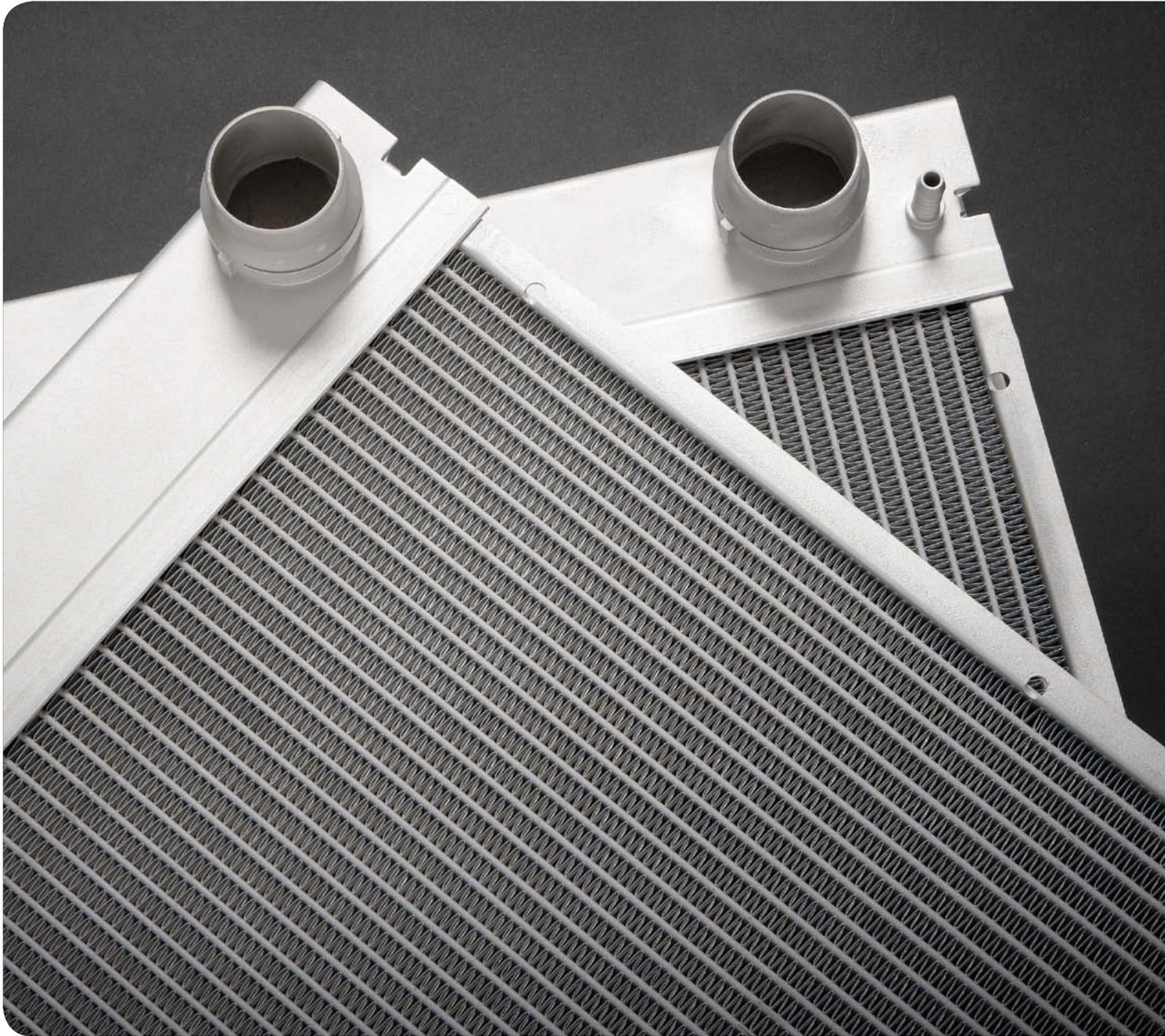


FULL-ALUMINUM RADIATORS

THE PERFECT CHOICE FOR EXCELLENT ENGINE COOLING

Nissens[®]

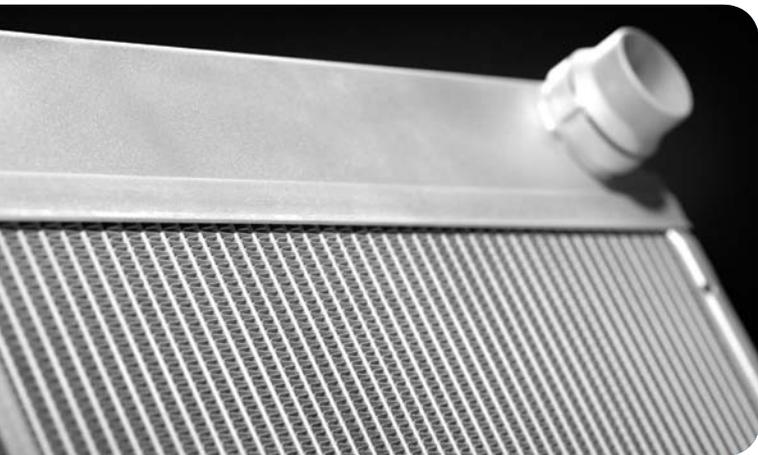
DELIVERING THE DIFFERENCE



To create technical, economic and environmental benefits, the automotive market is moving towards new technologies and raw materials. A new trend involves the use of aluminum in radiators for automotive applications.

