

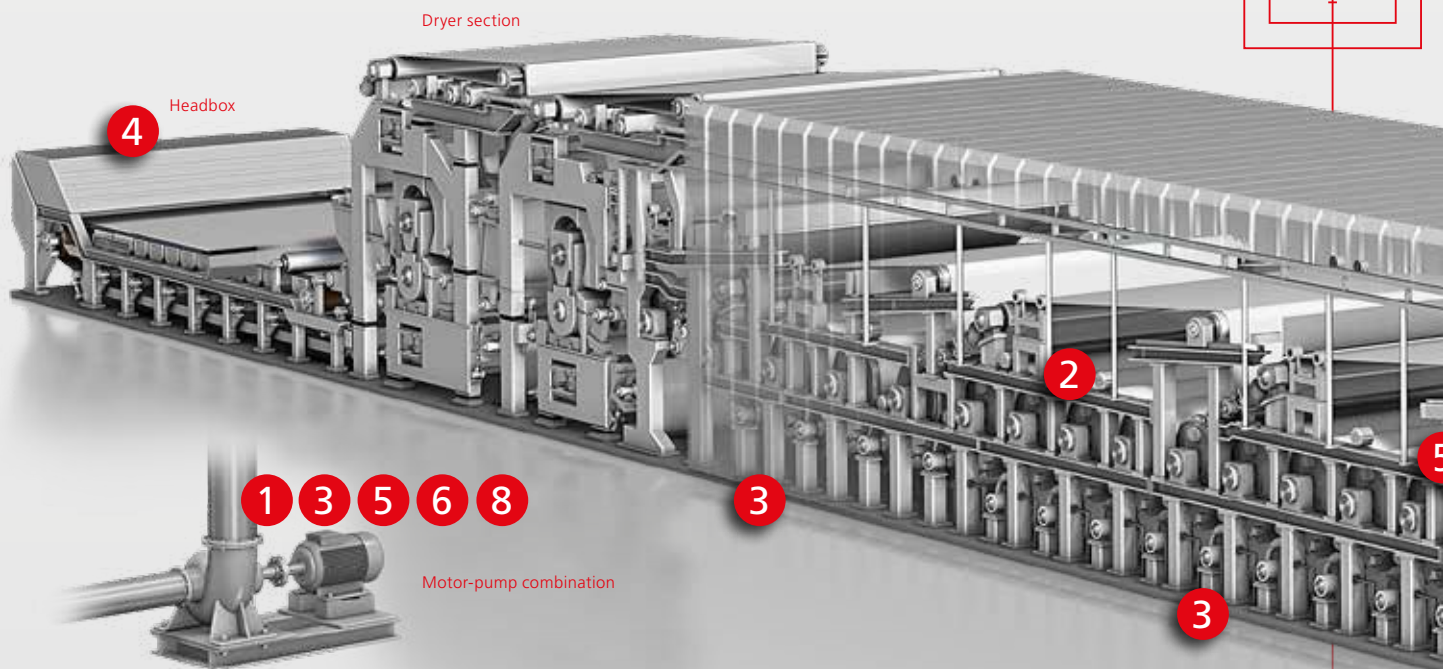
Rolling smoothly

Our solutions for the paper industry



- Alignment of drives and rollers
- Measurement of system geometries
- Recording of machine and foundation displacement
- Vibration analyses

Our measurement systems and services



- 1** Laser-optical alignment of couplings, cardan shafts and spindles

World premiere: Now you can align cardan shafts fast - even when they are coupled in.

Properly aligned cardan shafts prevent the occurrence of vibration and speed fluctuations in the production process. Aligned couplings and rotary axes prevent premature wear in bearings and pump gaskets and reduce maintenance costs.

The powerful and easy-to-operate laser-optical alignment systems from PRÜFTECHNIK, e.g. OPTALIGN® smart RS or the ROTALIGN® Ultra iS multi-application platform, make for fast and efficient shaft alignment.

