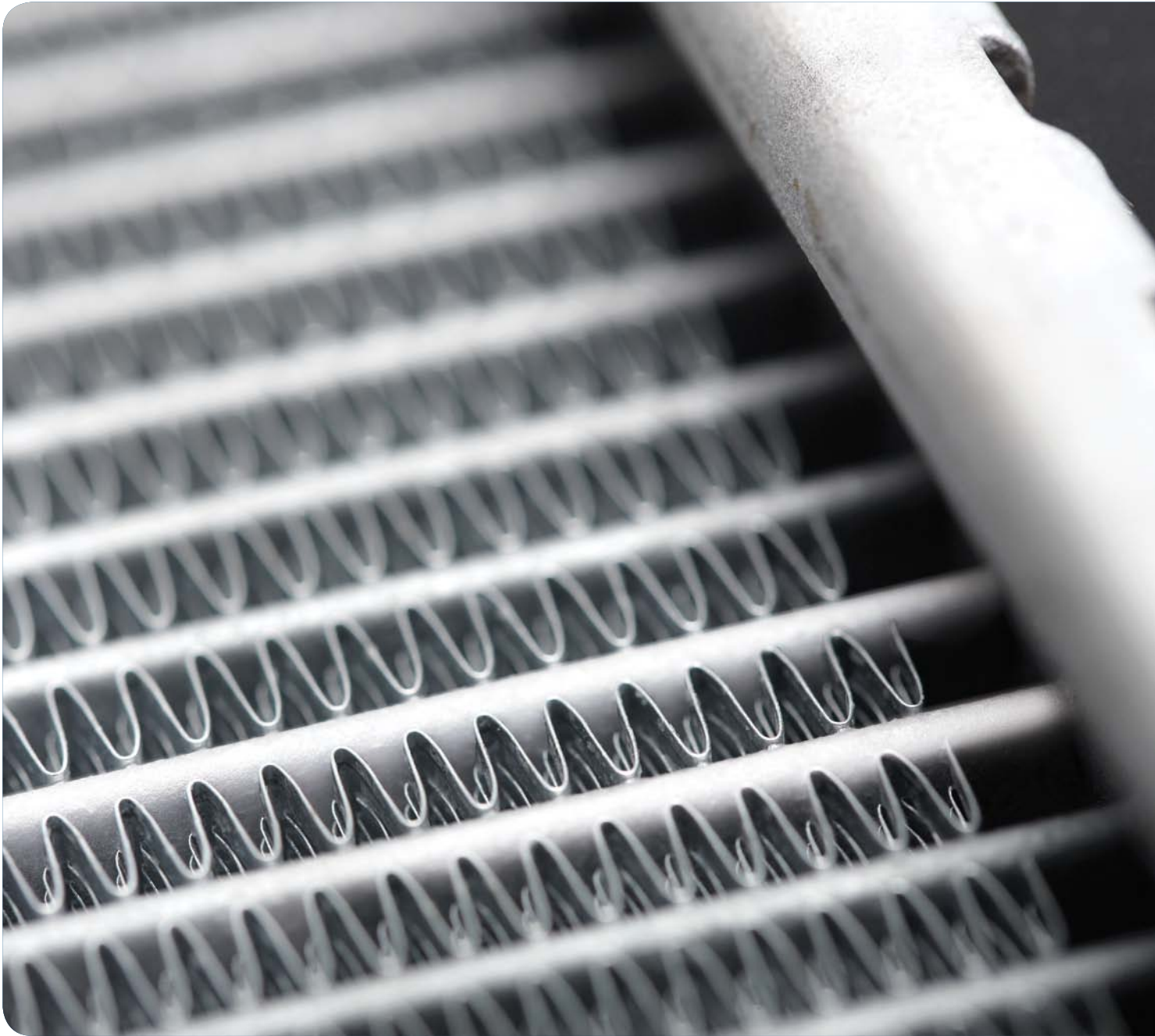


5 MM RADIATORS

THE LATEST TECHNOLOGY OFFERING EVEN MORE EFFICIENT COOLING

Nissens[®]

