

STATIC BALANCING SYSTEMS

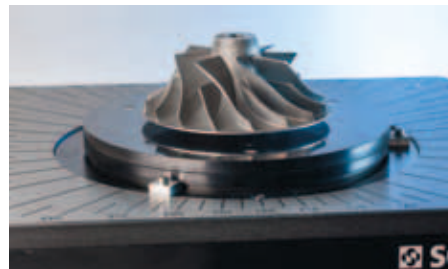
**Without rotation –
simple and precise balancing**

PERFECT FOR DISC-SHAPED ROTORS – STATIC BALANCING SYSTEMS

Nowadays static balancing systems represent in many cases an alternative to rotating solutions. Meanwhile their accuracy is high to such an extent that a lot of applications can be balanced with more efficiency than with rotating machines.

The extended field of application is due to the new, unique measuring principle. This measuring procedure considerably improved the efficiency of our static balancing systems, also leading to an extension of the typical range of use. Unbalance and weight of simple, disc-shaped rotors can now be determined fast and precisely. Depending on the required balancing quality they offer a considerable cost-saving potential.

Among its typical applications are railway wheels, propellers, grinding wheels, or pump impellers and brake discs. Static unbalance can be determined precisely for all rotors having a disc-shaped geometry.



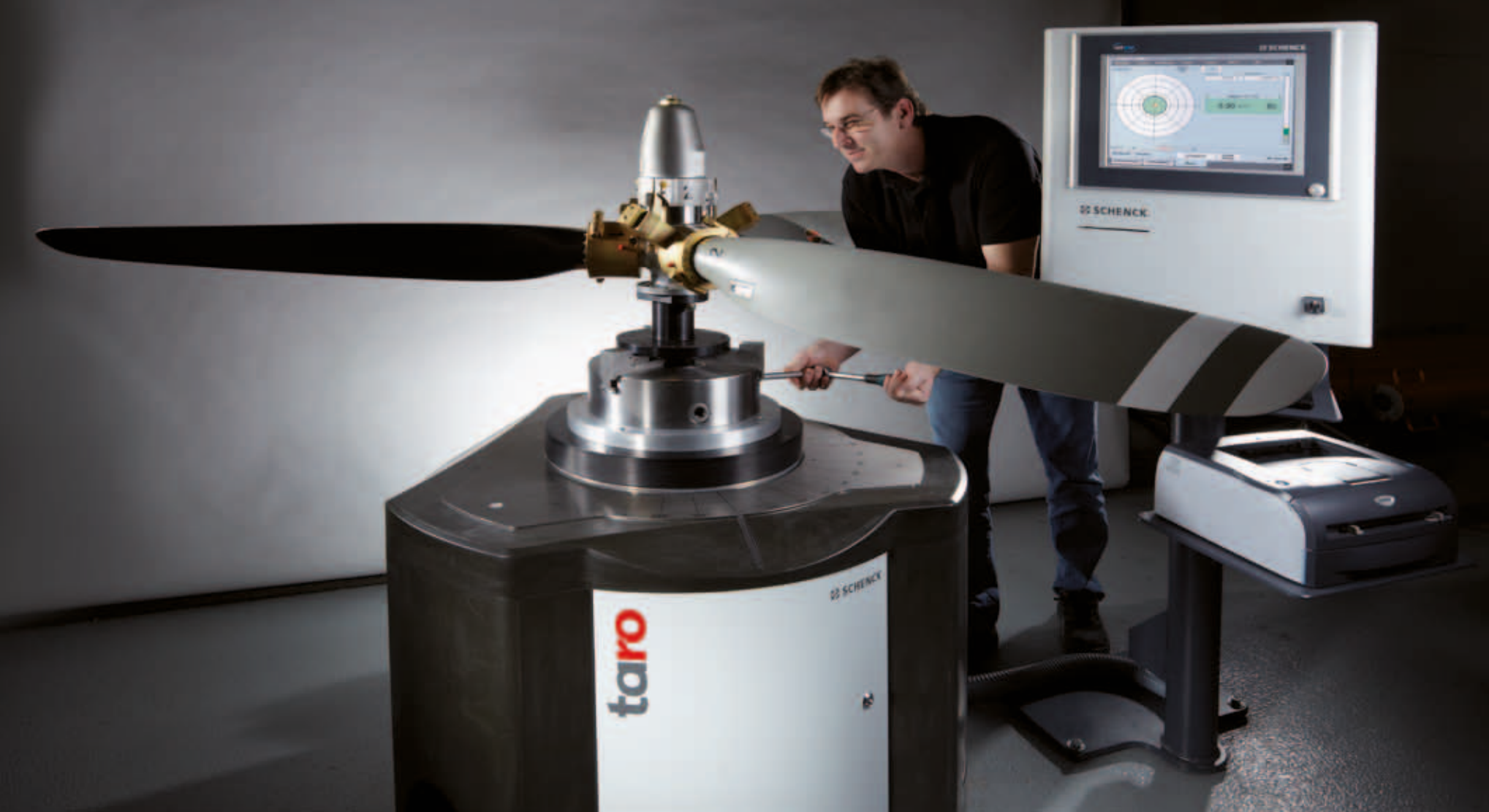
► ENERGY EFFICIENT AND LOW MAINTENANCE

A further advantage of our static balancing systems is the robustness and the resistance against shop influences and short-term overloading. They are trouble-free and reliable to an utmost degree.

As there is a minimal amount of moving parts, the systems are practically free of wear-and-tear ensuring low operating- and maintenance cost over a long period.

► ENERGY EFFICIENT

Due to their working principle static balancing systems are very economical. As rotors are not rotated for unbalance measurement, the energy required for the balancing process is a fraction of the energy consumed when balancing comparable rotors with traditional rotating balancing machines. Windage losses as in the case of propellers or fans do not exist at all.



