

MECHANICAL ROLL SERVICE

Strategic outsourcing for long-term mill success

ANDRITZ

Transforming industry challenges into competitive edge

The global pulp and paper industry faces a critical shortage of skilled labor as veteran engineers and machinists retire. This loss of expertise, combined with a lack of new trade workers, has created significant operational risks and rising maintenance costs for mills.

Economic volatility and rapid technological shifts are further complicating how facilities manage production-critical assets like rolls. To remain competitive, mills must now navigate a perfect storm of labor shortages, financial pressures and regulatory complexity while operating with fewer in-house resources. Traditional maintenance models have become inefficient, posing a direct threat to a mill's long-term survival.

Stop managing maintenance, start driving performance

As the labor pool shrinks and process complexity grows, outsourcing has shifted from a convenience to a critical strategy for operational resilience. This model allows mills to convert fixed labor costs into flexible service capacity while ensuring production-critical assets receive a level of precision that overstretched in-house teams can no longer sustain. By offloading mechanical work, mill leaders can refocus their limited internal resources on core production and safety.

THE ANDRITZ ADVANTAGE

Leveraging deep OEM and mechanical expertise, ANDRITZ services thousands of rolls annually across our global service centers. We help mills navigate labor and economic shifts by providing the industry's most complete mechanical service capabilities.

Our veteran technicians – many of whom come from the mill floor themselves – combine local accessibility with global technical resources. Their deep empathy for the pressures of tight shutdown windows and resource constraints ensures a true partnership mindset focused on our customers' operational targets.



ANDRITZ is setting a new standard in roll lifecycle management

ANDRITZ provides a total lifecycle approach to roll assets, merging advanced engineering and OEM technologies with a truly complete suite of mechanical services.

Our capabilities include high-performance thermal spray coatings, crown-controlled seal upgrades, precision grinding and dynamic hot balancing. Every capability is designed to restore and enhance critical machine components.



END-TO-END SERVICING CAPABILITIES

Full-scale mechanical servicing ensures every roll returns to the production line with verified precision, beginning with rigorous inspections and diagnostic testing. These core services feature specialized journal and shaft repairs, precision balancing and grinding – all designed to eliminate mechanical variability and extend the operational life of every asset.



"We're hearing from paper producers that they're struggling to find the specialized labor required for complex roll maintenance. ANDRITZ fills that void with skilled technicians and proven processes that don't just fix the immediate issue but actually extend the life of critical paper machine assets."

– Matthew Manley

Mechanical Roll Service Manager
(16 years with ANDRITZ)

BENEFITS OF OUTSOURCING

- Access to highly skilled engineers, technicians and machinists
- State-of-the-art service centers with end-to-end roll servicing capabilities
- Consistent and proven processes across thousands of rolls serviced annually
- Precision testing and advanced machining to extend roll life for maximum machine uptime and performance
- Reduced lead times to streamline maintenance cycles and avoid production disruptions
- Seamless logistical support – from on-site roll removal, transport and servicing to reinstallation and start-up
- Shared accountability to reduce mill risk and improve audit readiness

COMPREHENSIVE ROLLS SERVICING

- Visual, dimensional and runout inspections
- Non-destructive testing
- Diagnostics and root cause analysis
- Functional testing under operating conditions
- Complete roll disassembly, inspection, rebuild
- Journal, shaft and bearing seat repair or replacement
- Bearing replacement and precision mounting
- Seal system inspection, repair, upgrades
- Replacement of worn internal components
- Surface profile correction and crown optimization
- Static and dynamic balancing
- Repair and upgrade of swimming rolls and hydraulic crown-controlled rolls
- Bore machining and honing
- Cooling circuit maintenance and replacement
- Design improvements for crown-controlled rolls, suction and calender rolls
- System upgrades (e.g. SMART, sealing, showers)
- Factory testing before return to service
- On-site field services

Your single source for all types of roll maintenance

COMPREHENSIVE PRESS ROLL REPAIRS

Operating from 24 global facilities, ANDRITZ services plain, suction and variable crown hydraulic rolls. Our technicians will disassemble, clean components and check all fits for size, concentricity and condition. An inspection report comparing measured tolerances to OEM specifications is always provided.

