

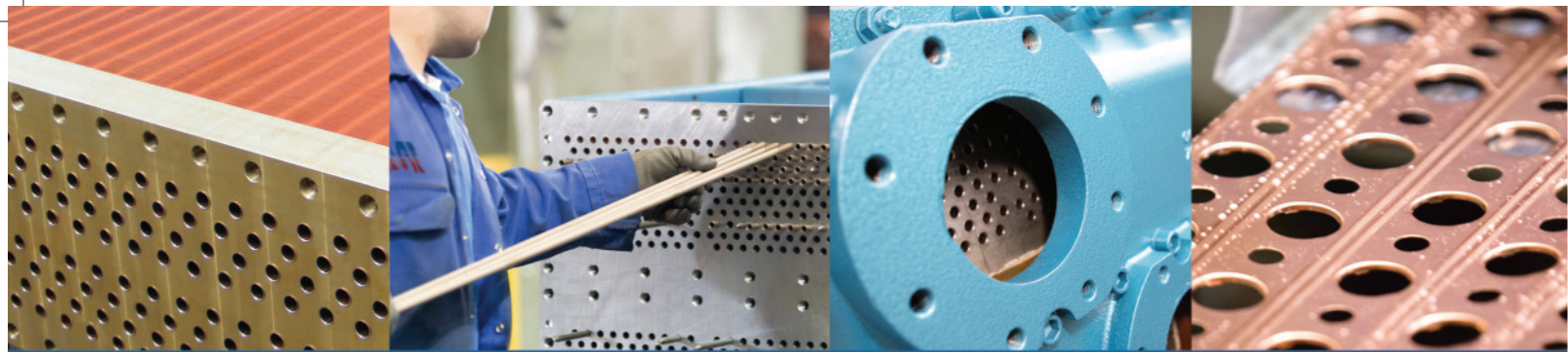
Agriculture • Compressors • Marine • Military  
Mining • Oil & Gas • Power Generation • Rail



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# CHARGE AIR COOLERS

## EXPERIENCE

We have been designing and manufacturing extended surface heat exchangers since 1987 for both original supply and replacements. During this time we have amassed a huge database of thousands of designs which together with our large fin selection allows us to offer the largest range of design solutions in our industry.

## NEW APPLICATION

We offer accurate thermal modelling and modern 3D design capabilities order to offer realistic dimensional and performance data prior to manufacture. We have 9 production lines, offering over 19 thermal options which is unparalleled in our market.

## REPLACEMENT UNITS

We often survey original units in situ and regularly receive units at our workshop which gives us unparalleled familiarity with designs of original charge air cooler makers. We are also aware of the real life practical problems that can occur during operation, often overlooked by the original makers. Design improvements include reduced vibration failures, efficiency improvements, ease of cleaning, reduce replacement costs, connection enhancements and material improvements. Units can be supplied to meet current NOx emission regulations.

## EMERGENCY SUPPLY

Whilst our normal delivery times are typically the shortest in the industry, we regularly perform what appears to be an impossibly short manufacturing time in order to meet emergency supply requirements. It is not unusual for us to manufacture complete heat exchangers from scratch in as little as 2-3 days. This is only possible with large material stocks and a hard-working, flexible approach to client needs.

## LIFESPAN SUPPORT

We offer a repair/refurbishment service for both OEM and our own products which along with vibrasonic deep cleaning of the fin core, offers extended lifespans and at the same time, enables us to gain full design parameters for no fuss replacements. Full and transparent reporting is performed on every unit we receive.