▶ SAFE AND SPACE SAVING

Due to the static measuring principle without rotation there is no need for safety shrouds. Advantage: considerable cost reduction and space saving. A further advantage is the easy integration within semi- or fully automated balancing processes.

▶ FAST COMMISSIONING

None of our static balancing systems require a foundation – simply set up the machine, fasten the bolts and connect power – the machine is ready to balance.

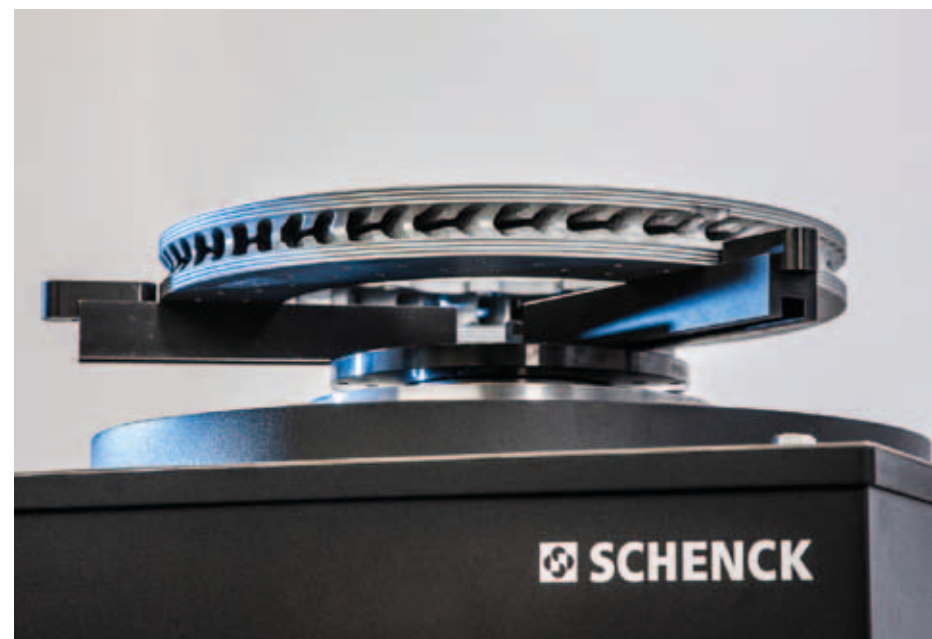
▶ SIMPLE TOOLING

As no torque transmission is required, fitting of the rotors on the static balancing system can be carried out with a simple and cost-effective tooling. The measuring instrumentation CAB920 offers the possibility for fast compensation of errors caused by fitting procedure.

▶ LOW OPERATING COSTS

The measuring principle with three measuring sensors now allows also with static balancing machines a real, permanent calibration. This enables an immediate availability of the balancing machine without the need for time consuming tasks of calibration and taring.

Changing the rotor types is now quick and does not require any calibration of the measuring unit.



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▶ PERFECT MEASURING TECHNIQUE CAB920static

Our static balancing systems are equipped with our high-end measuring instrumentation CAB920, especially laid out for static balancing. It offers an intelligible operating philosophy and utmost precision during unbalance determination.

Many comfortable features facilitate working with the measuring unit, e.g. the unbalance and the description of required correction are clearly displayed in a vectorial and numerical mode; calculation of tolerance according to DIN ISO 21940-11.

