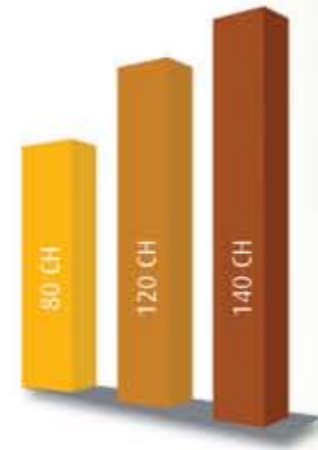
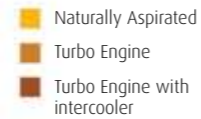


Valeo - give a boost to your sales!

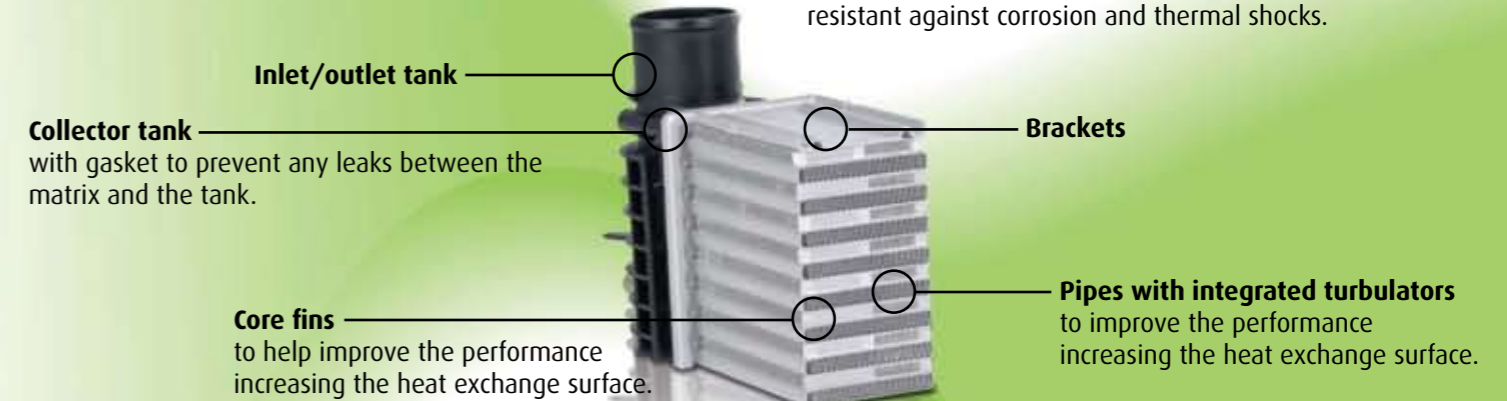
WHY USE AN INTERCOOLER?

- ⦿ The turbocharger increases power and torque (+25%) but an increase in the temperature of the air within the intake manifold limits the power yield.
- ⦿ The intercooler reduces the temperature of the air in the intake manifold from 130 degrees to 60 degrees, removing the negative effects of the turbo and increases the power (+20%).



INTERCOOLER CONCEPTION

- ⦿ Constraints are higher and higher (temperature & pressure are increasing) which involve higher performance materials, resistant against corrosion and thermal shocks.

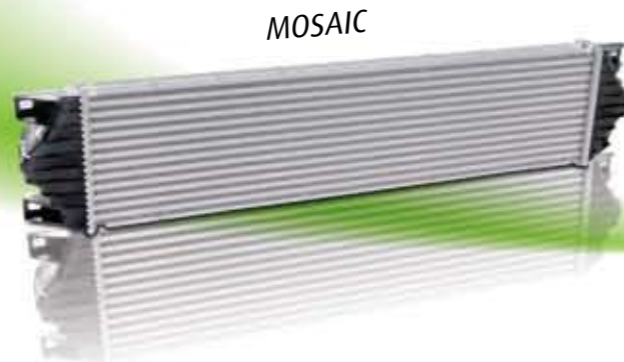


3 TYPES OF INTERCOOLER

- ⦿ The intercooler format depends on its location in the vehicle.

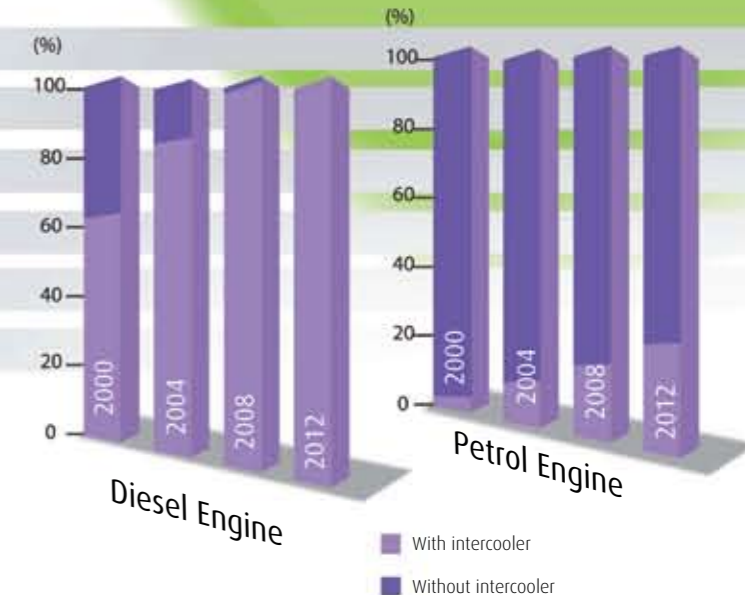


- ⦿ 4 different locations possible:
 - Below the radiator (mosaic)
 - Along the radiator (compact)
 - In the wheel arch (compact)
 - Below the radiator (surface type)



A MARKET IN CONSTANT DEVELOPMENT

- ⦿ The Engine emission regulations, which are becoming more stringent (Euro 4 in 2005 and Euro 5 in 2009), push car manufacturers to reduce the size of their petrol and diesel engine to limit energy consumption and exhaust emissions (downsizing). The driving experience remains the same and is improved by the addition of a turbocharger and an intercooler.
- ⦿ In 2000: 1 in 4 new vehicles were fitted with an intercooler
- ⦿ In 2008: 1 in 2 !