UP TO  
**50%**  
COST SAVING

90% OF COOLERS  
DELIVERED IN  
**4**  
WEEKS OR LESS

MORE THAN  
**200**  
COOLERS  
SUPPLIED IN 2014

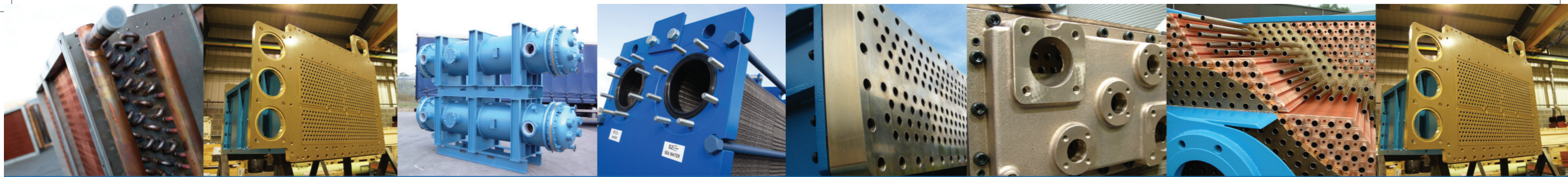


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sales@ami-exchangers.co.uk

## Product Directory

			Replacement Unit	Repair/Refurb	Spares	On-Board Repairs
Charge Air Coolers	<b>Replacements Supplied For:</b>	Main Engine Charge Air Cooler	●	●	●	●
	Astra-Refrigeranti, Behr, Britannia, Brown Boveri, Bryansk, Caterpillar, Cegielski, Daihatsu, DongHwa, Doosan, Farad, GEA, Hyundai, Jenbacher, Kawasaki, Koatsu, MAK, MAN B&W, Mitsubishi, Mitsui, Pielstick, Rumia, Seo-Koatsu, Serck, Sterling, Suction Gas, Vestas, Wartsila, WUHU, Yanmar	Auxiliary Engine Charge Air Cooler	●	●	●	●
		Motor & Generator Coolers	●	●	●	●
		ASV Air Coolers	●	●	●	●
		Water End Covers	●	●	●	●
Shell & Tube Heat Exchangers	<b>Replacements Supplied For:</b>	Oil Coolers	●	●	●	●
	Accutherm, Bloksma, DongHwa, Jucker Mueller, Sasakura, Serco, Serck-Como, Showa, Spriax-Sarco, Stahl, Thermex, Westfalia, Woojin, Yamashima	Fresh Water Cooler	●	●	●	●
		Evaporators	●	●	●	●
		Condensers	●	●	●	●
		Portable Water Heaters	●	●	●	●
		Swimming Pool Heaters	●	●	●	●
		Chillers	●	●	●	●
		Electrical Lube Oil Purifiers	●	●	●	●
Plate Heat Exchangers	<b>Replacements Supplied For:</b>	Fresh/Seawater Central Coolers	●	●	●	●
	Alfa Laval, APV Baker, GEA, SPX, SWEP, Sondex, Tranter, Vicarb	Water to Water	●	●	●	●
		Oil Coolers	●	●	●	●
		Evaporators	●	●	●	●
Radiators	<b>Replacements Supplied For:</b>	Emergency Generators	●	●	●	●
	Atlas-Copco, Cummins, Daeheung, Nakamura, Motormic, STX	High Pressure Air Coolers	●	●	●	●
		Deck Crane Oil Coolers	●	●	●	●
HVAC	<b>Replacements Supplied For:</b>	Direct Expansion Coils	●	●	●	●
	Luvata, Novenco, Viking-Airtech	Steam Heating	●	●	●	●
		Chilled Water	●	●	●	●
Spares	<b>Replacements Supplied For:</b>	Ferrous/Non-Ferrous Tube Supply			●	
	Original & Non-Original	Pressure & Temperature Instrumentation			●	





## AGENTS & DISTRIBUTORS

## CHARGE AIR COOLER RANGE

### EUROPE

IMSE BVBA Belgium  
 info@imse.org +32 3 644 4121

UMAR Shipping Services Cyprus  
 mail.cy@umarwsr.com +357 2535 5518

DMI Hellas Greece  
 dmi@dmihellas.gr +30 210 4285882

Diesel Marine Italy Srl Italy  
 info@mdisrl.it +39 0586 428118

Wojciech Ostrowski Poland  
 wojciech\_ostrowski@interia.pl +48 91 4318133

Turbo Cadiz SL Spain  
 tc@turbocadiz.com +34 9564 07949

Calvey Marine UK  
 calvey@calveymarine.co.uk +44 (0)1903 748860

Turmar Marine Russia & Turkey  
 turmar@turmarmarine.com +90 216 411 45 75

### THE AMERICAS

Wakefield Central America  
 sales@wakefieldme.com +507 838 9808

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Applied Cooling Technology USA  
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### ASIA

Nanjing IMSE Co. LTD China  
 adams@imse.org.cn +86 25 5269 0042

PT IMSE Marindo Utama Indonesia  
 indonesia@imse.org +62 21 4390 9999

IMSE Utama (M) SDN BHD Malaysia  
 info@imse.com.my +603 8993 9130

### RECLAIMING PARTS

Where the sample core has deteriorated beyond repair, we can often offer to reuse existing compatible components such as side panels, frame and water chambers in order to reduce replacement cost to the minimum whilst maintaining a full warranty. Depending upon the core size, we can also offset the scrap value of the old core against a new replacement.