Nissens now offers an interesting range of market-popular full-aluminum radiators. For decades, we have developed and mastered in-house production of Controlled Atmosphere Brazing (CAB) processes in our factories in Europe. The result is aluminum cooling products with excellent brazing quality and uniform flux coatings.

Aluminum is ideal for car manufacturers and car users, since availability of the raw material, lower weight, non-corrosive advantages as well as cost efficiency ensure excellent and efficient cooling solutions.



WHY CHOOSE A FULL-ALUMINUM RADIATOR?

The use of radiators based on the full-aluminum technology offers a number of attractive benefits compared to conventional radiators manufactured on the basis of plastic and aluminum materials and technologies.

Since modern car design and construction have become more complex and more technologically advanced with less space for equipment, full-aluminum radiators are the perfect choice compared to plastic solutions, as they are lighter and more flexible.

In conventional radiators, the plastic tanks are installed on the aluminum core with a sealing gasket. When choosing a full-aluminum radiator, the use of gaskets and the risk of breaking the drainage tubes or in- and outlets in a fragile plastic material are completely eliminated.

Aluminum is one of the most abundant metals on earth. For that reason, the availability of the raw material is basically unlimited. Furthermore, the aluminum material is perfect for recycling with no waste and zero need for material disposal. Consequently, the application of the aluminum material is compatible with respecting our natural resources as well as the environment.

NISSENS' PROVEN PERFORMANCE IN FULL-ALUMINUM TECHNOLOGY

- The full-aluminum radiators from Nissens are produced on the basis of the latest and most advanced technologies, including fully automatic manufacturing and assembly lines.
- The Controlled Atmosphere Brazing (CAB) process applied to manufacture our full-aluminum radiator elements ensures a cooling unit with very strong and durable structures.
- We use Paint Flux on all critical components in order to ensure a high and consistent quality of the brazed full-aluminum radiators.
- The cores of the radiators are produced with heavy-duty tubes, highly efficient double-folded fins, optimally shaped louvres and a small tube distance to ensure excellent durability and cooling performance.
- Nissens' full-aluminum radiators are easy to handle and install into the plastic cassette. Furthermore, our Multi-Fit concept ensures a quick and flawless installation in more than one application.
- All our full-aluminum products have been thoroughly tested in corrosion, vibration, pressure impulse, thermal expansion and thermal performance test series.
- It is important for Nissens to take the impact on our environment into consideration, when we design and manufacture our products. We are certified according to ISO 14001.

ISO 14001
Management System Certification
BUREAU VERITAS
Certification Denmark A/S



The ISO 14001 certificate is an evidence of our dedicated effort to protect the environment, and it puts an emphasis on the fact that:

- We care about environmental issues by focusing on sustainability
- We are committed to minimizing the effects on our company's physical surroundings through a structured approach, which also takes financial savings and increased competitiveness into account
- We are able to document that the task of minimizing external environmental effect is integrated into our daily processes, short- and long-term activities and existing as well as future competences

NISSENS' FULL-ALUMINUM RANGE

Today, our range of full-aluminum radiators comprises a **complete coverage of 23 OE numbers for 27 car models**. Our selection is designed with a **Multi-Fit feature**, which means that one full-aluminum product covers more than one OE application.

NISSENS' FULL-ALUMINUM RADIATORS, AUTUMN 2011

New items description (for full description check our catalogues)

NISSENS' ITEM	MANUFACTURER	MODEL	YEAR	OE NUMBER
60761	BMW	E60-E61 / 545i E63-E64 / 645 Ci	2003-	17117507972, 7507972
60761	BMW	E65-E66 / 735i-745i-760i	2001-	17117507972, 7507972
60762	BMW	E60-E61 / 525d-530d E63-E64 / 630d	2003-	17112248478, 17112248748, 2248478, 2248748
60762	BMW	E65-E66 / 730d-740d	2002-	17112248478, 17112248748, 2248478, 2248748
60763	BMW	E60-E61 / 520i-530i-545i-550i E63-E64 / 650Ci	2003-	17117519209, 17117519211, 17117519212, 7519209, 7519211, 7519212
60764	BMW	E60-E61 / 545i	2003-	17117532770, 7532770
60765	BMW	E60-E61 / 535d E63-E64 / 635d	2004-	17117792832, 7792832
60766	BMW	E65-E66 / 740i-750i-760i	2003-	17117534904, 7534904
60767	BMW	E65-E66 / 730d-745d	2002-	17117795138, 7795138
60772	BMW	E60-E61 / 523i E63-E64 / 630 Ci	2003-	17117534914, 7534914
60773	BMW	E60-E61 / 520d-530d	2002-	17117795878, 7795878

