Tailor-made premium solutions



# Roll technology

# Functional rolls - made by MWN





- Suction roll shells
- Press rolls
- Rolls made with composites
- Spreader rolls
- Reel spools
- Guide rolls
- Granite rolls

- Making us one of the most able partners to industry for
- over 100 years:
- Paper industry
- Cardboard industry
- Pulp industry
- Films industry







#### The benefits to you

Everything we make is designed and manufactured exactly according to your individual requirements. We're also totally adaptable to your needs. So for every conceivable in-line permutation, we come up with a solution that is perfectly matched to your situation – without compromise.

Premium quality – the hall-mark of German technology: ideal for high-end requirements, totally dependable, strong and made to last. Our solutions help safeguard the reliability of your production processes. After all, everything should run like clockwork.

The service and support you deserve: fast and uncomplicated – across the board. Whether it's testing, service and maintenance, balancing, grinding, making precise modifications or completely overhauling the system, with our experience and expertise, you're in safe hands. We also offer maintenance packages to keep things running smoothly.

# Our speciality:

## Suction rolls and suction roll shells

Customised precisely to match your individual engineering requirements. Your suction roll shells are specially produced out of premium stainless steel with gun-drilled holes in triedand-tested MWN quality. Our suction rolls can be used individually, offering highly effective dewatering performance on all kinds of paper machines - ideal for raising the dry content of paper sheets and improving material strength.











### We provide you with

- Suction breast rolls
- Forming rolls
- Suction couch rolls
- Pick-up suction rolls
- Central suction rolls
- Felt suction rolls
- Suction press rolls
- Pocket ventilation rolls
- Transport suction rolls (for film adjustment)

#### Sizes:

- diameters up to 2200 mm
- face length up to 12000 mm
- speeds up to 2200 rpm



# Spreader rolls, press rolls, CFRP rolls and more ...



#### **Spreader rolls**

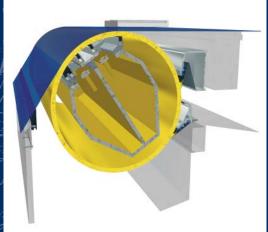
- Steel rolls
- Stainless steel rolls
- Rubber cover rolls

Available with fixed or variable bow, for wet or dry applications.

#### **Special functional CFRP rolls**

- Backing rolls
- Breast rolls
- Guide rolls

Carbon-fibre materials and laminates are carefully finetuned to match requirements.







### Modular water management

Smart solutions, inside and outside suction rolls.

Doctoring systems - for dewatering and cleaning suction roll surfaces.

Water collectors - for carefully removing water and preventing rewetting.

Cleaning shower - on the inside or the outside, fixed or oscillating, ensuring uninterrupted operation.

#### Surface design

MWN offers tailor-made solutions for suction press shells and functional rolls. Our flex groove system (patent pending) opens the door to new possibilities and can be used on all kinds of materials - metal, rubber or polyurethane. Our experience could make a huge difference to your business.

#### **Materials**

MWN draws on the very latest material developments.

Glass-fibre reinforced plastics

- for sealing strips.

Carbon-fibre reinforced plastics - for rolls used under extreme conditions.

Surface coating - corrosion and wear-resistant, made of polymer materials, with or without tungsten carbide, for suction press shells and functional rolls.

## Roll on the service

Our portfolio of services and made-to-measure roll maintenance contracts ensure you benefit from quick turnarounds, specialist servicing and professional reengineering – for all types of rolls and shells. Depending on your

requirements, we can provide essential maintenance, upgrades, grinding, coating, assembly supervision, staff training plus a variety of other specialist services. Our priority: support whenever you need it.









#### Dynamic balancing

Balancing of assembled rolls, with no additional costs incurred by dismantling the roll or shaft; ultimate precision and optimal balancing thanks to special ultra-sensitive measuring technology; computerised balancing; dynamic balancing in 3 planes; easyto-understand documentation of the balancing process; pinpointing of residual imbalance and balancing grade (in line with ISO 1940); definition of operating speed (critical/near-critical).

#### Grinding

For us, finishing rolls to perfection is a given. We grind all kinds of functional rolls using an integrated roll inspection system. Concentricity and form deviation are registered automatically, before and after grinding.

#### Sizes:

- diameters up to 2000 mm
- face length up to 12000 mm
- weight max. 50 tonnes



# The company

MWN has always specialised in producing innovative rolls, ever since its foundation in 1909. Today, we consider the engineering and production of suction rolls and suction roll shells one of our core competencies. We're an international company doing business

We would be delighted to send you a detailed list of reference customers. What always matters most to us is delivering precisely the solution you need, so we work closely with you to ensure everything we develop, design and deliver is a precise match with



wherever paper is needed. We count among our many customers leading paper factories throughout the world. your requirements. Our customised component development is based on state-of-theart 3D CAD design technology.





array of modern engineering

facilities to provide you with

the solution you require.







... over 100 years of expertise

... over 100 years of expertise

MWN Niefern

Maschinenfabrik GmbH

Bahnhofstraße 51-53

75223 Niefern - Öschelbronn

Germany

Phone: +49 (0) 72 33/75 - 0

Fax: +49 (0) 72 33/75-11

Email: info@mwn-niefern.de

Internet: www.mwn-niefern.de

