

# AIR COOLER CLEANER

For manual and "in service" cleaning of Diesel Engine charge air coolers.

- \* Effective removal of all contaminants.
- \* Anti corrosive properties.
- \* No impact on cylinder oil films.
- \* Completely combustible in the cylinder.
- \* Dosing systems available.

# **Application**

#### **Immersion bath**

Dependant on design, the cooler is flooded with AIR COOLER CLEANER immersed in a tank full of product. The product should be heated to approx. 50°C and agitation provided with an air line. After 2 hours, drain off and flush well with water, followed by drying with an air line.

#### Circulation method

Some designs of cooler can be circulated "in situ". In this case a pump tank and pipe system is fitted permanently or connections are provided for connecting a temporary circuit. The system should be filled with AIR COOLER CLEANER circulation carried out for 2 - 4 hours at a temperature of upto 50°C.

After cleaning the cooler should be thoroughly flushed with fresh water and dried with an air line.

Note: Both cleaning methods benefit from heat of up to 50°C and cleaning times can be reduced or extended dependant on temperature and degree of fouling.



## **Direct injection**

AIR COOLER CLEANER has the approval of the majority of major manufacturers for use either in their own design of "in service" cleaning system or other recognised systems provided by suppliers.

# **Injection systems**

StarMarine offer a range of newly developed easy to operate manual systems.

#### **Directions for use**

Regardless of the type of "in service" system used, AIR COOLER CLEANER should be dosed at the ratio of 2 parts water added to 1 part product (in that order) and well mixed for immediate use. If the emulsion is left standing for up to 5 minutes its composition will change and effectiveness reduced. It is most important that 5 - 10 minutes after dosing the solution, injection with fresh water only is repeated using double the total volume of the first solution to flush off the chemical residual which contains the "solved" contamination. Failure to do this will result in a "sticky cooler" which will foul very quickly.

## **Turbo blowers**

The water washing of the air side of turbo blowers has been accepted for many years. Most manufacturers provide nozzles and dosing pots to inject water into the volute casing after the inlet filters. These systems can be utilised with a solution of AIR COOLER CLEANER at the same ratio of 2 parts water mixed into 1 part product and dosed via the water wash system.

**Note:** When cleaning turbo blowers "in service" follow the equipment manufacturers instructions regarding engine load and/or blower revolutions during the procedure.

As with normal water washing, do not attempt to clean a badly fouled blower as resultant removal of deposits could cause imbalance of the rotor.

The principle to follow is prevention not cure.

### **Injection systems**

StarMarine can give advice on modifications to existing equipment or retrofit packages. For further details refer to the equipment information sheet.

## **Properties**

Light yellow coloured neutral fluids, which emulsify with water and are safe in contact with all metals.

Specific Gravity (20°C) : 0.91Flash point PM CC : >62 °C

For detailed information on safety and health, please refer to Material Safety Data Sheet and / or Product label.

Star Marine is a specialist chemical manufacturer and any directions for the use and application of its chemicals are provided in good faith. This information is based on experience and research but is not intended to be a definitive statement for the use of the chemical or to be taken as complete process advice. While the company, its management and employees will share what knowledge they have and make recommendations, this information can never give rise to liability or consequential damage from third parties. Any information provided regarding the chemical does not exempt the customer from examining the product and its directions for use to determine the suitability themselves for its intended purpose.