- 2** Fast and precise roller alignment

Well-balanced shafts are the prerequisite for high quality, shorter set-up times, fewer rejects and a reduction in paper breaks in the paper-making industry. Moreover, they minimize scheduled downtimes and prevent non-scheduled downtimes.

High-precision, rapid measurement of roller parallelism, even without visual contact between the rollers, is possible only with the patented PARALIGN® process from PRÜFTECHNIK.

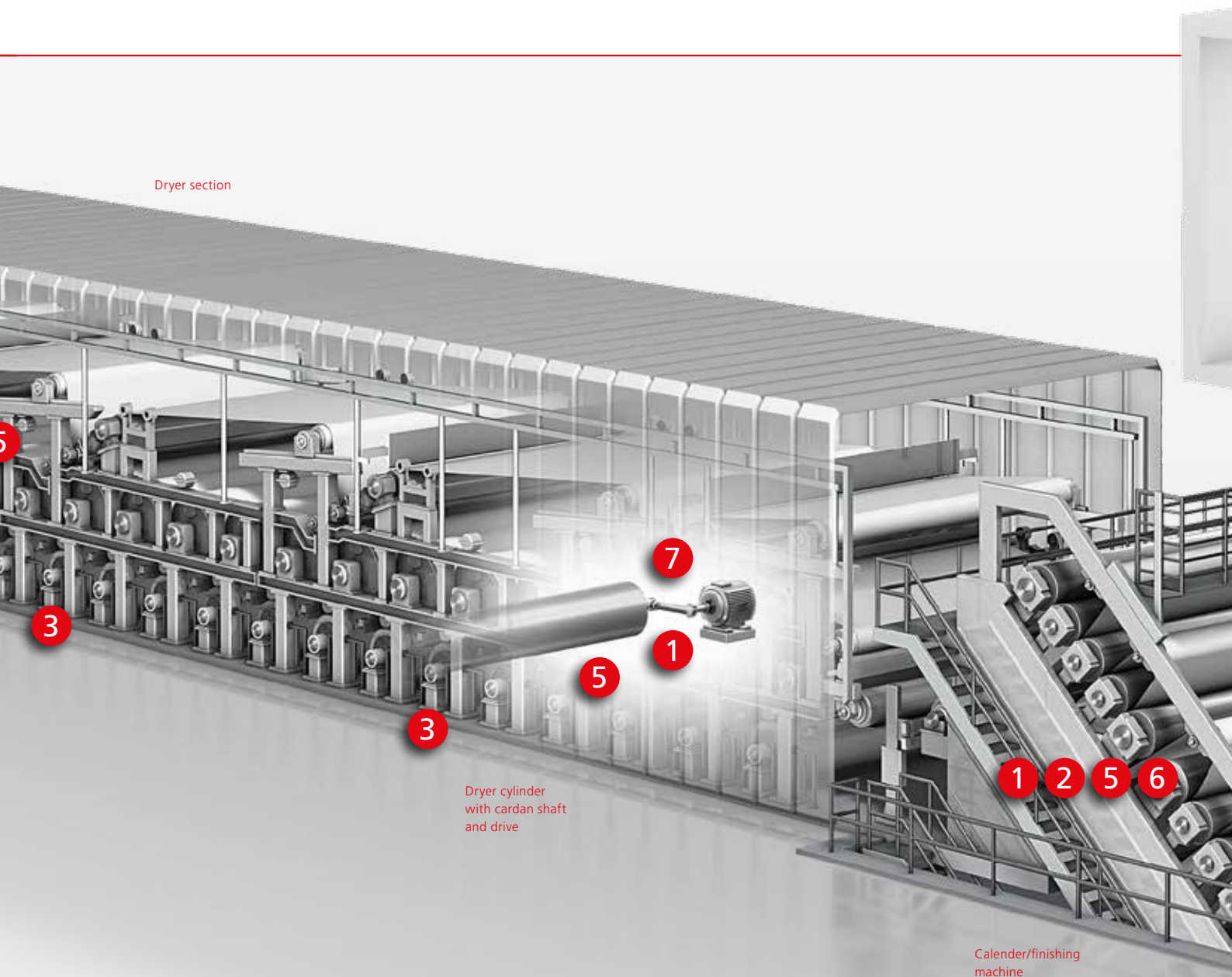
- 3** Monitoring of machine and foundation displacement

