



INCREASE PROCESS EFFICIENCY

AVOID UNSCHEDULED DOWNTIME

PREVENT CAPEX INVESTMENTS

Engine & Generator Coolers

OUR SERVICE FOR CHARGE AIR COOLERS

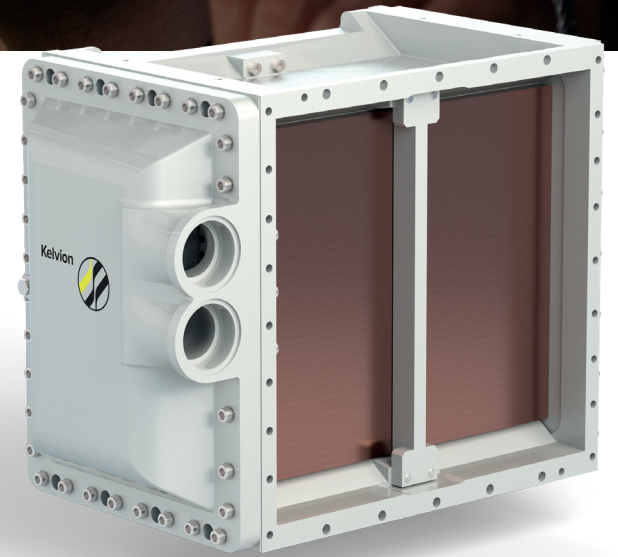
As part of marine, off-road and stationary diesel and gas engines charge air coolers have to perform particularly heavy duties.

Over time pollutants in the air or gas mixture can cause corrosion and accumulation of deposits in the tubes. This can lead to pressure loss that can damage the turbocharger and cylinder in the engine room and also lead to water leakage. Regular servicing will extend the lifetime as well as prevent downtime of the engines.

CHARGE AIR COOLER REFURBISHMENT

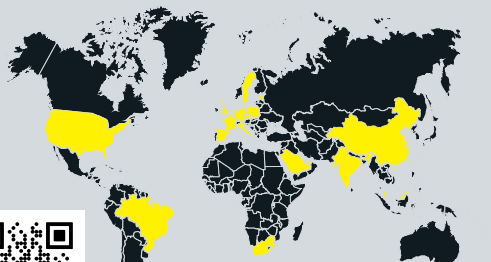
Whatever kind of damage your heat exchanger has, we can offer you exactly the right service that is needed.

If, for example, cleaning the charge air cooler is no longer sufficient due to excessive fouling and corrosion, we can go straight to the next level and, for example, carry out any necessary retubing or replacement of parts.



MORE THAN 30 SERVICE LOCATIONS WORLDWIDE

Kelvion Service starts from our first contact with you and continues after your order has been delivered, with us as your reliable service partner. Thanks to our worldwide service centers, we are always close to you.



Get in contact



| | |
|-------------------|--|
| BASIC | <p>THE BASIC LEVEL is designed to analyze the current status of the returned heat exchanger. It includes full visual and technical inspection.</p> |
| 1 LEVEL | <p>REASONS FOR LEVEL 1 CLEANING AND REPAIR</p> <ul style="list-style-type: none"> ▶ Heat exchange performance without doubts ▶ Pressure test passed ▶ General overhaul (Extend lifetime) |
| 2 LEVEL | <p>REASONS FOR LEVEL 2 RETUBING</p> <ul style="list-style-type: none"> ▶ Loss of heat exchange capacity ▶ Pollution of inner cooler core ▶ Dissolved, dismantled, or loose fins ▶ Water leakages / Pressure test failed |

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|-------------------|---|
| 3 LEVEL | <p>REASONS FOR LEVEL 3 BUNDLE EXCHANGE</p> <ul style="list-style-type: none"> ▶ Damaged outer parts (sidewalls, tube supports...) ▶ Plugged tubes ▶ Upgrade reasons |
| 4 LEVEL | <p>REASONS FOR LEVEL 4 EXCHANGE UNIT</p> <ul style="list-style-type: none"> ▶ Start exchange program ▶ Inefficiency |



ALL BRAND SERVICE

Besides being experts in our own products and our former brands, we also have the expertise to service other brands.



SERVICE PORTFOLIO | CHARGE AIR COOLERS



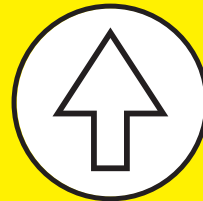
EARLY LIFE

- ▶ Assistance to assembly and disassembly, shipping and transport
- ▶ Supervision of installation by Kelvion experts



REPAIRS, OVERHAULS & MAINTENANCE

- ▶ Complete overhaul, repair or new production
- ▶ Renewal of corrosion protection and exterior painting
- ▶ Internal cleaning of the tube and shell side
- ▶ Cleaning (high pressure, chemical) of Kelvion and non-Kelvion products
- ▶ Brush cleaning tube side including documentation of results
- ▶ Pressure testing with 3.1 certificate



UPGRADES & REPLACEMENTS

- ▶ Modifications and replacements of Kelvion and non-Kelvion products



SPARE PARTS & SPARE PART SOLUTIONS

- ▶ Spare parts
- ▶ Cleaning brushes
- ▶ Service kits



MONITORING, CONSULTING & TRAINING

- ▶ Examination and assessment of operating conditions
- ▶ Endoscopic examination of tube side regarding pollution, corrosion, erosion
- ▶ Examination of fin side regarding pollution, corrosion, erosion
- ▶ Analysis product samples
- ▶ Investigation of corrosion problems (destructive testing and sample analysis with specialists)
- ▶ Assessment of deposits or corrosion products which may occur on the tube side
- ▶ General visual inspection and documentation of results
- ▶ Pressure test (tube and gas side)
- ▶ Repeating pressure tests acc. to PED / DVGW (category I+II) and PED / DVGW (category III+IV, Kelvion together with 3rd party)