CAB 920static Safe and quick results



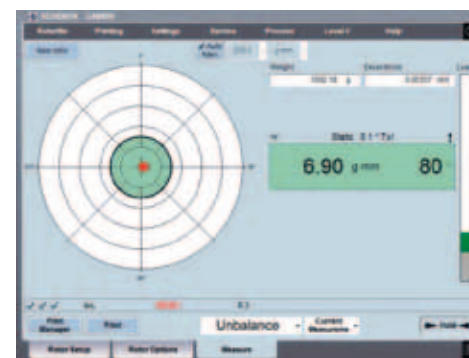
SIMPLEST OPERATION AND NAVIGATION

The fast and clearly laid out input of rotor data is supported by the intuitive operational concept.



SAFE AND SIMPLE PROCESSES INTELLIGIBLE FOR STARTERS AND PROFESSIONALS

Also standard procedures, as for instance: index compensation of the clamping tool are user guided. Working with the machine becomes a child's play.

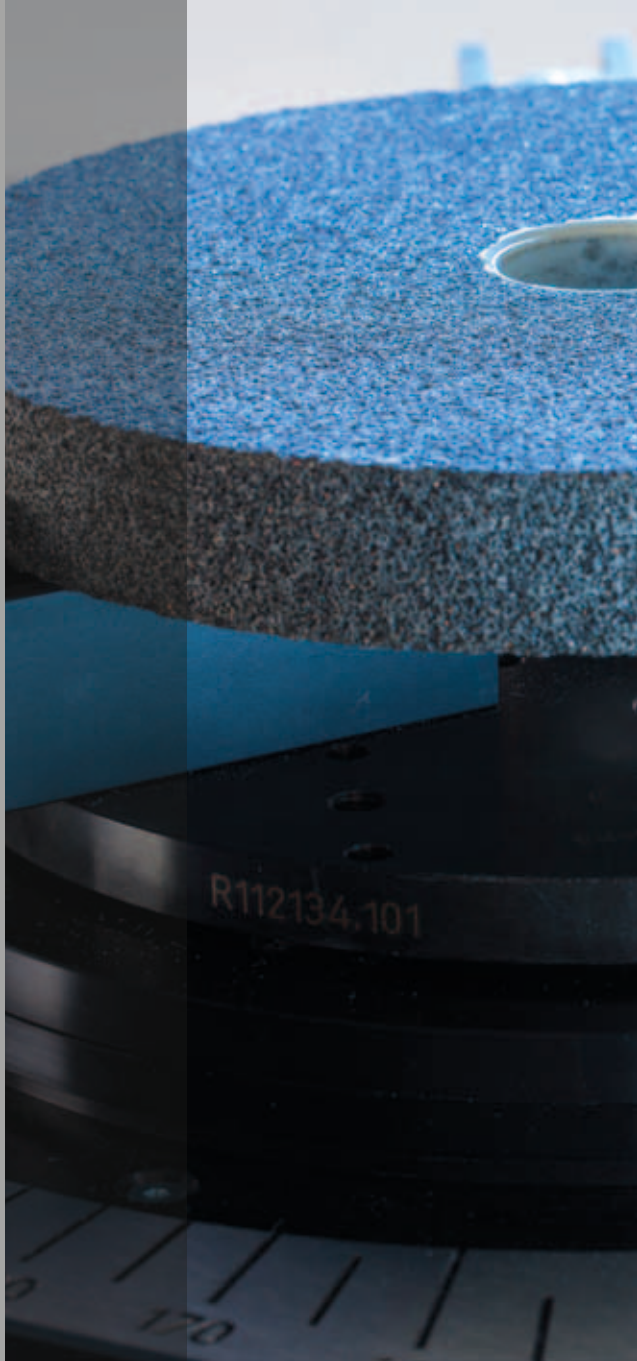


BALANCING – QUICK AND SIMPLE

Measuring results are clearly displayed and easy to understand. A big variety of software options enables shortest balancing procedures.

MACHINE TYPE		ESA	ESB	ESC	ESD	ESE	ESF	TARO 600	TARO 1600	TARO 3600
Capacity of measuring unit, max.	kg	1	3	6	20	60	200	600	1600	3600
Measuring uncertainty	gmm	0,5	3	5	12	25	50	600	800	1200
Measuring time	sek	2 ... 5						3 ... 7	5 ... 12	10 ... 15
Operating voltage, normal		100-240V / 50-60Hz								

- ▶ **SAFE AND SPACE SAVING**
- ▶ **FAST COMMISSIONING**
- ▶ **SIMPLE TOOLING**
- ▶ **LOW OPERATING COSTS**
- ▶ **ENERGY EFFICIENT AND LOW MAINTENANCE**
- ▶ **ENERGY EFFICIENT**
- ▶ **PERFECT MEASURING TECHNIQUE**
CAB920^{static}



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