COMPLETE SUCTION ROLL RESTORATION

Our full restoration process combines major mechanical repair with non-destructive testing of the shell, heads and journals. We rebuild suction boxes, optimize seal strips and showers, and perform high-speed balancing to reduce vacuum loss and vibration. Appropriate metal parts are sandblasted, primed and epoxy coated before final assembly with stainless-steel fasteners. The result is a roll restored to OEM standards for better sheet dryness and less unplanned downtime. For major overhauls, we provide replacement shells or fully engineered new rolls.



"There's a lot more to working on these rolls than meets the eye. We have tremendous competency and experience, and we're training the younger generation to make sure they have the skills."

— Nathan Myers

Machinist
(10 years with ANDRITZ)

DYNAMIC SERVICING OF HYDRAULIC ROLLS

Designed for crown-controlled rolls under high heat and pressure, this service helps maintain roll integrity in demanding conditions. Testing is performed with hydraulic pressure, along with hot balancing at operating temperature. We also apply HVOF thermal spray coatings to resist wear and thermal cracking. These services help prevent unplanned reliability events and extend roll run time.

WORLD-CLASS SPREADER ROLL REBUILDS

ANDRITZ repairs and upgrades fixed and adjustable bowed spreader rolls from virtually any brand, rebuilding your rolls better than the original. We service metric and imperial designs up to 10 meters (394 inches) in length and 38 to 380 mm (1.5 to 15 inches) in diameter for wet, dry or high-temperature applications. Technicians optimize lubrication systems, convert legacy designs and restore axles to precise bow configurations. These technical rebuilds guarantee precise web spreading, web widening and slit separation.

EXPERT ON-SITE FIELD SERVICES

Our field engineering teams deliver rapid troubleshooting, predictive maintenance and specialized on-site repairs directly to paper mills globally. While complex overhauls are routed to our advanced service centers, our mobile teams resolve essential mechanical and control issues right on the mill floor whenever feasible. This strategic combination minimizes your logistics delays, shortens turnaround targets and protects your production uptime.



SERVICING ALL TYPES OF ROLLS

- Forming section rolls (forming, couch, wire/guide, table)
- Press section rolls (press, suction press, crown-controlled, shoe press)
- Dryer section rolls (guide, vacuum)
- Film, size-press and coater rolls (sizer, coater applicator, metering)
- Calender rolls (soft and hard, thermo, multi-nip)
- Reel/winder section rolls (reel drums, winder drums, guide)
- Spreader rolls for all machine positions

ANDRITZ delivers with expert OEM reliability

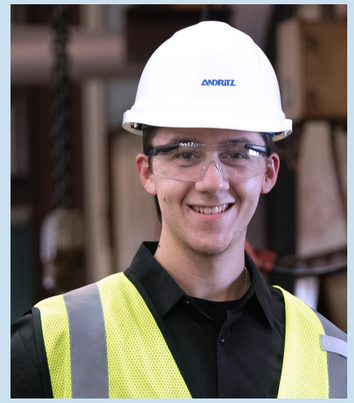
The global paper industry is at a critical juncture, facing immense pressure from a vanishing skilled workforce and unpredictable economic shifts. Operating with a self-performance maintenance model is no longer efficient or sustainable. More than ever, mills are moving to strategic outsourcing for guaranteed, expert reliability.



ANDRITZ's integrated machine and roll service loop combines advanced OEM engineering capabilities, robust service centers and 24/7 on-site field support.

With the volume of rolls we service comes vast expertise that our customers can leverage. Servicing hundreds of rolls every month means our crews have encountered, diagnosed and repaired virtually every issue imaginable – experience that far surpasses the capacity of today's mill-based teams.

Partnering with ANDRITZ for mechanical service gives papermakers immediate access to these resources, securing your operational efficiency and protecting your profitability in an evolving industry.



"We're very particular about how work is performed. When it goes out the door, you can be sure it's done right."

– Hunter Ross

Assembly
(4 years with ANDRITZ)



Secure your mill's operational future with industry-leading mechanical service

Service centers supporting paper mills worldwide



ANDRITZ.COM

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