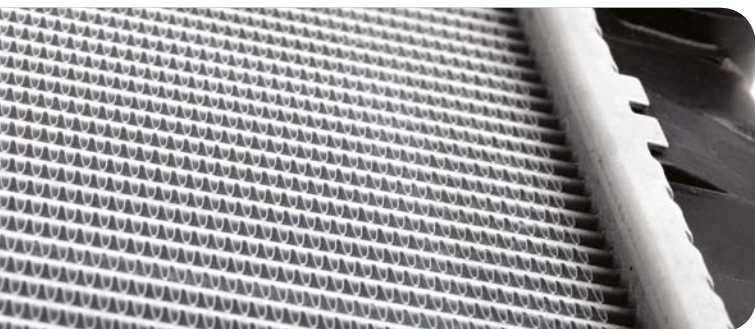
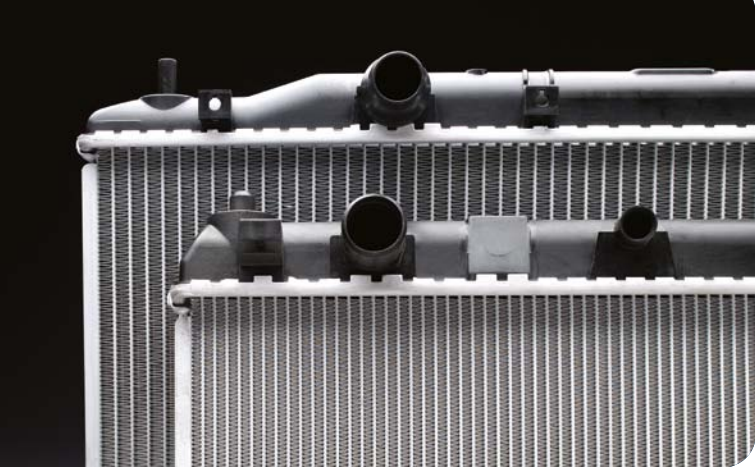
DELIVERING THE DIFFERENCE



The advanced technologies applied in modern cars develop extremely fast. Automotive designers continue to put more and more emphasis on enhancing the effectiveness of the power unit with the aim of reducing volume.

However, achieving a higher power effect from smaller engines requires more efficient cooling. But more efficient cooling cannot be provided by larger cooling unit sizes. The space in the engine chamber becomes increasingly limited due to the advanced equipment of the engine, so more efficient cooling needs to be supplied by applying a radiator technology, which takes both efficiency requirements and space limitations into consideration.

Nissens is the first manufacturer in Europe to offer radiators produced in-house based on the latest 5 mm technology, thus meeting the need to combine a larger cooling efficiency with a significantly reduced need for space for the cooling unit.



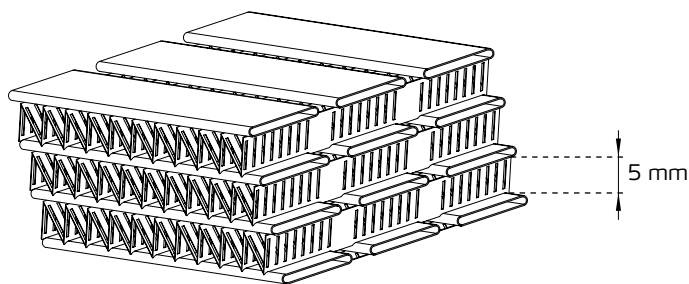
WHAT DOES 5 MM MEAN?

Originally, the 5 mm technology was introduced and applied in a selection of popular Japanese cars, e.g. Mazda, Suzuki and Toyota. Today, the European market potential is also growing, and the number of new cars equipped with the 5 mm cooling technology develops rapidly.

