Kelvion

COMPACT FIN
HEAT EXCHANGERS

Kelvion Exhaust Gas Recirculation Cooler

RESISTANT EMISSION REDUCER

DESIGN & FUNCTION

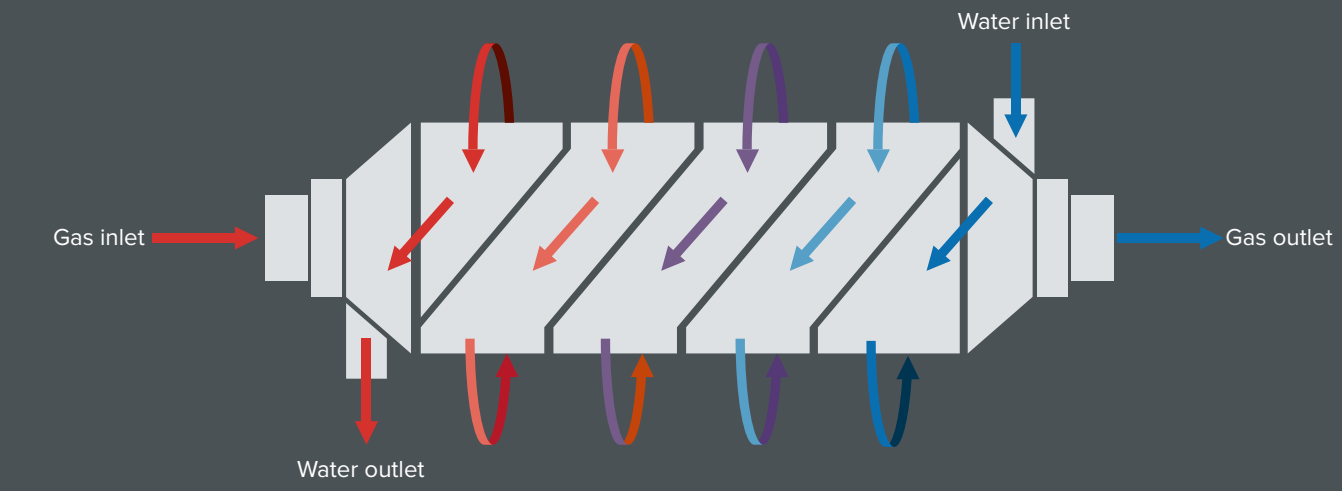
To combat air pollution from shipping, the International Maritime Organization (IMO), Tier (the US exhaust gas standard), EURO and other regulatory bodies have imposed limits on emissions of nitrogen oxide (NOx) from marine diesel engines. Our exhaust gas recirculation cooler is setting new standards in this area, with an effective solution that can fulfill the requirement to reduce NOx emissions in low-speed, two-stroke, engines by up to 80%.
We also have models for four-stroke engines.

Manufactured from temperature and corrosion-resistant stainless steel, this patented technology has the capability to handle exhaust gas temperatures as high as 700 °C. Its finned tube system ensures effective heat transfer over the entire surface and minimizes the collection of dirt and debris. Our compact, service-friendly, recirculation coolers transfer heat extremely effectively to cooling water and are customized for each diesel engine manufacturer.

ADVANTAGES

- **NOX REDUCTION**
- **COMPACT DESIGN**
- **HEAT AND CORROSION RESISTANCE**
- **FINNED-TUBE SYSTEM ESPECIALLY DEVELOPED FOR POLLUTED ENVIRONMENT**
- **MINIMIZED MATERIAL STRESS**

EGR OPERATION



Hot medium

Cold medium

Patent protected design for optimized water flow facilitate minimized stress at critical parts with regard to thermal expansion.

OUR COMPACT FIN TUBE SYSTEM

FINS

- **Stainless Steel 409L (1.4512)**
  Good to excellent corrosion resistance;
  Good heat exchange;
  High material strength
- **Stainless Steel 316L (1.4404)**
  Excellent corrosion resistance;
  Average heat exchange;
  High material strength
- **Stainless Steel 904L (1.4539)**
  Excellent corrosions resistance
  (also against chlorides);
  Average heat exchange;
  High material strength

TUBES

Stainless steel 316L or 904L:

- **Average heat exchange**
- **Excellent corrosion resistance**
- **High material strength**
- **Tube diameter 8mm or 12mm**

APPLICATIONS

MARINE **TRANSPORTATION** **POWER**

www.kelvion.com