


## CONTACT US

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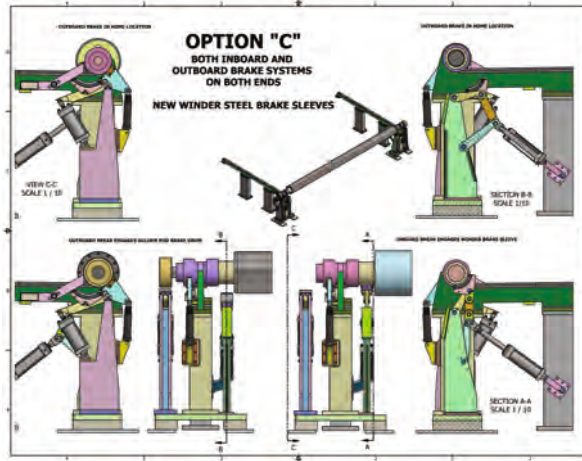
 <https://westernmachine.com>



# ENGINEERING SERVICES

-  IN-DEPTH AND EXTENSIVE KNOWLEDGE
-  SINGLE-SOURCE SOLUTION
-  MINIMUM INPUT OR OVERSIGHT REQUIRED
-  24/7 EMERGENCY RESPONSE

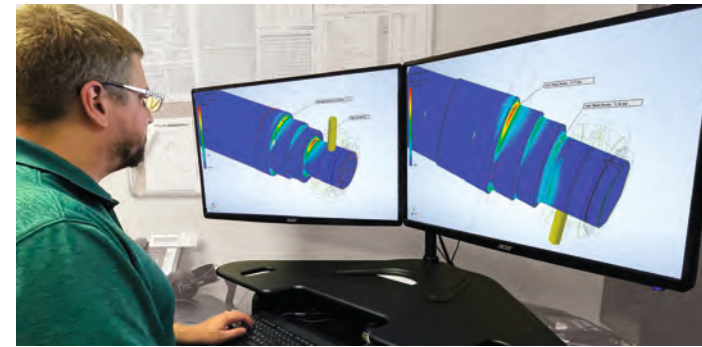




## RELIABILITY ENGINEERED INTO EVERY PROJECT.

Western Machine Works has the engineering capabilities and expertise required to design new equipment or upgrade your existing machinery while adhering to your precise specifications and rigorous standards. From beginning to completion, our engineering team oversees your project to ensure quality and long-term asset reliability.

