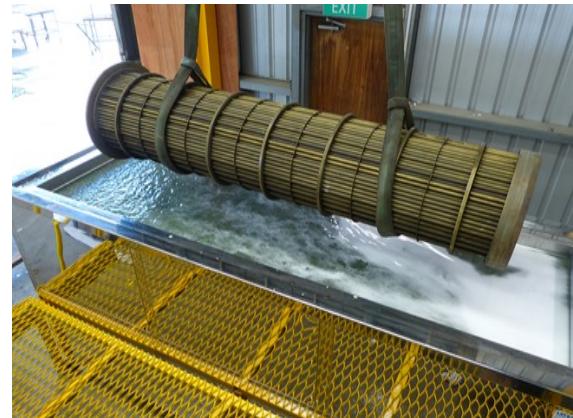
Email: [sales@fluidynamics.com.au](mailto:sales@fluidynamics.com.au)

Website: [www.fluidynamics.com.au](http://www.fluidynamics.com.au)



# Fluid Dynamics

Heat Exchange Solutions since 1981



The Heat Exchanger Specialists for all your Heat Exchanger Needs