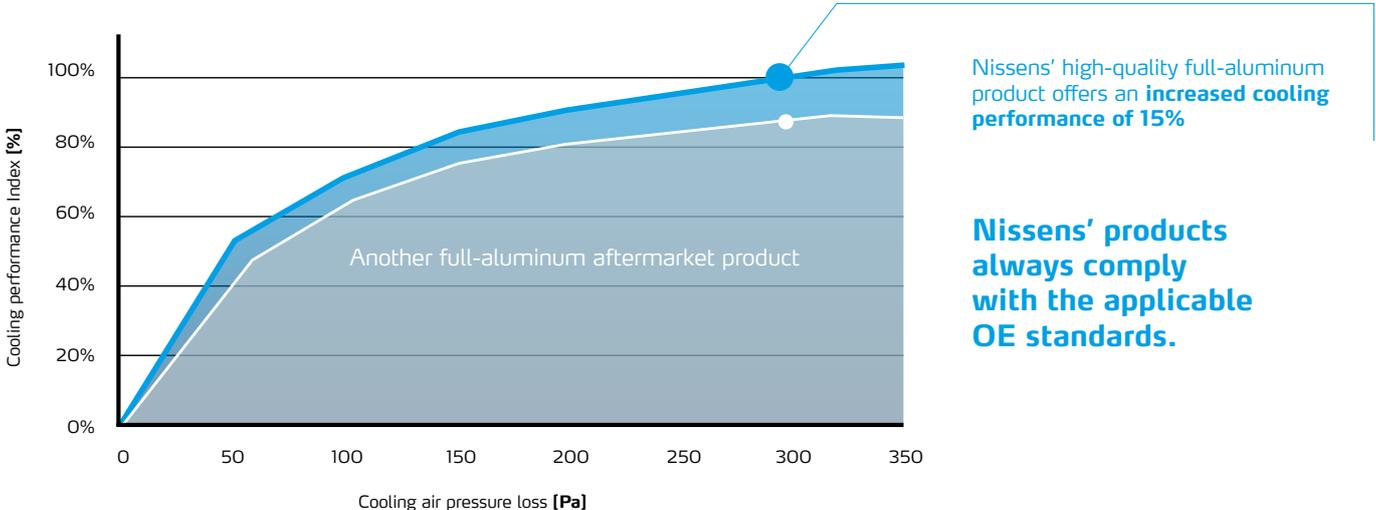
Thanks to the product description, our full-aluminum products are easy to identify in Nissens' product catalogues. **Our range of full-aluminum radiators will be expanded continuously by new and innovative products.**



NISSENS FULL-ALUMINUM PERFORMANCE

Since product quality and technology are highly valued by Nissens, we are proud to document our unique performance in comparison with other aftermarket products.

Cooling Performance Test



The above table shows the result of a cooling performance test of two identical full-aluminum radiators. One of the radiators is produced by an established aftermarket supplier. The other is produced by Nissens. The conclusion is that Nissens' full-aluminum radiator performs better than the competitive product.

QUALITY & TECHNOLOGY – OUR KEYS TO DEVELOPING YOUR COOLING BUSINESS

Since 1921, we have endeavoured to deliver the best quality cooling systems. We strongly believe that our efforts invested in R&D and quality represent a true benefit to our growing number of customers around the world.

Our high quality and advanced technology position Nissens as one of the leading European aftermarket manufacturers and as an acknowledged OEM supplier. Among our customers, we are renowned for our product and service reliability.



To have a product catalogue, please contact your local sales office or one of Nissens' official distributors. To learn more about us, visit www.nissens.com.

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CONTROL OF EVERY STEP

From development, through prototype testing, production, packaging, product catalogues to sales, all our processes are controlled by quality standards according to ISO 9001, ISO 14001 and TS 16949 certifications. A dedicated quality approach contributes to developing the trust and satisfaction of our customers. When our customers browse our catalogues, call our customer service or install our products, they will feel that we are **Delivering the Difference** in every detail. Together with a wide and excellent product range, we offer a smooth and customer-friendly after-sales service.

R&D

Our in-house R&D and testing departments give us a unique strength and flexibility in the development of our wide product range. Having in-house facilities for the production of manufacturing and tooling equipment, we are able to respond to market trends and demands very quickly and effectively. Complex and advanced product life tests are integrated elements in our strict product quality policy.

THE BEST RAW MATERIALS & ADVANCED SOLUTIONS

Nissens' products combine the best raw materials, advanced technologies and an innovative mindset. That enables us to design and manufacture quality products with extraordinary features. Double-folded fins, heavy-duty tubes and reinforced water tanks are examples of our cooling parts. They are all characterized by being solid, durable and excellently performing products. With Nissens, you will find the perfect match between the finest cooling product and the highest market requirements.

YEARS OF EXPERIENCE & MODERN TECHNOLOGY

For decades, we have built our comprehensive experience in cooling, which - in combination with our application of the newest production technology - means that our customers can rely on our know-how and product expertise. Developing and manufacturing more than one million units per year for aftermarket applications in both automotive and industrial segments mean that we are constantly challenging ourselves to maintain the highest standards. Behind each of our products, our customers will find modern technology, expert knowledge and a strong commitment to **Delivering the Difference**.