

TECUMSETH APPLICATION CHALLENGES AND OPERATIONAL SOLUTIONS

PULP AND PAPER NEWSLETTER

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fournier

Fournier Rotary Press Stampede To Upgrade Belt Press

The Fournier Rotary Press is 'the greatest thing since sliced bread' when it comes to dewatering mill sludge. Mills should be trashing those under-performing and messy belt presses as obsolete equipment. As well, the days of scraping out settling ponds or clarifiers are long past.

The Rotary Press is clean, quiet and operates reliably unattended while making higher cake solids of mill waste or clarifier sludge. It can take input flows that contain suspended solids as low as 0.7% and compact it to produce cake. Some materials can be reduced to over 50% solids. Tecumseth will assess the improvement potential and application validity for your mill.

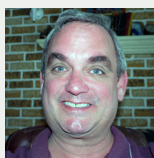
The first step is to get a sample of your sludge sent to Fournier Industries for evaluation. Those results will indicate what can be accomplished and if it would be worthwhile proceeding to an on-site pilot. [\(continue on page 3\)](#)



APPLICATION - SOLUTIONS - PEOPLE

PRESIDENT'S MESSAGE

Tecumseth must deliver products and services that promote continuous improvement if our customers are to build sustainable operations. That also requires that we evolve and be innovative in our approach to serving the pulp and paper industry.



Ken Klempner

Tecumseth has realized that our business encompasses three different business realms and we have restructured our organization so that our resources are best focussed to serve you. Our growth divisions are now Tecumseth Performance, Tecumseth Environmental and Tecumseth Optimal. We hope these categories will help you to identify with the products and services we represent.

Tecumseth Performance is an expansion of our traditional equipment supply business. This division is focused on providing innovative and technically superior products that can improve your pulp and paper operations. In addition to the products for which we have been known, this newsletter introduces an expanded range of high value equipment you can resource through Tecumseth. [\(continue on page 3\)](#)

LATEST TECHNOLOGY

- Tecumseth Filtration now offers an outstanding line of equipment for stock thickening, process water clarification, raw water treatment and complete effluent management.
- The new **metsoRotary** consistency transmitter obliterates the maintenance, upgrade and reliability issues of competitive systems.
- MWN's modular water management technologies raise the bar on suction roll performance.

Upcoming Events

- **PaperWeek 2014, Montreal**
- **Tissue World, Miami**
- **PaperCon 2014, Nashville**



Purpose-Designed Doctor Blades

The past year has seen a surge in the use of blades from The Yellow Box Guys at Clouth.

In particular, there has been broad acceptance with tissue and board manufacturers, along with growing acceptance at light-weight publishing and newsprint mills.



Tecumseth's hands-on approach to working with customers on each installation provides that extra level of comfort on blade selection. Our surveys ensure your blade holders are healthy and properly positioned – both of these are critical components of installation satisfaction.

"We feel that the Clouth Doctoring products; both blades and HS1 holder have been instrumental in improving the cleanliness and productivity of our Paper Machine."

*Mr. Eric Faulkner, PM Superintendent
New Forest Products*

"I also installed one of your blades in the bottom wire breast roll our wet end break frequency has dropped to under 1 per day you will see an order for more blades..." *Newsprint Machine Manager*



Up Your Quality and Throughput

As paper and board machines get pushed to wider trim widths and new throughput limits, wet edges often become a limiting factor that is easily corrected. IRCON infrared edge-drying modules are installed to assist with water removal that moves sheet quality into specification limits.

Tecumseth works with customers to understand what can be achieved and the exceptional value that IR drying can bring to machine performance.

Tecumseth personnel have a long history in realizing the importance of incremental drying and CD profile correction. We tackle your wet edge or streak problems.



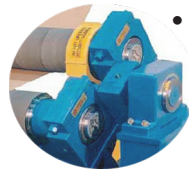
Customer claim: "The system is performing as predicted by IRCON. We are achieving the desired moisture content across our sheet at the reel."
Large Specialty Paper Manufacturer



Reliability and Longevity of Paper Machine Rolls

Quality rolls for every machine position. MWN specializes in suction rolls and is a quality producer for all types from the breast roll through the machine to the reel spools. Tecumseth service technicians together with MWN roll manufacturing capability are a great combination to ensure the right fit of material and performance for your paper machine rolls.

High tolerance manufacturing, enduring performance:



- Breast and wire turning rolls
- Suction rolls and shells, press rolls and covers
- Felt rolls, bowed rolls and reel spools
- Reel drums and winder drums

All paper makers depend on the reliability and performance of machine rolls. Tecumseth looks forward to discussing your future roll upgrades or rebuilds.



Cellwood Machinery
FOR BETTER PULP AND PAPER

Innovation In Process

Cellwood Machinery and Tecumseth have teamed up to provide mills with outstanding technologies for initial fibre preparation and process water reuse. The Grubben stock preparation technologies and the Krüma system for dispersing waste paper fibre have been designed to develop quality fibre at low energy.

The Algas rotary drum microfilter has an outstanding record of clarifying process water and effluent for reuse in mill showers and pump seals. Tecumseth technicians perform Algas in-situ pilot studies to demonstrate equipment capability and verify effectiveness.

Tecumseth has expanded to focus more resources on cleaning water, fibre recovery and energy use reduction in order to make pulp and paper operations more sustainable.



Extraordinary Results:
Payback on these technologies is typically 6 to 9 months.

"Progress comes from the intelligent use of experience."
Elbert Hubbard



This entails bringing a transport trailer with a full size Rotary Press, flocculant mixing tank and supply tank to site for several days of test runs.

