



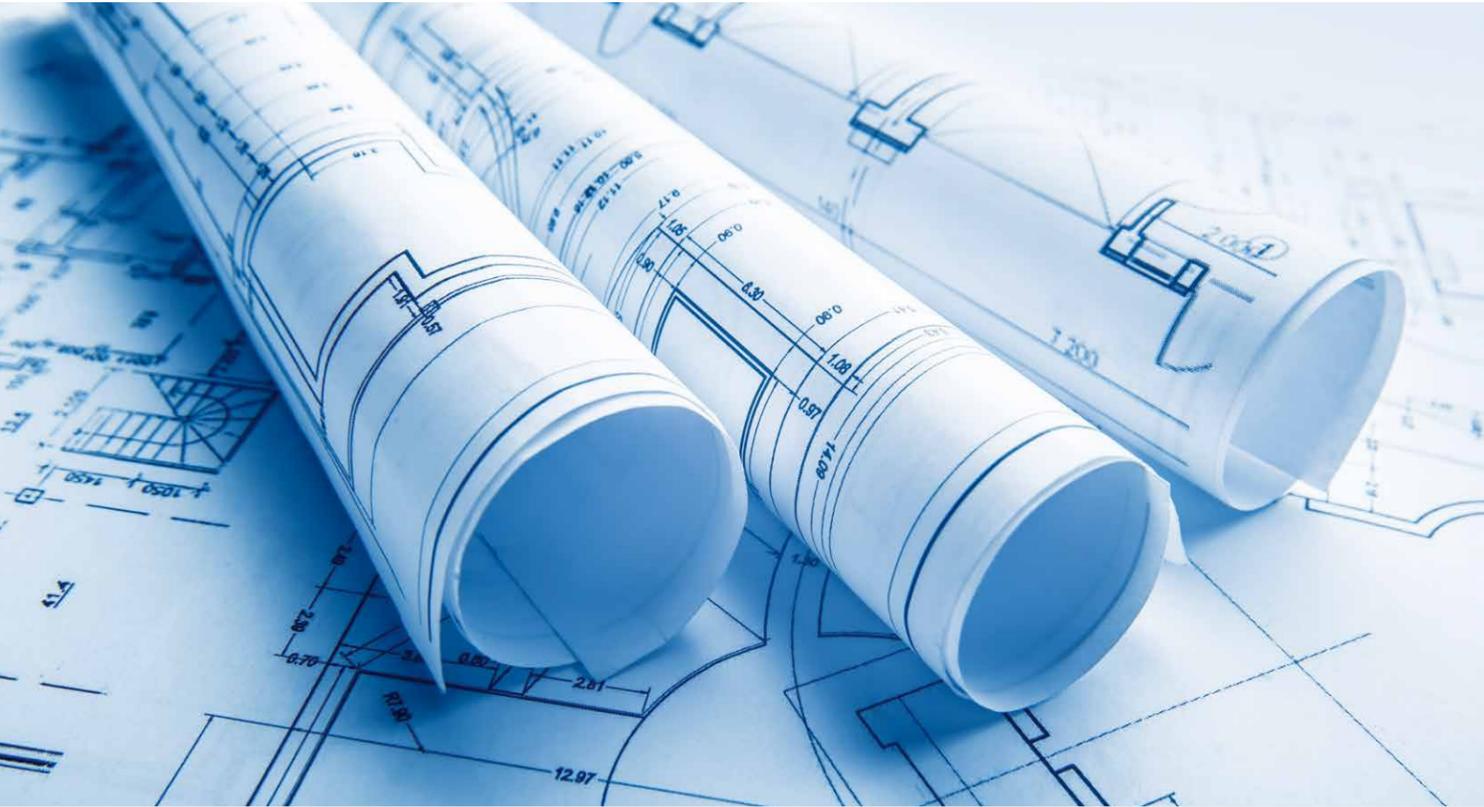
weisstechnik[®]
a schunk company

Test Benches for
Large Engines.
Running smoothly.

www.weiss-technik.com

Innovative system construction at full speed.

With weissttechnik system solutions from a single source.



Good. Better. Together.

The Weiss Technik companies are among the most innovative and important developers and manufacturers of systems in the fields of environmental simulation, heating technology and air conditioning. We have developed solutions specifically for the engine industry that fulfil the most demanding requirements. They have been deployed by large engine manufacturers and their customers around the world. And we are there for our customers 365 days a year, 24 hours a day because service always guides our thoughts and actions. Thanks to our specialist service team, we offer you sustainable solutions for a long-term successful and partner-like cooperation.

Many requirements - one partner.

For every assignment we develop the optimal, individually designed solution from a single source. Be it for a new construction, conversion or modernisation. In doing so, we always think of the room as a whole: floors, walls and ceilings - 360 degrees.

As specialist engineers, we pay attention to all important details and support the whole project from planning to implementation with intensive specialist consultation, products, components and services. You can also take advantage of our many years' experience in system construction. Test what we can do for you.

Running smoothly.

Test Benches for Large Engines, Gearboxes and Drive Components.

Diverse range for all sectors.

