



SCHENCK

NEW – High-speed balancing

BALANCING AND SPIN-TESTING SERVICE

Fast, competent and economical

RA 1032-12e

THE ART OF ROTATION

PERFECTION THROUGH BALANCING SAFETY THROUGH SPIN-TESTING

Balancing is a decisive process step for the quality of rotating parts. This applies to a repaired individual part just as much as to new parts manufactured in series. Because only after this is their vibration behaviour so perfect that they satisfy the highest quality demands. A strength test through spin-testing provides verifiable operating safety and so offers an important competitive advantage to you.

Service throughout Europe with wide-ranging possibilities

Up to now, we have always managed to balance rotors perfectly that were entrusted to us – whether they were air turbines from the dental sector weighing just a few grams, or a large ventilator from a power station weighing almost 50 tonnes. We can balance even challenging shaft-elastic rotors from turbines or generators perfectly in suitable high-speed installations. **Entrust your rotors to our experts at many European locations!**

Our know-how for your rotors

Our employees have already tested and balanced many rotors in their working lives. They see the latest technical trends at a very early stage and are often included in their development before they become new products and go into production. Profit from this wealth of experience and use it to the advantage of your rotor – especially where quality assurance is concerned.

Our customers come from a variety of branches, such as the automotive and electrical industry, aerospace, or the turbine and mechanical engineering industries.

Our service is your flexibility

Whether prototypes, single examples or series products – we put the finishing touches to your rotors in our balancing centres. As far as balancing is concerned, we are an extended workbench for manufacturers and maintainers. In this way, you gain more flexibility in your production, reduce response times and avoid bottlenecks.

- ▶ **Rotor spectrum from 1 gram to 50 tonnes**
- ▶ **Processing single parts and series**
- ▶ **High-speed balancing**
- ▶ **Balancing flexible rotors**
- ▶ **Strength test at overspeed**
- ▶ **Precision balancing**
- ▶ **Field balancing**
- ▶ **Spin-testing**

Think about balancing and spin-testing from the start

Let us be a part of your team: we are ready for you in the development stage when the design or strength verification of your rotor is involved. In this way, we contribute our know-how at a very early development phase. And you can be sure that in the end your rotor is designed suitable for balancing and complies with the demands placed on it.

BALANCING INDIVIDUAL PARTS

Rotors, parts and whole components – even unusual ones – are our day-to-day business.



BALANCING SERIES

You can react flexibly to capacity bottlenecks with our balancing service for small and large series.



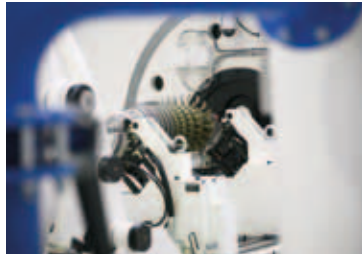
HIGH-SPEED BALANCING

We offer suitable balancing solutions for special cases as well, such as turbocharger core assemblies that require a measuring run close to their service speed.



BALANCING SHAFT-ELASTIC ROTORS

Rotors from steam and gas turbines or compressors can be balanced with speeds in excess of 20,000 min⁻¹.



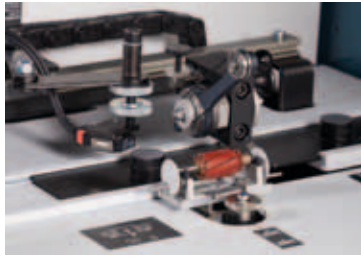
FIELD BALANCING

With field balancing we eliminate unbalance vibrations in machines on site so that your systems are ready for operations again quickly.



PRECISION BALANCING

We use only the best precision balancing machines for very small rotors with residual unbalance masses of just a few milligrams.



SPIN-TESTING

You play it safe with our spin-test service. We carry out strength, burst or creep tests for you.



EXPERT KNOWLEDGE

Our technical personnel can offer a great deal of experience and the right machine for balancing every type of rotor as well as for spin-testing many workpieces.



ALMOST UNLIMITED POSSIBILITIES:

Balancing cylindrical rotors

(e.g. decanters, turned parts, electric rotors, crankshafts, spindles, rollers, tools)

Diameter, max.:	3,600	mm
Length, max.:	8,800	mm
Weight, max.:	50,000	kg

Balancing disc-shaped rotors

(e.g. brake discs, clutches, fans, flywheels, turbochargers, pump rotors)

Diameter, max.:	4,400	mm
Width, max.:	1,950	mm
Weight, max.:	50,000	kg

High-speed balancing of shaft-elastic rotors

(e.g. electric armatures, steam and gas turbine rotors, generators, multistage pumps)

Diameter, max.:	2,500	mm
Length, max.:	8,000	mm
Weight, max.:	20,000	kg
RPM, max.:	20,000	min ⁻¹

Spin-testing rotors

Diameter, max.:	900	mm
Width, max.:	900	mm
Weight, max.:	400	kg
Spinning speed, max.:	250,000	min ⁻¹
Vacuum min. res. pressure:	< 1	mbar

BALANCING CENTRES NEAR YOU:

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You can find our European service centres on our website:

www.schenck-rotec.com/service/



Our quality management system is certified in accordance with:

- ▶ DIN EN ISO 9001
- ▶ DIN EN ISO 14001
- ▶ VDA 6.4
- ▶ Ford Q1



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