

新型高性能チャージエアクーラ

New-type and High-performance Charge Air Cooler

水冷タイプ

Water-cooled Type

特徴 Advantages

▶ トップレベルの性能によりコンパクト化を実現

Top-level performance has led compactness.

▶ 細かな温度制御により燃費向上・排ガス対応に貢献

Optimal temperature control has improved fuel economy and corresponded to emission control.



構造・技術のポイント Structure & Technical Points

▶ 小型・軽量化を実現するために 高性能フィン採用とコアの高密度化

A high-performance fin and core densification have been adopted to achieve compactness and light weight.

▶ 採用による低圧損・軽量化

Lower pressure loss and light weight have been achieved by adopting dimples on the water side.

%	開発品 New	当社従来品 Conventional
体積 / 性能 Volume/Performance	88	100

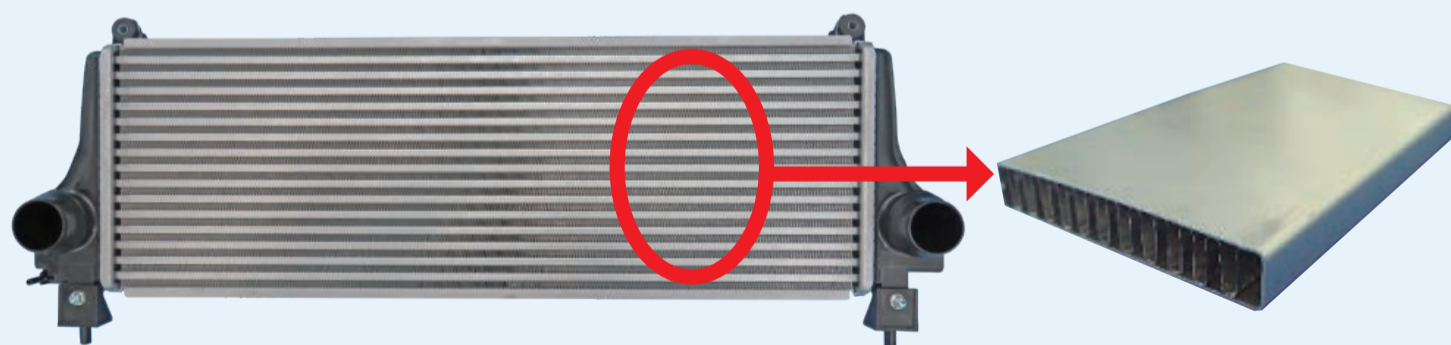
空冷タイプ

Air-cooled Type

特徴 Advantages

▶ フロントフェイス&ワイドタイプ 搭載に適した矩形チューブを採用

A rectangular tube has been adopted which fits well for front mounting with a wide core.



New-type charge air cooler

Rectangular tube

構造・技術のポイント Structure & Technical Points

▶ 矩形チューブ化のメリット(通気断面積拡大効果)

Merits of a rectangular tube (Expanding a passage of charge air)

① 通気抵抗の低減

Reduction in pressure loss of charge air.

② インナフィン山数増加による性能向上

Performance improvement by increasing the number of waves of a fin.

③ チューブ寸法拡大による チューブ本数低減と軽量化

Reduction in the number of tubes and weight by expanding dimensions of a tube.