PRÜFTECHNIK offers numerous solutions for monitoring machine and foundation displacements, e.g. due to thermal expansion in hot pumps or cylinders: From temporarily attached laser-optical systems like ROTALIGN® Ultra iS Live Trend to permanently installed monitoring systems such as PERMALIGN® or HYDRALIGN®, which can forward status changes directly to the control centre.

- 4** High-precision laser-optical measurement of flatness and straightness

The LEVALIGN® Ultra, LEVALIGN® Expert and INCLINEO® measuring equipment developed by PRÜFTECHNIK provides fast and simple, yet high-precision measurement of flatness, (e.g. of the suction box) and linearity (e.g. at the lip of the headbox). Logging takes place automatically during measurement.

The powerful ALIGNMENT CENTER PC software supports measurement and archiving of the measurement results.



Dryer section

Dryer cylinder
with cardan shaft
and drive

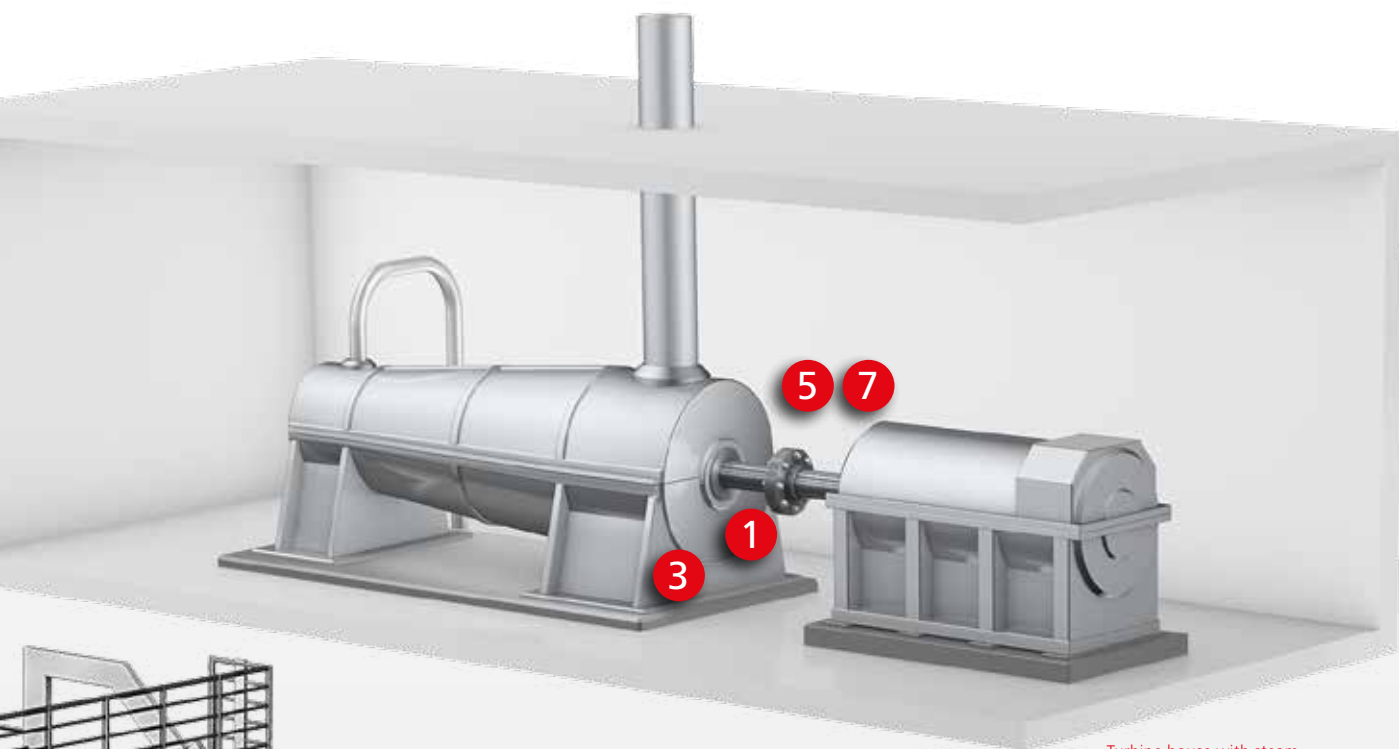
Calender/finishing
machine

5 Online vibration and roller bearing monitoring

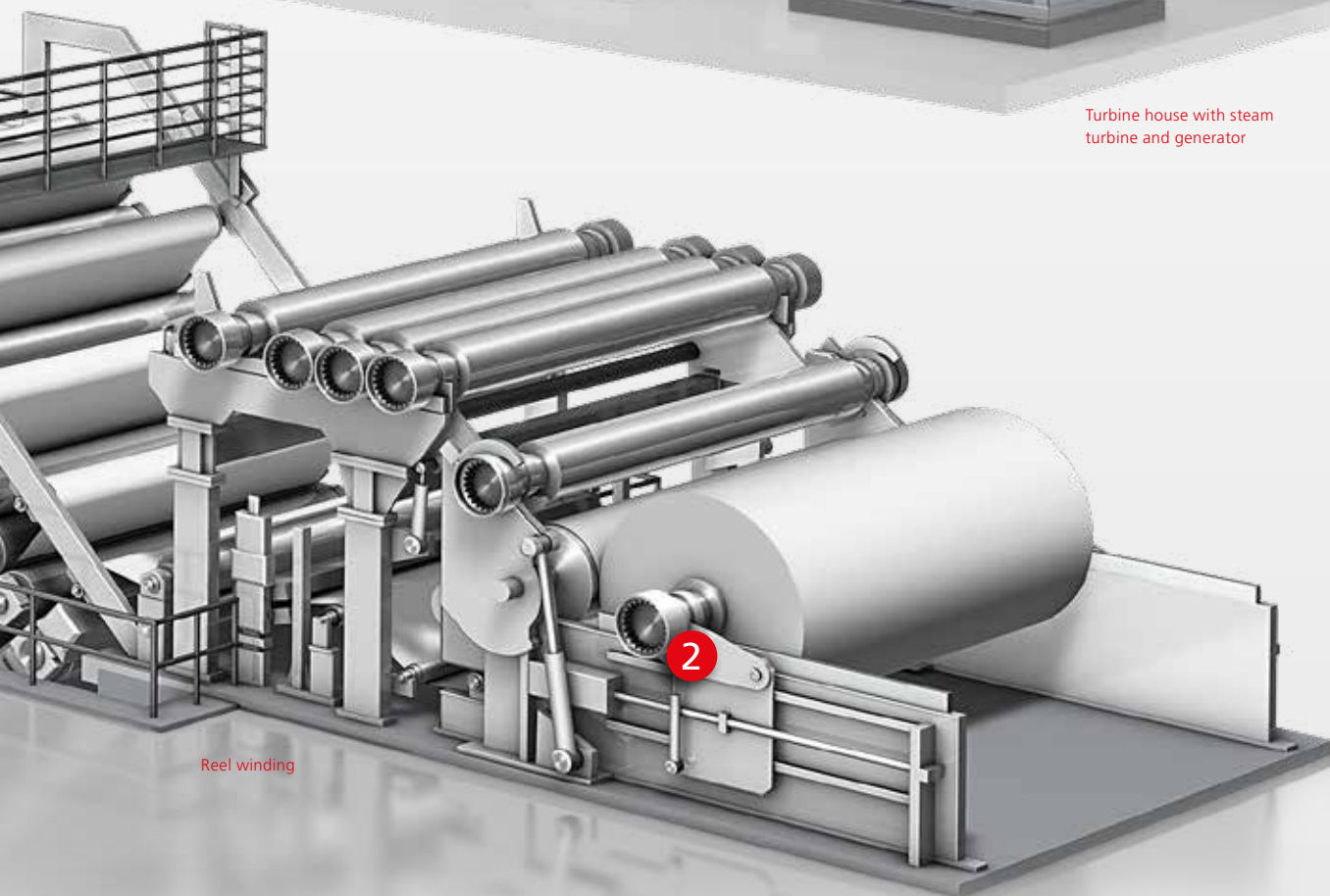
High availability is one of the most important goals of a plant operator in the paper industry. PRÜFTECHNIK can offer you the right solution for your application from its wide range of Online Condition Monitoring Systems: From a simple, low-cost multiplexer system for condition monitoring in paper machine auxiliary equipment, through to high-performance systems with synchronous recording of measured data for monitoring complex, dynamic machines.

