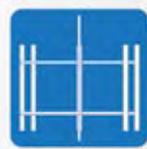


50 YEARS OF EXCELLENCE

JMS

JIM MYERS & SONS, INC.



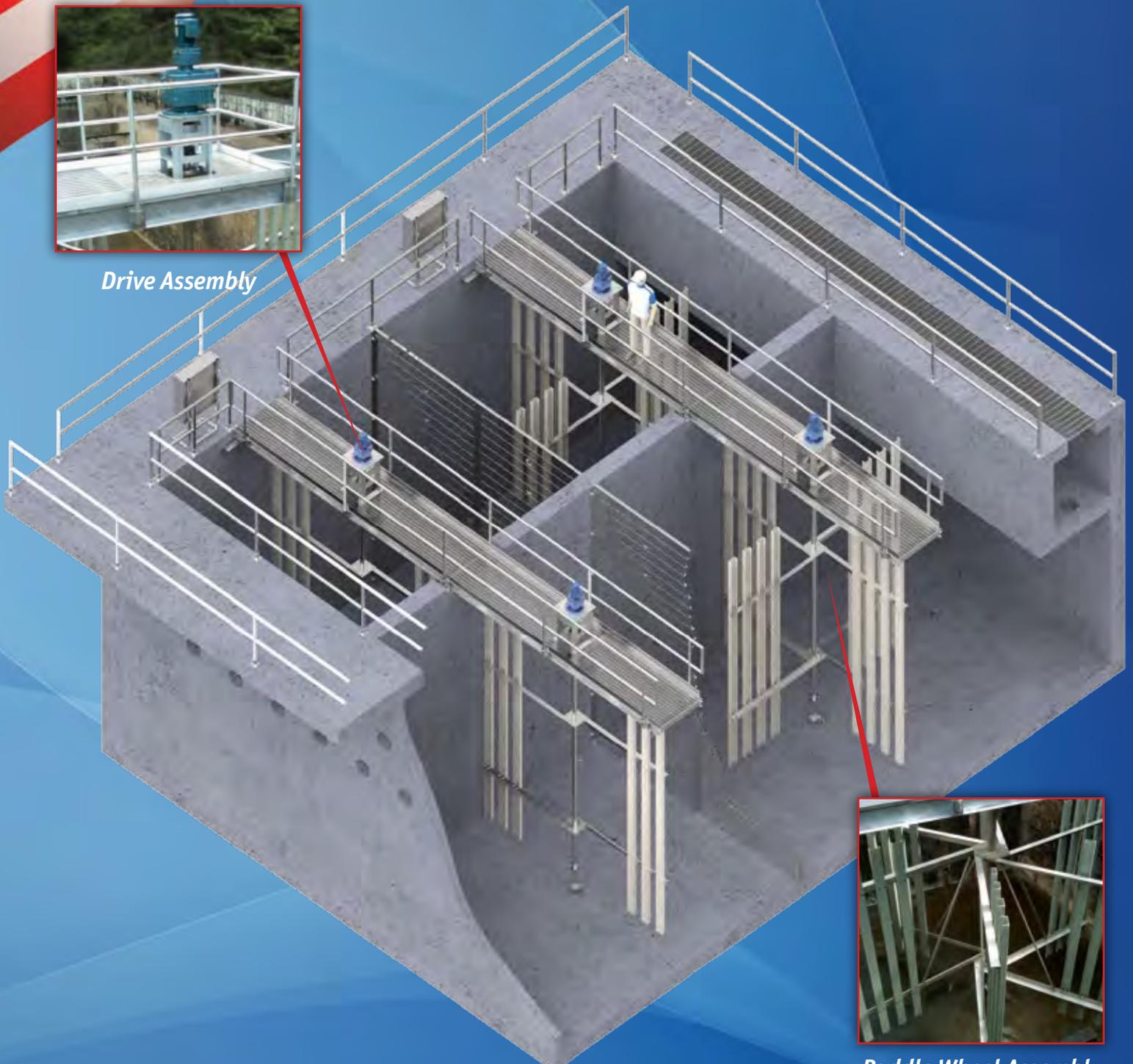
Mega-FLOC

Vertical Paddle Wheel Flocculator

Proven ... Process ... Performance



Drive Assembly

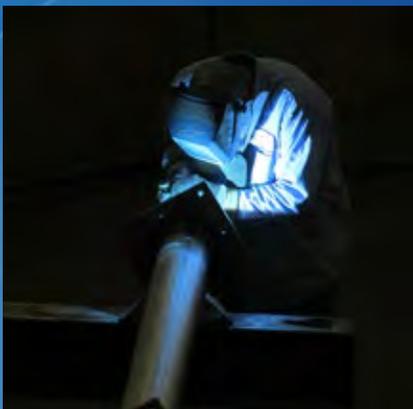


Paddle Wheel Assembly

J I M M Y E R S & S O N S , I N C .



Since being established in 1962, Jim Myers & Sons, Inc. (JMS) has grown continually and today is recognized as one of the nation's leading designers and manufacturers of water and wastewater treatment equipment and systems. We have reached this point by incorporating equal parts innovation, quality and reliability into every component bearing the JMS name. We maintain that leadership position through one of the most comprehensive, solution-driven product offerings available.



Utilizing the latest software for BIM-compliant mechanical and structural design with commercial and proprietary analysis programs, our professional engineering staff makes concepts reality by providing solutions to complex problems.



True to our roots, our 72,000 sq. ft. Charlotte facility is the site for all fabrication, manufacturing, machining, and testing. There, the JMS commitment to excellence, a part of our DNA, manifests itself every day with the promise to continue for generations to come.



Proven ... Process ... Performance

It is not possible to sum up in a few words what has taken better than half a century to achieve, but these three come closest. Our Mega-FLOC (Vertical Paddle Wheel Flocculator) design has already **proven** itself in hundreds of successful applications throughout the U.S. and abroad. JMS in-depth knowledge of both the water and wastewater