



Choose certainty.
Add value.

Services for bridges and engineering structures

Maintain the safety and reliability of new and existing infrastructure.

Your challenges

Infrastructure projects such as bridges and other engineering structures represent major investments in long-term economic development. Ensuring their safety and long lifespan is a critical concern for all stakeholders, including government and transport authorities, developers and contractors. Structural damage may not be detected until it progresses to an advanced stage, leading to higher repair costs or serious risks to users. As a result, international legislation such as DIN 1076 requires regular testing and inspection of all bridges and engineering structures.

Which services does TÜV SÜD provide for bridges and engineering structures?

TÜV SÜD provides comprehensive consulting, testing and inspection services for all types of engineering structures such as bridges, tunnels (road, rail, metro, water etc.), underpasses, culverts, chimneys, supporting structures, noise barriers and rainwater harvesting

systems. Our experts support you in new engineering structure development as well as refurbishment projects.

Why are these services important for your business?

Our services allow you to maintain single-source control over fund flow and utilisation, improve planning and budgeting, and reliably measure project results. We enable you to complete projects on time and within budget, maintain the safety of road users and protect your organisation against business, financial and legal risks.

How can we help you?

Accredited by various national bodies, TÜV SÜD offers a full suite of services that increases operational availability, boosts cost effectiveness and assures legal certainty of your project. We support you at every stage, from initial design to final acceptance and maintenance, with project management, materials testing, site inspection and other services.



Our solutions for bridges and engineering structures

TÜV SÜD's comprehensive portfolio of solutions comprises the following services:

■ Consulting

- Drawing up construction plans
- Structural analysis and structural classification
- Failure analysis
- Damage assessment reports
- Refurbishment proposals and repair recommendations including cost estimates
- Acceptance / documentation

■ Inspection

We conduct regular construction quality assurance inspections throughout all stages of development and refurbishment to ensure structural stability according to international regulations.

- Technical audits
- Logbook preparation
- Recording of all engineering structures
- Primary and secondary inspections
- Final inspection prior to commissioning
- Structural review of load-bearing capacity and grouping into load categories
- Measuring the concrete cover of the reinforcement
- Concrete inspection and engineering report
- Classification of engineering structures as per international standards
- Grouping into military categories in line with STANAG 2021

■ Testing

- Chemical and physical testing and analysis of concrete and steel construction materials
- Destructive and non-destructive structural strength testing
- Non-destructive testing of steel components, welds and connecting elements

Your business benefits

- **Deliver projects on time** – with single-source control enabled by our interdisciplinary support and project management consultancy.
- **Reduce cost** – through our expertise in identifying repair needs and making restoration recommendations with cost efficiency in mind.
- **Gain legal certainty** – from our in-depth familiarity with national and international directives and standards, and knowledge of technical directives, rules and regulations, and standards.
- **Benefit from complete solutions** – with our one-stop solutions covering technical consulting, quality assurance, testing and project management throughout the project lifecycle.

Why choose TÜV SÜD?

TÜV SÜD is a trusted, independent third-party solutions provider that carries out impartial analyses and tests of your structures. Our experts actively participate in the preparation of directives and standards governing safety of engineering structures. This ensures they are familiar with all relevant requirements and regulations. We have decades of international experience in the real estate and infrastructure sector. In addition, we are accredited according to ISO 17020 to conduct independent inspections for quality assurance.

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:

- Services for roads and highways
- ISO 9001 – Quality management system certification
- ISO 14001 – Environment management system certification
- OHSAS 18001 – Occupational health and safety management system certification