

PAPER CAN'T WAIT

APPLICATION DETAILS

- Conveying product: coater
- Operation temperature: 45-55 °C

KEY SPECIFICATIONS

- Two-stage design to ensure longer lifetime of the rotor and stator
- Low pump speed to handle the high abrasive medium
- Stainless steel material to avoid corrosion residues on the high quality paper

BACKGROUND

One of the world's leading international paper groups produces magazine paper, newsprint, art paper, special paper, and self-adhesive label materials as their core products. The company can look back on more than 100 years of history and expertise in paper production.



Unobstructed pump operation is key in the paper industry.

TASK AND TARGET

The company was faced with a challenging problem regarding its pumps that conveyed coater as they caused clearly visible and unwanted particles on the final products. The detrimental marks on the art paper were not acceptable. Additionally, the lifetime of the stators was quite low which resulted in frequent downtimes for maintenance activities. SEEPEX was contacted for help.

SEEPEX's task was to find a solution that guarantees a trouble-free pump operation to ensure a stable and high quality of paper production, including high part durability of components to avoid unnecessary downtimes.

STAINLESS STEEL AND PRECISE TECHNOLOGY

COST SAVINGS

ECONOMICAL INVESTMENT COSTS

DECREASED SPARE PARTS COSTS

SEEPLEX PRODUCTS

- Pump type N, pump range BN
- Capacity: up to 90 m³/h per pump
- Operation pressure: 5 bar
- Solid content: max. 60%
- Operation temperature: 45-55 °C

SOLUTION

SEEPLEX experts identified the abrasive wear of stators and rusty carbon steel casings as the causal factors for the marks on the paper and provided a two-stage pump solution with a controlled pump speed in the pump range BN. BN pumps have a modern, compact, low-cost and user-friendly design.

The pump solution includes components with high part durability and superior performance thanks to precise engineering. A stainless steel pump casing and a stainless steel rotor with ductile chromium coating were key factors in avoiding marks on the final product, which was previously based on the abrasive wear of stators and rusty carbon steel casings.



Operating hours of a paper machine average at 8.300 hours per year.

Furthermore, a dry-running protection device (TSE) was added. It is an ideal accessory for longer stator lifetime as it monitors the temperature of the stator during operation and protects it from premature wear by switching off the pump when the limit is reached.



Worldwide paper and cardboard production exceeds 415 million tons a year.

MINIMAL MAINTENANCE

The installation of SEEPEX pumps, including components adapted to the customer's production process, solved the on-site problems and work extremely reliable. Downtime for maintenance activities was successfully reduced to a minimum.



SEEPEX pumps increase energy efficiency and offer quick and easy maintenance.

“Simple structure, friendly maintenance, high reliability. Our pumps guarantee the perfect paper quality.”, summarises Sean Yang
Sales Support Manager, Pump Applications, SEEPEX PUMPS SHANGHAI