## OUR ENGINEERING SERVICES:



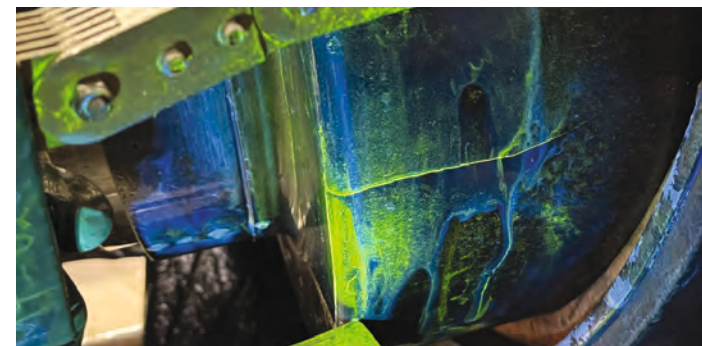
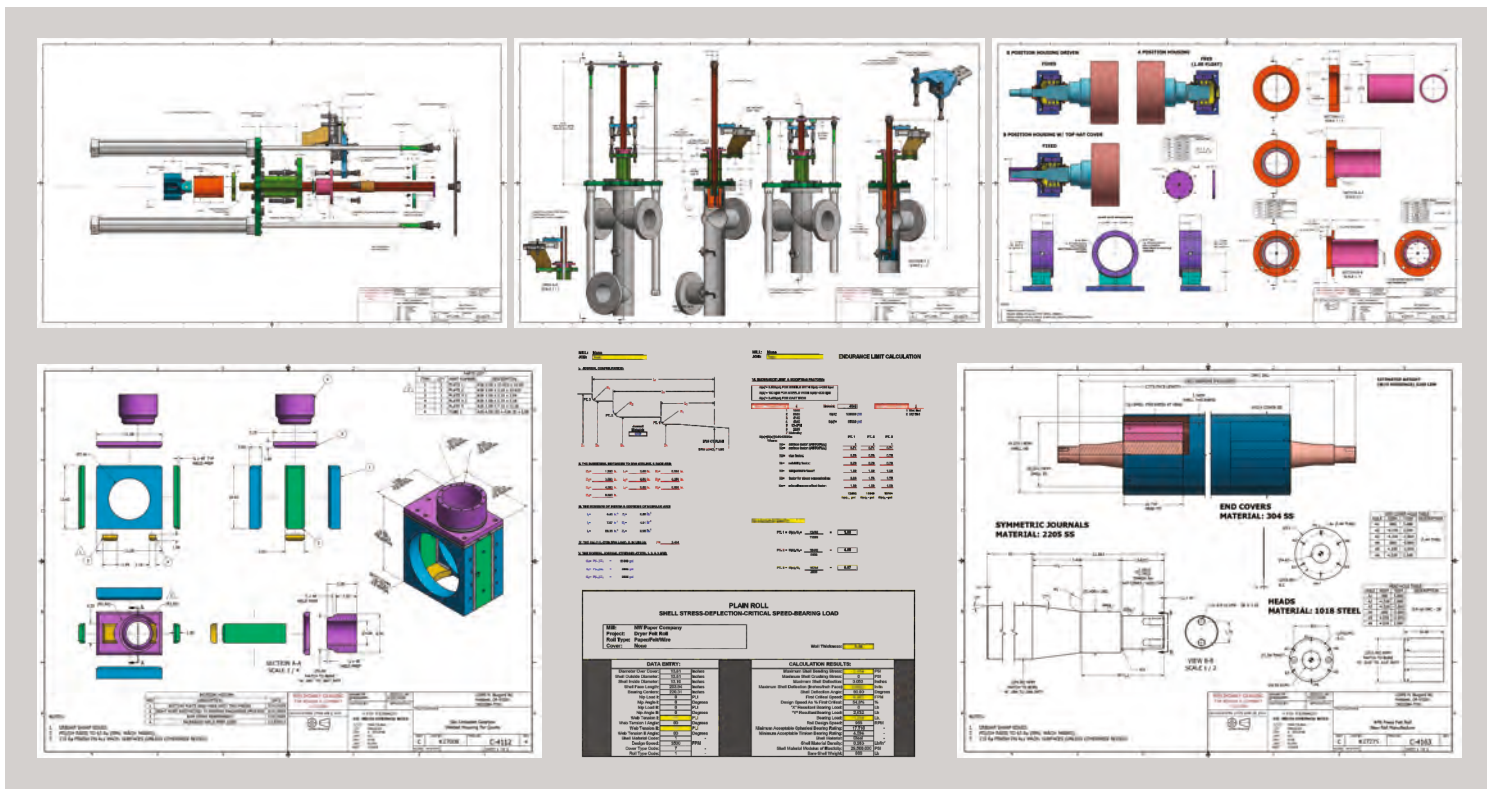
### NEW EQUIPMENT DESIGN & REVERSE ENGINEERING

- Field or onsite measurement of critical dimensions.
- Create engineering drawings that define specifications.
- 3D CAD Modeling and prints.
- Inhouse or onsite design consultation.
- Propose new features for improved performance.
- Fast and efficient manufacturing of new equipment, with or without existing specifications provided by the OEM.



### ENGINEERED REPAIRS & UPGRADES

- Detailed dimensional analysis and verification of specifications.
- Accurate documentation of all testing and results.
- Propose repair or upgrade options that are time and cost efficient.
- Extend the reliability and performance of your equipment.
- Upgraded materials for corrosion resistance.
- Fabrication alternatives to cast parts.



### INSPECTION & ROOT CAUSE FAILURE ANALYSIS

- Stress analysis of equipment under current running conditions.
- Root cause failure analysis.
- Non-destructive testing.
- Vibration analysis and critical speed calculations.
- Bearing life calculations.
- FEA Analysis.
- Metallurgical analysis and recommendations.



### TURNKEY PROJECT MANAGEMENT

- Project consultation from start to completion.
- Detailed documentation of all testing, evaluations and analyses.
- Status updates and progress reporting.
- Technical assistance with installation.
- Responsive and focused on your needs, specifications, budget, and schedule.

## DESIGNED & MANUFACTURED COMPONENTS



NEW PRESS ROLLS

REPULPER HEAD

GEARBOX ASSEMBLY

PROPULSION SHAFT

WICKET GATES

BEARING TUB

HOUSING RETAINER



## WHO WE ARE

Western Machine Works was established in Portland Oregon in 1985 as a full-service machine shop specializing in all facets of equipment repair, upgrades, and new manufacture. More than just a machine shop, WMW provides engineering-focused approach to its repairs, refurbishments, and fabrications. Its 34,000 sq. ft facility is equipped to handle machining, grinding, balancing, welding, and metallizing of large rotating equipment and shafts for the Hydro & Wind Industry, Marine, Pulp & Paper, and other heavy industries. WMW provides reliability while offering reverse engineering, on-site measurements of critical components, in-house transportation services, 24/7 rapid response, and total project management. Minimize downtime and achieve peak efficiency for your operations with Western Machine Works.