The 5 mm term indicates that the spaces between the tubes in the radiator core are 5 mm. Until recently, the majority of aluminum radiators for cars were made with 10 mm tube distance

The remarkable distance reduction in 5 mm radiators generates a number of interesting benefits in comparison to the standard systems of 10 mm:

- **Better cooling performance**
- **Reduction in cooling unit size; mainly in thickness in terms of less rows, but also in width and height**
- **Lower weight**

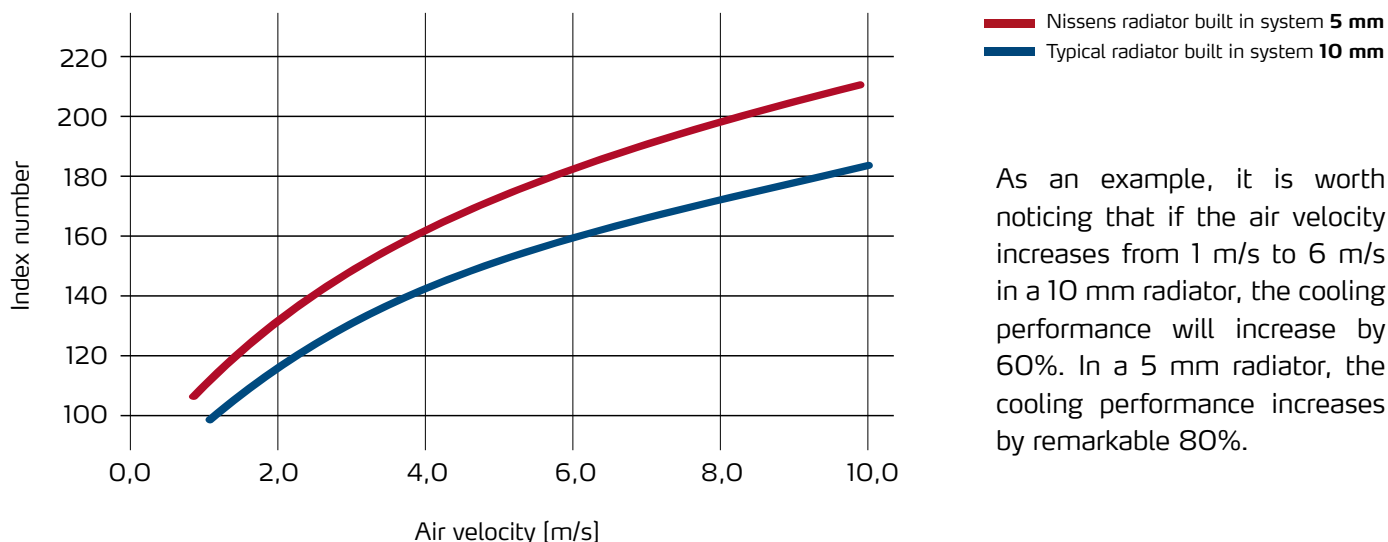


IMPROVED COOLING PERFORMANCE

Below, the chart presents the results of a cooling performance test, which was carried out on two identical radiators except that one was built in standard 10 mm, and the other in the new 5 mm technology.

The comparison between the 5 and 10 mm radiator performances reveals that the cooling performance of the 5 mm radiator is up to 25% better than the 10 mm system. This amazing result is shown in the performance curve, where 1 m/s in the 10 mm system is index 100, which corresponds to 100%. All other values reflect the percentage increases from index 100.

Comparison between radiators in systems 5 mm and 10 mm



As an example, it is worth noticing that if the air velocity increases from 1 m/s to 6 m/s in a 10 mm radiator, the cooling performance will increase by 60%. In a 5 mm radiator, the cooling performance increases by remarkable 80%.

NEW NISSENS MODELS AVAILABLE IN 5 MM

Our commitment to offer the widest product range in the aftermarket means that more and more Nissens products apply the 5 mm technology. Today, radiators building upon the 5 mm technology comprise a full coverage of **35 OE numbers within 44 car models**. The list below includes all radiators manufactured by Nissens in 5 mm technology.

