Your challenges
Increasingly stringent emission standards mean automotive OEMs are under pressure to develop efficient and reliable engines. As the radiator, the cooling circuit and all associated components are critical to the engine, OEMs are demanding excellence from cooling system component manufacturers to help them achieve their production goals.

OEMs’ divergent specifications add another layer of testing complexity for manufacturers, who must test using different fluids to meet requirements. Each OEM’s bespoke automotive parts also necessitate a specific laboratory structure for every test.

What tests are available?
Both OEM requirements and industry standard test specifications necessitate a wide range of cooling system component tests. This includes durability, pressure pulsating, ageing, erosion, corrosion, climatic, temperature cycling, pressure-vibration-temperature and materials testing, as well as permeation measurement.

Why are these tests important for your business?
To ensure success in an extremely competitive market, manufacturers must have proven safety and quality standards. Tests carried out by a certified laboratory deliver assurances to OEMs that they are using the very best components in their vehicles, helping you to increase sales.

How can we help you?
As an impartial third-party technical service provider, TÜV SÜD’s services deliver your customers the assurance of independent verification for safety and quality. Offering a wide range of cooling system component testing, that simulates the diverse range of stresses on automotive parts, we will help you to meet both OEM and industry standard test requirements. Wherever you operate, we have industry experts ready to support you in achieving your competitive advantage goals.

Cooling system and component testing
Proving compliance to drive sales
Our services
TÜV SÜD provides the full scope of testing that is applicable to cooling system components, such as Conformity of Production (CoP), as well as tests for new materials and designs. Our testing services include:

- **Bench testing, endurance and durability tests**
  - Fatigue strength (pressure pulsating, temperature cycling, ageing)
  - Resistance to environmental simulation (climatic temperature and pressure change. PVT, internal corrosion/erosion)
  - Functional testing (static, dynamic)

- **Material testing**
  - Tightness
  - Burst pressure test
  - Assembly/disassembly

- **Project management**
- **DVP processing**
- **The interpretation of norms and specifications**

Your business benefits
- **Simplify market access** – by taking advantage of TÜV SÜD’s long track record with the world’s top automotive OEMs and suppliers in the industry, helping you to develop a competitive advantage based on quality and innovation.
- **Minimise time to market** – with a flexible TÜV SÜD team that can rapidly respond to evolving customer specifications, supported by a sophisticated test rig that can be adapted quickly to meet test requirements.

- **Cost efficiency** – through our technical expertise and range of value-added services that helps you to reduce your development costs, product failure rates and lead-time to market.
- **Worldwide support** – from our network of local experts and accredited laboratories in each of the global markets that you and your suppliers operate in.

Why choose TÜV SÜD?
Global manufacturers have relied on TÜV SÜD’s automotive testing expertise for more than 30 years. Today, our network of international experts work with the world’s top automotive OEMs and suppliers, providing an end-to-end solution from development through to production and distribution.

Our one-stop testing service includes tests for a wide range of fluids, including fuel, coolant, oil, water and urea. We can also undertake the tests with the medium air. This approach enables us to reduce the time spent on testing to minimise your time to market.

TÜV SÜD helps you to minimise risk by maintaining a strict commitment to safety across all our processes, and we are audited regularly. Customers and governments worldwide place trust in us as an independent and impartial third-party technical service provider. In an industry where safety is of paramount importance, a partnership with TÜV SÜD enhances your reputation in the market as a reliable and high-quality supplier.

Choose certainty. Add value.
TÜV SÜD is a premium quality, safety and sustainability solutions provider that specialises in testing, inspection, auditing, certification, training and knowledge services. Represented in over 800 locations worldwide, we hold accreditations in Europe, the Americas, the Middle East, Asia and Africa. By delivering objective solutions to our customers, we add tangible value to businesses, consumers and the environment.

Related services
TÜV SÜD provides the following related services:
- Material testing and analysis
- Vibration testing