

Energy Efficient Repulper Rotor

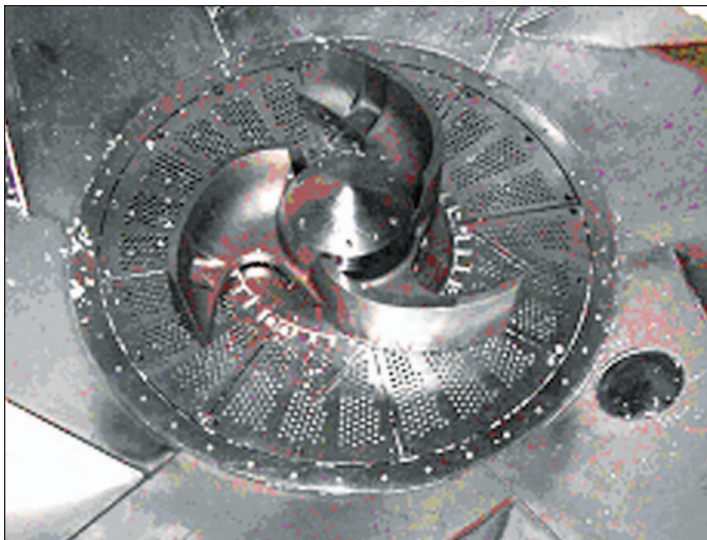
REPULPING

A repulper is a giant blender – a big tank with a mixer on the bottom. As dried pulp bales are added to water in the tank, the mixer, or rotor, agitates the material. Using a process similar to a washing machine, the rotor blades draw the dried pulp below the water's surface to defiber the pulp mix.

Non-integrated mills must purchase their raw paper-making fibers. The fibers are delivered in the form of dried pulp bales. The mills re-pulp the bales to prepare the pulp fibers for delivery to the paper making process.

ENERGY EFFICIENT REPULPER ROTOR

Because rotors are rebuilt or replaced periodically, facility managers have the opportunity to investigate new repulper rotors for their facility. Manufacturers of paper process equipment have recently designed new energy efficient repulper rotors to help mills offset rising energy costs (see **Figure 1**).



Courtesy of Voith Paper

Figure 1. Energy Saving Repulper Rotor Blade

WHERE TO USE THE REPULPER ROTORS?

The new energy efficient repulper rotors can be used for both virgin pulp and recycled pulp in the secondary processing area and on the paper machine.

WHAT IS THE ECONOMIC RETURN?

Energy efficient repulper rotors can cut repulping energy by 20 percent to 30 percent for an estimated annual savings of \$30,000 for a 500 hp repulper.

The payback for an energy efficient repulper rotor that runs constantly is estimated to be between one and two years. The payback is even attractive for a rotor that runs 50 percent of the time. Since the technology is not considered capital intensive – a new energy efficient rotor can be installed in an existing repulper – the simple payback is often less than one year. See the *Wausau Paper case study on the reverse side*.

Focus on Energy can assist you in advance by performing an economic analysis to consider the effects of actual site conditions, hours of operation and process controls. Note: along with our technical support we are now offering a special incentive for a limited time.

Special Incentive \$20 per motor horsepower

For a limited time, Focus on Energy is providing a \$20 per motor hp incentive when you install an energy efficient repulper rotor in your eligible facility.

(Not available for under machine applications.)

Call 608.277.2941 for more information.

Focus on Energy provides specialized Best Practice support for Wisconsin **Pulp and Paper** mills, including project evaluation assistance and monetary incentives for stalled projects.

To improve process efficiency at your mill, contact Focus on Energy. We can assist you with a project feasibility study grant and/or a project implementation grant. Additionally, we can help you find a trade ally for project support.

Call 800.762.7077 and ask to speak with a member of the Industrial Team.