NISSENS 5 MM RADIATORS

New items description and availability plans

NISSENS ITEM	APPLICATION	OE NUMBER	PLANNED AVAILABILITY
68504	MAZDA 2 1.3-1.5 07-	ZJ38-15-200, ZJ38-15-200A	August 2011
68505	MAZDA 2 1.5 AUT. 07-	ZY84-15-200A	August 2011
68506	MAZDA 2 DIESEL 07-	Y405-15-200	August 2011
68503	MAZDA 5 05-	LFB-71-200A, RF7N-15-200	August 2011
68507	MAZDA 6 1.8-2.0 07-	LFH-415-200, LF4J-15-200 B	August 2011
68508	MAZDA 6 2.0 AUT 07-	LFH-115-200 B, LF4K-15-200 B	August 2011
68510	MAZDA 6 2.0 D 07-	RF8G-15-200	August 2011
68509	MAZDA 6 2.5 07-	L3R4-15-200 D, L510-15-200 C	August 2011
64202	SUZUKI GRAND VITARA 1,6 05-	17700-66J00	July 2011
64200	SUZUKI GRAND VITARA 2,0 05-	17700-65J00	July 2011
64201	SUZUKI GRAND VITARA 2,0 D 05-	17700-67J00	July 2011
64199	SUZUKI GRAND VITARA 2,0 AUT 05-	17700-65J10	July 2011
64681A	TOYOTA HI-LUX 05-	16400-0L120, 16400-0L130, 16400-0L160	August 2011
62896	MITSUBISHI L 200 2.5 TD 06-	1350A182, 1350A183	October 2011
64691	TOYOTA AURIS 1.4 D4D 07-	16400-0N060	October 2011
64692	TOYOTA AURIS 1.4i-1.6i 07-	16400-22160, 16400-0D400, 16400-0D410	August 2011
64693	TOYOTA AURIS 2.0D-2.2D 07-	16400-0R030, 16400-R061	October 2011
68137	HONDA ACCORD 2.2 D 08-	19010-RLO-G01	2012
68522	MAZDA 3 1.6 AUT 09-	Z681-15-20YA	2012
68523	MAZDA 3 1.6 D 09-	Y642-15-20YA	2012
68521	MAZDA 3 1.6-2.0-2.3i 09-	LF8B-15-20Y, Z668-15-20Y	2012
68520	MAZDA 3 2.2 DIESEL 09-	R2AH-15-20Y	2012
64694	TOYOTA AVENSIS 2.0 AUT 08-	16400 OT120	2012
646804	TOYOTA LANDCRUISER 3.0 TD 02-	16400-67230	2012
646805	TOYOTA LANDCRUISER 3.0 TD 02-	16400-30142	2012
646806	TOYOTA LANDCRUISER 3.0 TD 02-	16400-30140	2012

All the 5 mm products are easy to be identified in Nissens catalogues by means of relevant notes added to their description.
The range of Nissens' 5 mm radiators will constantly be developed in the coming months.



QUALITY & TECHNOLOGY – OUR KEYS TO DEVELOP YOUR COOLING BUSINESS

Since 1921, we strive at delivering the best quality cooling system components. We strongly believe that our efforts invested in research, development and quality represent a true benefit to the growing number of customers around the world.

Our high quality and advanced technology place 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.



Contact your local sales office or one of the official Nissens distributors to get our product catalogues.

Nissens A/S

Ormhøjgårdvej 9
DK-8700 Horsens

Tel.: +45 7626 2626
Fax: +45 7564 2349
www.nissens.com



CONTROL OF EVERY STEP

From development, through prototype testing, production, packaging, and product catalogues to sales, all of our processes are controlled by quality standards and regulations in terms of ISO 9001/TS 16949. A focused quality approach contributes to developing the trust and satisfaction of our customers. No matter whether you browse our catalogues, call our customer service or install our products, you will feel the difference in every detail. Together with excellent products, we offer a complex and customer-friendly after-sales service.

RESEARCH & DEVELOPMENT

Our own research, development 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 such as thermal, vibration and pressure tests are integrated elements in our strict product quality policy.

THE BEST RAW MATERIALS AND ADVANCED SOLUTIONS

Nissens' products combine the best raw materials, advanced technologies and innovative ways of thinking. 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 as solid, durable and excellently-performing products. Selecting Nissens, you will get the finest cooling product meeting the highest market requirements.

YEARS OF EXPERIENCE AND MODERN TECHNOLOGY

For decades, we have built our comprehensive experience in cooling. Combined with our application of the newest technology in our production, you may rely on our know-how and product expertise. Manufacturing and developing more than one million units per year and supplying a variety of aftermarket segments in both automotive and industrial sectors, we are constantly challenging ourselves to maintain the highest standards. Behind each of our products, you will find modern technology, specialist knowledge and a strong commitment to "delivering the difference".