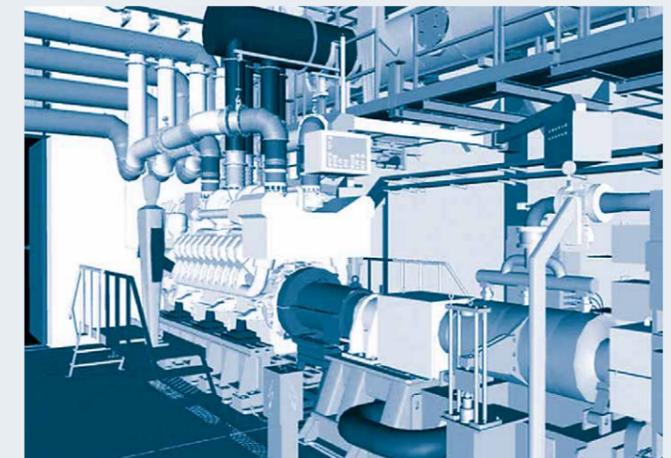
Through the integration of Automotive System Solutions into the Weiss Umwelttechnik portfolio, we have expanded our range to include turn-key engine test benches. As the general contractor, we design individual systems for stationary dynamic and high-dynamic tests.

Variety of services.

We offer modular solutions and test benches in conventional designs for research and development, manufacturing and end-of-line tests, including media supply, control, automation and measurement technology. From independent individual test benches to complete test fields. In doing so, we consider the extreme environmental requirements as well as the integration of safety devices and the realisation of a high level of automation in order to achieve efficient and reproducible test results.

Deployed around the world.

weissttechnik Test Benches for Large Engines are intended, among other things, to test the drives of cars, trains and ships as well as industrial engines, generators and military applications. They are deployed around the world.



Our highlights:

- High level of measurement accuracy
- High level of reproducibility of the test results
- Shortened test times

We optimise our systems with flexible solutions that are tailored to individual customer requirements.

More know-how for more safety.

weisstechnik Test Benches for Large Engines.



Fast and efficient.

Planning and implementation by a project team allows the systems to be optimally customised. Thereby, functionality, safety, energy consumption and availability are always tailored to the centre of the test bench - the engine.

Years of experience in project management ensure an optimised project schedule that observes all specified project targets.



Testing for all it's worth.

Safe and reliable for R+D and end-of-line applications.

Perfect for every task.

Depending on requirements, complete large engine test benches can be designed for simple, stationary running tasks or challenging transient tasks and they can be flexibly adapted to the demands.

Furthermore, our programme also includes individual modules. Under highly reproducible conditions, this enables a multitude of applications, manually or automatically:

- Run-in programs for troubleshooting
- Test runs for basic configurations, engine map testing, acceleration and load connection
- Load profiles to simulate flywheel masses
- Emission certification in accordance with EPA 1065 incl. particle measurement and opacity
- Determination of key indicators and performance figures

Technical data (extract)

Brake performance:	12,600 kW
Torque:	75,500 Nm
Rotational speed:	1,150 U/min
Exhaust volumetric flow rate:	53,600 m ³ /h
Room air conditioning:	100,000 m ³ /h

Equipment with 2 brakes possible

Simple. Mobile. Flexible.

weisstechnik Conditioning Systems.



Benefits with system.

For an additional conditioning of the coolant, conditioning assemblies are used. In this way, engine coolants can be easily preheated or additionally cooled. Two loops with different temperature configurations ensure the necessary heat and cooling capacities. Pre-assembled components reduce the assembly time and the downtime of the test

bench. Constructing the assemblies on transport frames, quick coupling, a pluggable power supply, removable feet and forklift pockets allow flexible deployment - even in different test benches. Thanks to an automation system, the system can also be integrated into a higher-level control system.



Well supplied.

For the perfect test process.

Everything possible. Everything complete.

Weiss Technik ensures that the optimal and individual media supply is always possible for all complete systems or individual modules for simulating reproducible conditions for manual or automatic applications.

Additional options for engine test benches:

- Use of all common measurement and control systems
- Documentation, visualisation and managing process data
- Traceability of the process data for an end-to-end proof of quality

Technical data (extract)

Fuel consumption, diesel:	1,700 kg/h
Cooling output high temperature loop:	3,000 kW
Cooling output low temperature loop:	1,300 kW
Sea water loop:	275 m ³ /h
Starting air:	7-40 bar

Passionately innovative.

We work in partnership to support companies in research, development, production and quality assurance. With 22 companies in 15 countries at 40 locations.

weisstechnik

Test it. Heat it. Cool it.



Environmental Simulation

The first choice for engineers and researchers for innovative, safe environmental simulation facilities. In fast motion, our test systems can simulate all the influences in the world as well as for instance in space. In temperature, climate, corrosion, dust or combined stress tests. With a very high degree of reproducibility and precision.



Heat Technology

Experienced engineers and designers develop, plan and produce high-quality, reliable heat technology systems for a broad range of applications from heating and drying cabinets to microwave systems and industrial furnaces.



Climate Technology, Air Dehumidification, Clean Rooms

As the leading provider of clean rooms, climate technology and air dehumidification, we consistently ensure optimal climatic conditions for people and machines. For industrial production processes, in hospitals, mobile operation tents or in the field of information and telecommunications technology. From project planning to implementation.



Clean Air and Containment Systems

With decades of experience and know-how, we guarantee the most sophisticated clean air and containment solutions. Our comprehensive and innovative range of products includes barrier systems, laminar flow systems, safety workbenches, isolators and airlocks.

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