The study results will show exactly what can be accomplished with the equipment and our evaluation will provide the economics for an installation. One paper mill was able to achieve a cake of 47 - 52%



solids from their feed of deink sludge at about 4% solids. The Fournier Rotary Press is an exciting part of the expanding portfolio of filtration and dewatering products and services that Tecumseth offers to save you money on energy, maintenance and raw materials.

ecs EVENT CAPTURE SYSTEMS INC. Visibility Where You Need To See

Event Capture Systems, Inc. leads the way on technology integration that gives operators better visibility down the machine and detailed information on the nature of breaks or defects. LED light technology, colour filters and high speed light pulsing have very significantly reduced lamp MTBF and slashed energy usage. Defect identification and reporting adds a whole new level of information and the ability to integrate with mill MIS adds to the functionality.

Tecumseth's hands-on support will ensure that you maximize the value of your investment and sustain its performance over time.



Customer claim: "The ECS Camera system helped us locate and resolve the water dripping issues that we had on the machine; no one believed it could be water drops until they saw it on the screen."
Rick Flinn, Supt. Irving Tissue



Authentic V.I.B. Parts

Tecumseth has teamed with Woollard and Henry to supply V.I.B. steam shower and water spray users with authentic parts and service from ex VIB people.

Steam Shower Designs Updated

WH has overhauled steam shower systems to be more reliable and maintenance friendly. It is time to look at upgrading.

President's Message *(from page 1)*

Tecumseth Environmental has been created to help manage the ever growing list of water and wastewater management products that will assist with the environmental challenges that are part of your sustainability initiatives.

Tecumseth Environmental products and services protect and reduce your water usage from intake to discharge. Allow us to demonstrate how our environmental products can reduce your discharge costs while they reclaim usable raw materials and save energy.

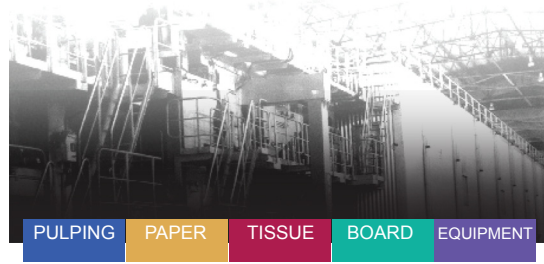
Tecumseth Optimal pulls together some outstanding resources and technologies that take advantage of your existing infrastructure by pushing it to continuous high levels of efficiency and stability. We are drawing on the process control optimization expertise that evolved from EnTech Control Engineering and have complemented that with proven automation system analytical techniques that identify any form of degradation.

Tecumseth continues to find product suppliers whose innovative ideas can drive machine efficiency, improve product quality and reduce cost of operations. We invite you to take a fresh look at Tecumseth and how we can 'Raise the Bar' on performance with products and services that support your manufacturing objectives.

Ken Klempner
President

APPLICATION SOLUTIONS PEOPLE

We look beyond our products to bring you innovation



PULPING PAPER TISSUE BOARD EQUIPMENT



No Excuses Consistency

Metso consistency measurement has no equal when it comes to accuracy, range and reliability, regardless of whether it is microwave, rotary, blade or light technology. Tecumseth will work with you to realize the value of upgrading some current technologies or to discover new applications that will provide enduring benefits to your performance. Tecumseth works with mill personnel to make certain each application achieves the expected results and we continue to check that the performance is being sustained by mill personnel.

Extra! Extra! We have exciting news about basis weight control.

The new **metsoACE** basis weight valve is exactly what the industry has been asking for: low cost, very high performance, easy to maintain. Talk to a Tecumseth representative about this game-changing valve for regulation of that most important of all stock flows on the paper machine.

Tecumseth understands that uniformity of stock delivery is the most critical factor that affects machine performance, water removal, drying energy and overall sheet quality. Our users see the difference, so will you.



Vacuum and Dewatering Performance

Relief from vacuum system degradation occurs very slowly and that results in repair being needed long before it is noticed. Vacuum system surveys cover the pumps, the piping, Uhle boxes and suction boxes. CVN Voener solutions can include: cost-effective vacuum pump upgrades or replacement; improved suction box cover designs and materials; new or correct lubrication showers; or recognition that there is a need to focus on the maintenance of any of these components. Tecumseth also offers the highly regarded CVN Voener oscillating shower and actuator technologies for upgrading the performance of your existing shower systems.

Tecumseth and CVN Voener specialists are your go-to team to maximize dewatering performance in your wet end.



Applied expertise for design of water removal elements reduces sheet breaks and ensures felt cleanliness and longevity

Customer claim: "I have purchased and commissioned multiple CVN Voener products over the years. They provide good quality, reliable products, at a competitive price. They are very knowledgeable about finding solutions ..."

Paperboard Machine Production Superintendent

Customer claim: "The actuator is working well. Thank you for such a great product."

Operations Manager

ABOUT US TECUMSETH

The Tecumseth Group has been working with industry for over 20 years and we celebrate this milestone as an excellent beginning. Our objective is to serve our customers with products that contribute to and enhance operating performance. Our product lines continue to evolve and expand as technology and innovation are applied to the problems you, our customers, need to have solved.

Commitment to our customers drives our determination to have Tecumseth regarded as a premier supplier. With our depth of product and application experience we are a resource you can call on for answers and solutions.

Success is the result of a strong working relationship.

3 divisions to serve you better



TECUMSETH Performance

Equipment & services to improve performance



TECUMSETH Environmental

Dewatering and Water Clarification Expertise



TECUMSETH Optimal

Optimize your automation resources

APPLICATION - SOLUTIONS - PEOPLE

CONTACT INFORMATION:

www.tecumseth.com

info@tecumseth.com

Telephone: 416.571.4892