OIL COOLERS STD AND COM

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STD and COM Oil Coolers

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Setrab oil coolers become one with the system

At Setrab we have long experience of developing oil coolers that function as an integral part of the system. Current cooling needs and external dimensions are important factors influencing the choice of an appropriate cooler. In most cases it is also important to consider factors such as pressure drop of oil and air, variations in oil flow, influence of the external environment, and so on, if the maximum effect is to be obtained.

The choice of a suitable oil cooler is based on the technical specifications that are agreed with the customer. We can thus guarantee optimal functioning and durability for every installation.

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Simulations for the best effect

We dimension coolers using computer programs based on theoretical models and laboratory tests. The programs have been developed as a powerful tool in finding the best technical solutions for each application. Besides simulating normal operating conditions, we can also see what happens during operation in warmer climates, cooling at high altitudes and other variables affecting the cooling result.

Our coolers are designed for demanding environments

All our coolers are fully brazed with the Nocolok method, which ensures complete brazing of all internal and external contact surfaces and a brazed seam that withstands vibrations and pulsations. To increase the resistance to corrosion, the coolers are epoxy-coated.

Variations in flow





STD Oil Cooler















Measurement data for Setrab STD Oil Cooler.

Calculation service: Contact us if you need help to dimension a cooler for your needs.

Long and secure functioning

Setrab STD Oil Coolers are used in applications with low to medium-pressure systems or in circulation systems where the oil cooler is an important component for achieving long and secure functioning. For example, in hydraulic systems, engines, transmissions, transformers, fuel coolers, etc.

Technical specifications

- Maximum working pressure is 10 bar. Approved testing at a dynamic working pressure of 0-10 bar, 200,000 fluctuations in load, 1 Hz.
- Corrosion protection: Nocolok brazing process and epoxy-coated.
- Connections: BSP (G), Metric (M), JIC (AN).



The turbulator, which controls the oil flow so that the maximum heat transfer is obtained, is designed for low oil pressure drop without the formation of a heat-insulating boundary layer in the oil tube.



In the standard version, the STD cooler is supplied with mounting flanges at each corner. If necessary, it can be manufactured without one or more of the flanges.

Oil Cooler gives us great freedom to adapt our coolers to most applications as regards external dimensions. The range comprises about 700 dimensions, besides which we can choose from among several different air fins, turbulators, mounting flanges, placements of connections, and about 60

Installation

All types of installations should be assesed for the best method of mounting the oil cooler. When designing the mounting arrangement consideration should be given to avoid any undue stresses and vibrations being transmitted to the STD cooler. Hydralic hoses should be used to connect both the inlet and outlet of the cooler and

Modular construction

Our unique modular system for the STD different kinds of connections.

hoses should be free from stress so as not to induce any tension to the cooler connections. We also recommend the use of damping devices to isolate the cooler from vibrations whilst providing for expansion of the cooler when at full operating temperatures.



Air fins are available in louvred and nonlouvred options. The choice is decided by the actual operating conditions, air quantity, degree of fouling, etc.



The composite range of STD Oil Coolers is available in 700 dimensions.

COM Oil Cooler











A-dimension Matrix length 125 250 375 500 WDL SLM 193 318 195 320 443 568 445 570

Example of A-dimension for some matrix lengths. The exact matrix length is fully optional

C-dimension

50 mm for WDL (45 mm tube width) 40 mm for SLM (27 mm tube width)





Measurement data for Setrab COM Oil Cooler.

Calculation service: Contact us if you need help to dimension a cooler for your needs.

High duty and flexible in size

The Setrab COM Oil Cooler is used in mobile and stationary plants with exacting demands as regards resistance to pressure and vibration. It can also be used in low-pressure systems requiring an exact fit of the cooler into the application.

Technical specifications

• Maximum working pressure is 25 bar. Approved testing at a dynamic working pressure of 0-15 bar, 5,000,000 fluctuations in load, 2 Hz.

- Corrosion protection: Nocolok brazing process and epoxy-coated.
- Connections: BSP (G), Metric (M), JIC (AN).

Withstands high pressures

A special characteristic of the Setrab COM Cooler is its high resistance to pressure. The entire design is made to cope with high oil pressure, thanks in part to the sturdy extruded aluminium side tanks. The Nocolok brazing also contributes to the high pressure resistance.



There is total flexibility. Within a max. matrix width of 650 mm and a variable height up to 450 mm, the COM cooler can be manufactured in virtually any dimension.



Air fins are available in louvred and non-louvred options. The choice is decided by the actual operating conditions, air quantity, degree of fouling, etc.

Fully optional dimensions

The COM Cooler is one of the most adaptable coolers on the market. It can be customized precisely for each application as regards cooling effect, dimension, connections and attachment.



COM Coolers withstand high pressure, thanks to the sturdy tanks of extruded aluminium.



In standard design COM Coolers are delivered with flanges for mounting to a wall or in a frame.



The turbulator, which controls the oil flow so that the maximum heat transfer is obtained, is designed for low oil pressure drop without the formation of a heat-insulating boundary layer in the oil tube.

We are everywhere

We have been manufacturing heat exchangers for over 20 years and today we are well established in many fields all over the world.

The parent company and production plant are located in Malmö, Sweden. We have wholly owned subsidiaries in Great Britain, Germany and the USA. We are also represented by specially selected distributors in over 20 other countries.

We cover all sectors

Setrab Oil Coolers are used in mobile and stationary application in transport, the process industry, energy supply, the engineering industry, agriculture, automobile industry and racing etc. By using coolers for engines, hydraulic systems, transmissions, compressors, and electronics, you prolong the life of the system, and the efficiency increases since all components can work at the optimum temperature.

Contact us if you need cooling for your equipment or products. We almost certainly have a solution to suit your needs.

Quality

Quality always takes top priority at Setrab. For us it is natural that quality should be a key word when it comes to service and design, production and distribution, in order to achieve the best result.

Other products





SLM Air-cooled oil cooler.

TOC Water-cooled oil cooler.

CP Air-cooled oil cooler with built-in fan.



LOC Water-cooled oil cooler.

LIC Water-cooled charge-air cooler.



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