



Maintenance · Repair · Optimization

Tailored service solutions for the paper industry

# Your machine in the best possible hands

PANZER Engineering provides tailored service packages for the papermaking industry and manufacturing companies. With customized services, broad expertise and many years of experience, the aim is to improve your business performance and make you more productive.

Through our measurement and analysis services we provide you with a clearly structured, readily understandable database to help you identify weakness and potential improvements, streamline maintenance processes and increase your safety and productivity. Yet in the end, the best solutions are invariably achieved through direct contact with a minimum of red tape. The outcome: highly customized solutions, fine tuned to each customer's individual wishes and needs.

It's nice to meet you

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Jürgen Panzer, Owner Master Professional of Technical Management, State Certified Engineer, Safety Inspector Level II L







## we are experienced consultants and guides

The huge number of projects and encounters in different countries and cultures has given us a comprehensive insight into the papermaking industry – with the emphasis on paper, board and tissue machines.

Our experience: When problems arise, fast and uncomplicated solutions are required. We are experienced consultants and guides and provide reliable assistance in all production-related questions and problems – from analysis to detailed reporting - transparently and on time.

### PANZER Support

#### Our services

- Production startup support after grinding, metallization or conversion
- > Analysis of adhesion and surface problems
- > Analysis of temperature and edge problems
- > Recommendation of grinding and metallization intervals
- > Detailed reports including recommendations

## Services at a glance

## PANZER Safety

Inspection programs for detecting non-conformities with regard to safety and performance before it gets too late.

#### External cylinder testing

- > Ultrasonic testing of bolts in flange and core areas
- > Magnetic testing of flange and manhole faces
- > Head tilt testing of flange faces
- > Run-out testing according to TAPPI
- > Visual check of external cylinder components and surfaces

#### Internal cylinder testing

- Spigot fit testing of flange connections
- > Soda straw blockage and clearance checks
- > Visual check of internal cylinder components
- > Visual check of condensate system (welds, bolts, general system condition)
- > Visual check of balancing weights
- > Visual check of internal condition of cylinder components and surfaces

#### Customized inspection programs

- > Based on customer-specific insurance requirements
- > Established annually or at extended intervals
- > Detailed reports including recommendations

### PANZER Maintenance

Repair and maintenance as preventive protection and to preserve the value of your machine.

- > Spot repair of surface damage
- > Maintenance and repair of condensate systems
- > Maintenance and repair of doctor systems
- > Machining of rope grooves, remachining and fitting of new rope grooves
- > Machining of journals and adjustment of new drive systems
- > Repair of bearing seats
- Repair of leaks at bolts or on sealing surfaces
- > Replacement of head bolts on Yankee cylinders
- > Edge repairs and metallization
- > Levelling out, adjustment and emerizing of surfaces
- > Detailed reports including recommendations





## PANZER Balancing

We use special, highly sensitive measurement technology to achieve optimal precision and roll balancing.

Dynamic balancing in accordance with DIN ISO 1940-1

- > Yankee cylinders
- > MG cylinders
- > Drying cylinders
- > Fans, rotors and propellers, rolls, turbines and shafts
- > Removal of old balancing weights and expert mounting of new weights
- Detailed reports including recommendations

In addition to cylinders and rotors for paper manufacturers, we also balance hydroelectric turbines, for example, as well as rolls and shafts for many different purposes. Contact us for more information – we'll be happy to advise you.

## **PANZER** Inspection

Inspection and analysis of surfaces as well as contour measurements on Yankee or MG cylinders, Pope reels, rewinders and drying cylinders.

- > Roughness measurements
- > Microscope images
- > Profile measurements
- > Wall and coating thickness measurements
- > Traction measurements
- > Thermography
- Analysis of results and recommendations for maintenance and optimization
- > Detailed reports including recommendations

After analysing the inspection results, we can optimize the grinding, metallization and maintenance intervals and tailor them to your individual requirements.

## Partners to the paper industry



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