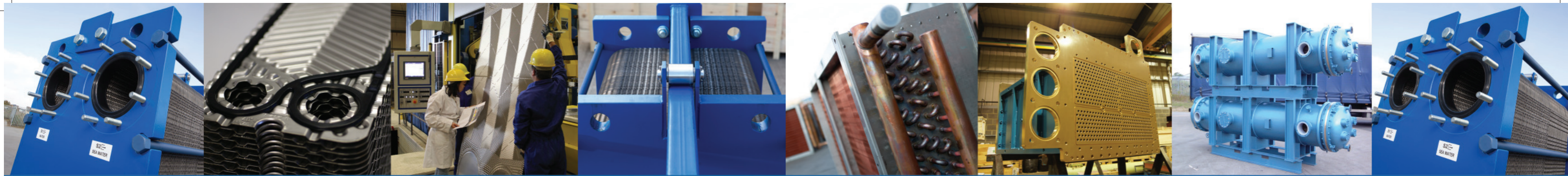
### NOx COMPLIANCE

AMI can manufacture units that fully comply with Marpol Annex VI and NOx Technical Code 2008

	Complete Replacement	Cooler Re-Design	Cleaning, Re-Core/ Refurbishment	Spares & Gasket Sets	Removal & Installation
Main Engine Charge Air Cooler	✓	✓	✓	✓	✓
Auxiliary Engine Charge Air Cooler	✓	✓	✓	✓	✓
Motor & Generator Coolers	✓	✓	✓	✓	✓
Water End Covers	✓	✓	✓	✓	✓

Replacements supplied for: Astra, Cegielski, Daihatsu, DongHwa, Doosan, Elite Farad, GEA, Hyundai, Jenbacher, Kawasaki, MAK, MAN B&W, Mitsubishi, Pielstick Rumia, Serck, Vestas, Wartsila, GEA WUHU & more.





## PLATE HEAT EXCHANGERS

## OUR CLIENTS

Plate Heat Exchangers (PHE's) are often used as alternatives to shell & tube exchangers as they offer an increased efficiency and occupy less space. Unlike other types of heat exchangers, PHE's offer the advantage of being able to adjust the number of plates after installation to satisfy changes in operational requirements during its lifespan.

### NEW APPLICATION

PHE's can be supplied with Stainless Steel or Titanium plates and sealed using a range of gasket materials either clip on or glued or can be brazed joints for higher pressure requirements. If you send us your parameters, we can offer a premium plate exchanger designed to meet your needs without paying the premium prices associated with the major brands.

### REPLACEMENT UNITS

Our key area of PHE supply is replacing existing PHE units with our designs. We not only provide equivalent PHE units at prices around 30% lower than the more well-established brands. An added benefit of choosing AMI PHEs is our efficient designs, which mean in most cases less plates are required, to achieve a given thermal performance.

### SPARES

In most cases, we can offer a complete replacement PHE with equivalent or better thermal duty and plate quality at less cost than an OEM sells replacement plate packs. We can offer replacement plates or gaskets to suit all major brands including those models discontinued by the OEMs at a fraction cost. We offer replacement plates, gaskets, port liners, strainers and clamping bolts for:

Alfa Laval | APV | Arsopi | GEA-Kelvion | Sondex | SWEP | Tranter | Vitherm

### REFURBISHMENT

A cost effective alternative to a new plate pack is to service your existing plate pack. Our team can chemically clean, crack test and remove gaskets from your existing pack, providing replacements for any defective plates and re-gasketing ensuring the pack is ready to be re-installed right from the box.

UP TO  
**60%**  
COST SAVING

PREMIUM  
QUALITY NOT  
PREMIUM  
PRICE

MORE THAN  
**8000**  
GASKETS  
SUPPLIED ANNUALLY



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## NOx COMPLIANCE

## PLATE HEAT EXCHANGERS

The IMO (International Marine Organisation) identified a need to control emissions from ships back in 1991 and in 1997 after significant deliberation and consultation, introduced Annex VI to the Regulations for the Prevention of air Pollution from Ships. This annex included a staged implementation involving a Tier system that progressively reduced permissible emission levels and this was designed to allow ship owners and technology sufficient time to adapt to these new requirements.

Within these regulations, controls and limits have been implemented for those components or settings that could adversely affect NOx emissions from the originally supplied settings – which is the basis of the initial IAPP (International Air Pollution Prevention) certificate supplied with the vessel.

Marpol Annex VI and NOx Technical code Regulation 13, applies to marine diesel engines installed into vessels or rigs over 400 gross tonnage, constructed on or after January 2000.

Charge Air Coolers are identified as a NOx influencing component and therefore are controlled. In order to renew your IAPP certificate, you will need to demonstrate that you have complied with the specific requirements set out within the NOx technical file. This is irrespective of where you purchase a replacement unit – even from the original engine builders.

### COMMON MISCONCEPTIONS

**“ You can only buy replacement parts from the original supplier. ”**

Whilst engine builders may try to convince you of this, it is simply untrue. The engine’s NOx technical file must be supplied to the vessel upon delivery and this technical document gives all the parameters for all NOx influencing components and the requirements stipulated must be met irrespective of supplier in order to renew your environmental certificate.