WATER INTERCOOLER: MAKING OVERBOOST SYSTEM MORE EFFICIENT

- ⦿ The air sent into the engine for vehicles equipped with a turbocharger is usually cooled by an air/air intercooler. A different technology supplied by Valeo is an Air/Water intercooler. The overboost system benefits from better cooling and a shorter air loop than a traditional intercooler which improves the response time during the acceleration. The water is cooled by a small additional radiator located at the front of the vehicle, managed by an electrical water pump.
- ⦿ The first popular application covered by this water intercooler is the VW Golf V 1.4 TSI.



WHEN DO YOU NEED TO REPLACE AN INTERCOOLER?

- ⦿ Due to its location, the Intercooler needs to be replaced at the same time as a radiator, after a front crash or when an air leak is detected. Another reason could be a corrosion or damage of the Intercooler fins, due to stone impacts.
- ⦿ A faulty Intercooler can lead to performance reduction. This can result in a failure of exhaust emissions testing.

Benefit from the support of the World's No.1 for OEM intercoolers

Valeo Part Number	Car Maker	Model	Engine	Date	OES Part Number
817238	Ford	Mondeo	2.0 TDCI	00>03	1124704
816890	Mercedes	Sprinter	2.2 D / 2.3 D / 2.3 i / 2.7 D / 2.9 D / 2.7 D Auto / 2.9 D 4WD	95>	9015010701
	Volkswagen	LTII / LTIII	2.5TDI / 2.8 TDI / 2.8 TD	96>	2D0145805
816851	Peugeot	806	1.9 TD / 2.0 HDI / 2.0 HDI 16V / 2.0i Turbo / 2.1 TD	94>02	0384E7
	Citroën	Synergie	1.9 TD / 2.0 HDI / 2.0 HDI 16V / 2.0i Turbo / 2.1 TD	94>02	0384E7
	Peugeot	Expert	1.9 TD / 2.0 HDI	95>06	0384E7
	Citroën	Dispatch	1.9 TD / 2.0 HDI	95>06	0384E7
	Fiat	Scudo	1.9 TD / 2.0 JTD / 2.0 JTD 16V	95>03	1472059080
	Fiat	Ulysse	1.9 TD / 2.0 ie Turbo / 2.0 JTD / 2.0 JTD 16V / 2.1 TD	94>02	1472059080
	817457	Audi	A3	1.8 i Turbo 20V / 1.9 TDI	96>03
Volkswagen		Golf IV/Bora	1.8 i Turbo 20V / 1.9 TDI	97>05	1J0145803A / F / G / T
Seat		Leon/Toledo	1.8 i Turbo 20V / 1.9 TDI	98>05	1J0145803A / F / G / T
Skoda		Octavia	1.8 i Turbo 20V / 1.9 TDI	96>04	1J0145803A / F / G / T
817437	Citroën	C5	2.0 HDI / 2.2 HDI 16V	01>04	0384F3
	Peugeot	406/607	2.0 HDI / 2.2 HDI 16V	99>04	0384F3
817653	Audi	A3	1.9 TDI	00>	1J0145803E / M
	Seat	Toledo	1.9 TDI	00>06	1J0145803H
	Skoda	Octavia	1.9 TDI	03>	1J0145803M
	Volkswagen	Golf/Bora	1.9 TDI	00>05	1J0145803H / M
817554	Nissan	Primastar	1.9 DCI	01>	1449600QAA
	Renault	Trafic	1.9 DCI	01>	7700312903
	Vauxhall	Vivaro	1.9 DTI	01>	91166035
817916	Vauxhall	Astra	1.7 CDTI 16V	03>	9192587
817637	Renault	Master	1.9 DCI / 2.2 DCI / 2.5 DCI / 3.0 DCI	03>	7701057121
	Vauxhall	Movano	2.2 CDTI 16V / 2.5 CDTI 16V / 3.0 CDTI	03>	93179776
817115	Renault	Master	1.9 DCI / 1.9 DTI / 2.2 DCI / 2.5 DCI / 2.8 DTI	98>03	7701043695
	Vauxhall	Movano	1.9 CDTI / 1.9 DTI / 2.2 DTI 16V / 2.5 CDTI 16V / 2.5 DTI / 2.8 DTI	98>03	9161147
817884	Fiat	Punto	GT	93>99	7738826
818725	Fiat	Punto II	1.9 D / 1.9 JTD	99>	46764253
818837	Peugeot	308	1.6 HDI 16V	07>	0384L4
818841	Peugeot	308	1.6 THP	07>	1440H9

INTERCOOLER

Boost your sales!



The complete range of Valeo intercoolers can be found in our Engine Cooling catalogue (Part Number 955376)

Distributor



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