

Laminova Intercoolers

HEAT EXCHANGER APPLICATIONS:

Intercoolers

Oil coolers

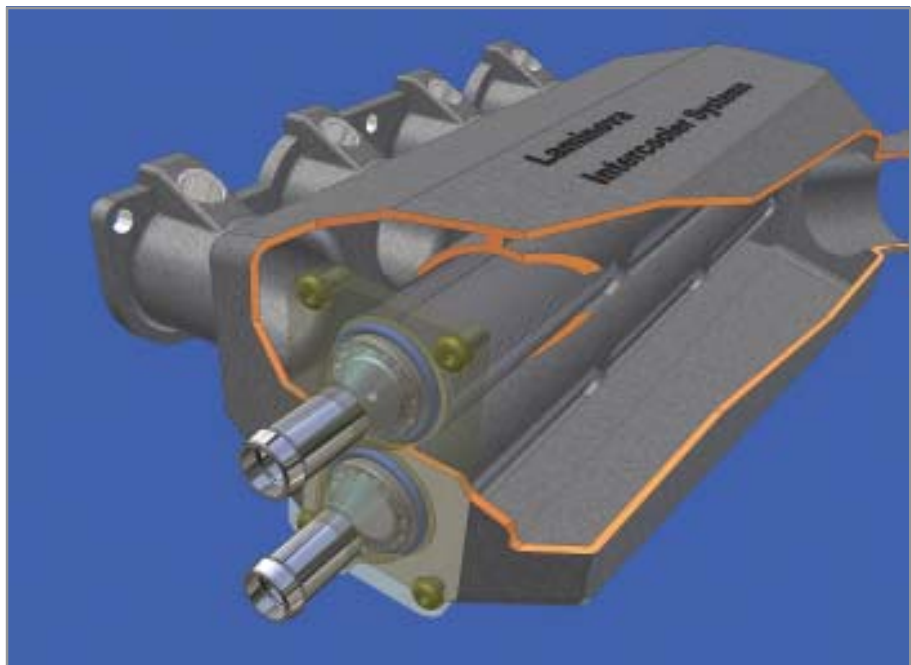
Power steering cooling

Transmission oil cooling

Diesel fuel cooling

Hydraulic system cooling

Air conditioning



The Laminova heat exchangers are especially designed for intercoolers in turbo and supercharged petrol and diesel engines. They are compact, easy to install and more efficient than conventional heat exchangers.

The heat exchangers are easily installed in the inlet manifold. You get cold air right from the start.

The air-to-liquid system increases engine efficiency and decreases fuel consumption. The surface area is extremely large compared to common plate style intercoolers. The Laminova heat exchanger and the core are patented.



The core can be delivered as a separate component, ready for installation.



ADVANTAGES:

- Superior cooling performance.
- Extremely low pressure drop.
- Ideal to integrate in the inlet manifold.
- Increased response due to short flow length in the system.
- Robust design. One piece aluminium extrusion.
- No soldering or braising - soft mounting with O-rings.
- Reduced sound and pulsation. Improved air distribution balance.
- Possible combination with the AC media.

Technical data & applications

Installation: Supercharger and turbo

Best result is achieved if the heat exchanger is installed in the inlet manifold. This also increases the response compared to traditional air-to-air intercoolers due to shorter flow length.

Special core for charged engines

We have a special core for airflow in charged engines. This core has longer and higher fins and less break-up zones (more surface) than the traditional core for liquid applications. Normally a package of 2-4 cores is needed to meet specification. Cores used are $\text{Ø}39.5$ & 45 mm.

Separate cooling circuit

The air-to-liquid intercooler system needs a separate cooling circuit with a circulation pump and a separate radiator.

Usage with air conditioning system

The Laminova intercooler can be combined with the air conditioning system for even better efficiency. Please contact Laminova for further information.

Racing/After Market

Laminova also supplies intercooler housings for use in racing/aftermarket applications and as prototypes for test and evaluation.

Environmental advantages

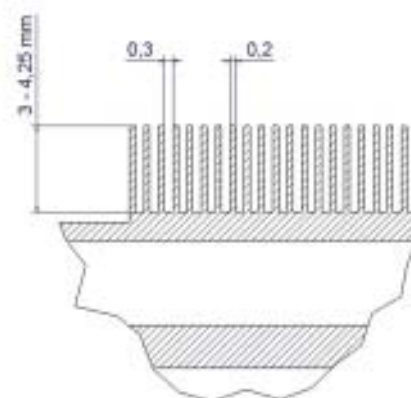
The intercooler reduces hazardous emissions of e.g. nitrogen. The engine temperature becomes more even due to improved air distribution balance. This also decreases fuel consumption.



Laminova intercoolers in manifold connected with radiator.



Air flow over the core.



Cross section of the core.

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