**“ The engine builder did not issue a Nox technical file. ”**

The IMO regulations stipulate that the technical file must be supplied with the vessel, it must contain all parameters for Nox influencing components or settings and must stay with the vessel. This holds the key information that the class surveyor will require in order to renew the environmental certificate. Without this file you will be unable to renew your certificate.

**“ You cannot repair an old charge air cooler. ”**

Again, this is untrue. There are no stipulations for repairs to old units. Units can be in any state of repair providing they meet the parameters stated within the technical file.

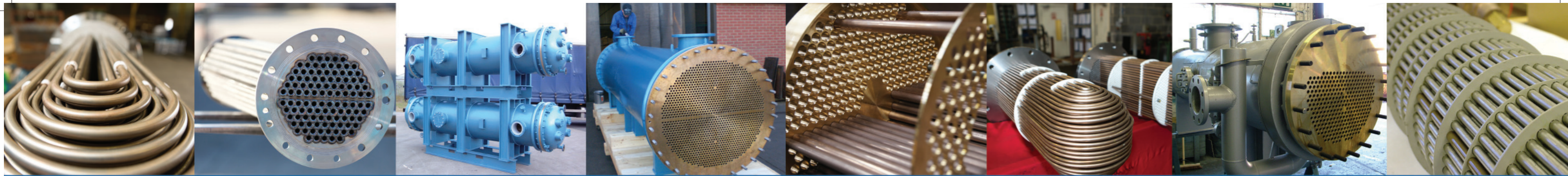
### DELIVERY

We have been exporting goods to all parts of the world for over 20 years and during this time we have built a large selection of reliable transport companies at very competitive prices. AMI are also a “known consignee” which means delays at customs is reduced or avoided completely and this ensures your deliveries arrive on time to meet tight deadlines. We have a vast amount of experience delivering to ocean going vessels where the arrival port and ETA can change at short notice and have the flexibility to respond quickly to any last minute changes.

**OVER  
20 YEARS  
OF EXPRESS  
DELIVERIES**

	Complete Replacement	Replacement Plates	Replacement Gaskets	Plate Pack Servicing	Removal & Installation
FW/SW Central Coolers	✓	✓	✓	✓	✓
Water to Water	✓	✓	✓	✓	✓
Oil Coolers	✓	✓	✓	✓	✓
Evaporators	✓	✓	✓	✓	✓
MGO Cooling	✓	✓	✓	✓	✓
Ballast Water Treatment	✓	✓	✓	✓	✓





# SHELL & TUBE HEAT EXCHANGERS

# SHELL & TUBE RANGE

### MANUFACTURING

Our manufacturing facility is located on the outskirts of Teesport, UK and houses a large range of modern processes. We manufacture a full range of shell and tube products from replacement tube bundles through to manufacture of large bespoke designs using our range of high quality materials.

### NEW APPLICATION

We offer full thermal and mechanical design of shell & tube heat exchangers for new applications. We can design to a range of class requirements and can be third party approved if required.

### REPLACEMENT

We offer everything from spare parts such as tubes and baffles to replacement tube bundles and full "like for like" units. AMI survey hundreds of units per year and so we are well versed in the operational problems often overlooked by the original manufacturer and modify the design to increase the operational life of the unit.

### REPAIR & REFURBISHMENT

We offer a varied repair and refurbish service for your old units. We inspect each unit upon arrival and produce an in-depth report on it's condition before offering a range of solutions for repair or refurbishment.

### SCRAPPAGE

All high value replaced components can be scrapped and costs offset against the repair or replacement costs. When units are no longer required or are sent to us for reporting only, we can also offer a scrap value which is credited to the client account.

**OVER  
1500  
DESIGNS  
ON OUR DATABASE**

**MORE THAN  
100  
REFURBISHMENTS  
IN 2015**

**OUR ENGINEERS  
COMPLETE OVER  
30  
ONBOARD REPAIRS  
EACH YEAR**

	Complete Replacement	Replacement Tube Bundle	Cleaning & Refurbishment	On-Board Service	Crew Repair Spares Kit
Oil Coolers	✓	✓	✓	✓	✓
Fresh Water Coolers	✓	✓	✓	✓	✓
Evaporators	✓	✓	✓	✓	✓
Condensers	✓	✓	✓	✓	✓
Portable Water Heaters	✓	✓	✓		✓
Swimming Pool Heaters	✓	✓	✓		✓
Chillers	✓	✓	✓	✓	✓
Electrical Lube Oil Purifiers	✓	✓	✓		✓

Replacements offered for: Accutherm, Aalborg, Bloksma, DongHwa, Serck-Como, Showa, Spirax-Sarco, Stahl, and more.

