

# Engineered pulp drying services

Improved productivity and reliability



# The challenge: Elimination of bottlenecks while drying line

## The solution: **Mechanical and process improvements**

**ANDRITZ has gained extensive knowledge and experience in supplying equipment, processes and complete lines to the pulp industry worldwide. Put this expertise to work in your mill. The ANDRITZ experts can help you to pinpoint the best improvements to enhance equipment availability and performance.**

ANDRITZ experts are highly skilled in channeling process, technology, operations, and maintenance knowledge into service products for your existing pulp drying line.

### Wide range of service products

#### Mill and energy improvement studies

ANDRITZ mill and energy improvement studies identify areas for process and product improvements by locating bottlenecks and weak links in the value chain, and identifying energy-saving potentials. Such improvement studies can be conducted for single machines, up to mill-wide operation.

#### Upgrades and modernizations

The ANDRITZ upgrades and modernization program is designed to bring existing equipment, independent of original supplier, into line with modern technology. The focus of each upgrade product is to improve quality, productivity, energy consumption and/or reliability of the machine and the equipment in its environment. Sometimes a simple upgrade can have a major impact on the entire process.

#### Spare and wear parts

ANDRITZ offers a complete range of spare and wear parts. ANDRITZ also offers special agreements (e.g. consignment stock contracts) for spare part handling and inventory of critical parts, such as gear boxes or auxiliary equipment.

#### Field service

ANDRITZ field service includes special training programs for operators or maintenance staff, process adjustments and optimizations, shutdown services, inspections, preventive and corrective maintenance.

## Benefits

- Reduced operating and maintenance costs
- Higher equipment and process reliability
- Elimination of bottlenecks
- Increased production efficiency



# increasing the profitability of the entire pulp

## Process and mechanical improvements

To meet the challenges of pulp producers head on, ANDRITZ offers a huge variety of modernization products. Our products are designed to provide solutions in a cost-effective manner. Some examples of world-class service products for pulp drying lines are listed below.

### Wet-end systems (including Fourdrinier machines, Twin Wire Presses and Formers, and press section)



**Dilution cross profiler**, adjustable during operation, provides even pulp distribution in the headbox.

**Wire regulating unit**, with simple, rigid design, results in extremely accurate and trouble-free wire regulating.

**Bearing protection package**, designed to avoid water splashing onto the bearing, eliminates the risk of water and conden-

sate entry. The special **add-on grease pot** gives the maintenance staff an easy means of inspecting the grease and bearing condition. This enables them to prevent unplanned bearing breakages.

### Pulp sheet dryer (including former Fläkt dryer)



**Improved threading tape** made from heat-resistant and moisture-proof Aramid fiber. It provides a low stretch factor and extended lifetime.

**RLEG heat exchanger** takes hot humid air from the drying process and uses this to heat process water, resulting in an energy-efficient process.

**New circulation air fan**, with a new FC-type impeller featuring an adjustable pitch

angle, results in increased production capacity.

**Broke removal solutions**, such as an internal broke nip combined with tailor-made hand tools, enables quick and simple broke removal - and reduces downtime significantly if there is a web break. The solutions further enhance occupational health and safety.

### Cutter/layboy and baling lines (including LAMB equipment)



#### Cutter/layboy

**Slitter and cross-cutter knife** with the new hard-facing technology provides higher wear resistance and better cutting quality.

**Modification of LAMB cutter (finger and lift table)** to hydraulic design gives failsafe and maintenance-free operation.

**Post-edge trim** adjusts oversized final sheet width and eliminates subsequent problems in the baling line.

**Top tape upgrade** corrects undesirable sheet flutter and stabilizes production. Production speed can be increased.

#### Baling line – including modification of former LAMB equipment

**Improved hydraulic system at the bale press** leads to a much shorter press cycle and increases production capacity.

**Rebuild of Duowrap** provides a a faster and more accurate system. Accurate wrapper feed ensures trouble-free operation and improves packaging quality.

**Upgrade of endfold unit** has a positive effect on the subsequent bale handling sequence and storage stacking.

**Improvements** for chain conveyors, bale tracking systems, limit switches, etc., decrease maintenance costs and unplanned shutdowns.

# Engineered service solutions

## ...more value-added service products



### OPE life cycle management maintenance concepts

In close co-operation with our customers, ANDRITZ maximizes process reliability and overall production efficiency by providing value-added services and innovative products cost-effectively.

- From single equipment service up to mill wide maintenance outsourcing agreements
- Always in close cooperation with the mill operation and maintenance experts
- Mutual agreement to develop overall production efficiency of the mill with optimized costs

### Hydraulic and lubrication systems

have a direct influence on the overall equipment efficiency. Furthermore, monitoring of oil circuits provides an additional tool for protective maintenance.

#### ANDRITZ offers:

- Monitoring – sensors, analyses
- Corrective systems – engineering, valves, etc., for hydraulic and lube systems with the complete knowhow available, including machine and process engineering, to deliver a solution with optimized valves.
- Optimizations - full process optimization

### Consumables and commodities

The value-added services optimize purchasing and stock-keeping costs, such as preventive maintenance and reduction of stock items, by standardizing, using alternative suppliers (global sourcing) for goods such as bearings, seals, pneumatic and hydraulic components, oil lubricants, oil filters, and filter elements.

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