6 Condition monitoring with mobile data mining

Mobile measuring devices provide an alternative to online monitoring. The status of your plant is recorded using a mobile data collector in regular measurements carried out during inspections. Depending on the requirements, data collection can take the form of the VIBROTIP® (for a simple measurement of key indicators) or the VIBSCANNER® with frequency analysis function, on to the high-performance VIBXPERT® II vibration analyser. Measurements are really easy, with our patented, automatic measurement point identification system VIBCODE®, for example.



Turbine house with steam turbine and generator



Reel winding

7 Troubleshooting

If increased vibration occurs only at particular speeds or in certain operating conditions, vibration analyses and torque measurements are required. Our Service and Diagnostics Center can offer exactly the right service for such special cases.

To analyse particularly difficult cases, we adopt temporary tele-diagnostic methods and install an online CMS for a couple of days or weeks.

8 Online balancing of auxiliary equipment

Properly aligned rotors are the basis for a long service life of your auxiliary equipment. Balancing the rotors reduces machine vibration considerably.

With the tried-and-tested VIBXPRT® II Balancer, detection and correction of unbalance on ventilators or pumps, for example, becomes child's play. If you require greater diagnostic power, all you need is a password to turn the VIBXPRT® II Balancer into the multiple award-winner VIBXPRT® II data collector and signal analyser.

PRÜFTECHNIK and the paper machine

an excellent combination

There is hardly another industry in which cost pressure applies just as much as it does in the paper industry. The enormous sums invested in this extremely competitive market must pay off.

One crucial determining factor for the economic viability of a paper plant is production. High plant availability, reduced scheduled and non-scheduled downtimes and shorter set-up times are vital factors when it comes to keeping on-going production costs low.

The product must be of high quality with few rejects produced, and downtimes due to paper break or premature wear in sieves and filters must be avoided as much as possible.

The PRÜFTECHNIK Group is an essential and reliable partner for paper manufacturers and processors. Its tailored solutions for vibration measurement and analysis, machine alignment and geometric plant alignment provide production and maintenance tools to increase the efficiency, enhance the quality of the product and cut costs.

The services of the PRÜFTECHNIK Group are scalable to the requirements of the paper industry: By providing innovative measuring systems directly from the manufacturer, leased equipment and full-service solutions from experienced and qualified personnel, PRÜFTECHNIK supports paper manufacturers in all production and maintenance scenarios.



PRÜFTECHNIK

proven technology for all industries

With our products, processes and services for alignment applications, condition monitoring and availability optimization, we help ensure that your machines run smoothly and generate an output of consistently high quality. This also includes systems for automatic process control and quality assurance that are integrated directly in your production process.

PRÜFTECHNIK consists of the following business areas



Alignment Systems

Laser measurement systems and services for optimum alignment of machines and systems.



Condition Monitoring

Vibration measurement systems for machine condition monitoring – including services such as machinery fault diagnosis.



Nondestructive Testing

Systems and services for quality assurance and process control in production.



Service & Support

We offer professional services anywhere in the world to support our customers with alignment and condition monitoring.



Known Consignor in
air cargo transport with
LBA registration
no. DE/
KC/00802-01/0218 +
DE/KC/00802-02/0218

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