treatment markets allows us to fully understand your **process** and provide solutions like the Mega-FLOC (VPWF), solutions designed with operational efficiency in mind. Like all JMS products, our Mega-FLOC (VPWF) line offers an unsurpassed level of **performance** geared around the longest possible component life and the lowest maintenance demands of any comparable flocculator system.

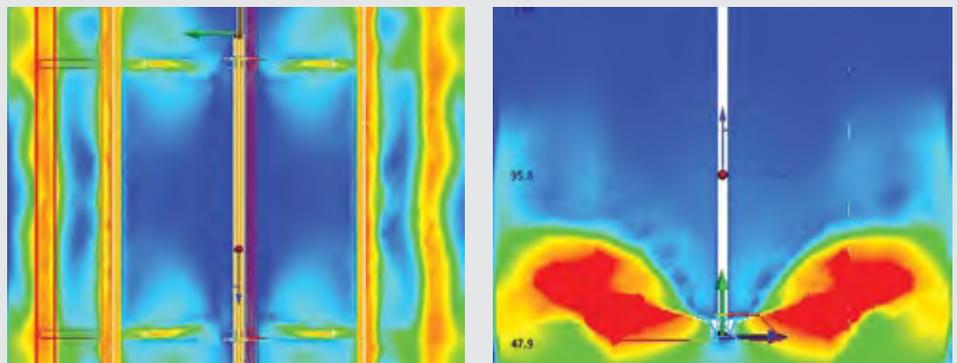
Just three words: Proven, Process, Performance, speak volumes. JMS has the answers you want, the solutions you need, and the support you deserve.



Process Harmony

One of the key components in the water treatment process, flocculation is most effective when the functions of fluid motion, differential settling, and velocity gradient (during each stage of the process) work in harmony to achieve the ultimate goal: maximizing agglomeration for either enhanced settling or filtration.

This concept of harmony is at the heart of JMS Mega-FLOC (VPWF) design. With more surface area than comparable turbine or impeller type units, paddle wheel flocculators can both operate at lower speeds, and achieve the desired velocity gradient. While lower speeds mean measurably reduced operating costs, it is never at the expense of performance. The lower tip speed (an industry standard 3 feet per second [FPS] for paddle wheels, versus 10 FPS for turbine and impeller units) coupled with the increased surface area, reduces floc shear while providing a broader homogeneous mixing action. Dead mixing zones and high shear areas in the basin, common in alternative systems (as seen in the CFD examples below), are all but eliminated.



CFD Examples of Paddle Wheel (Left) and Turbine/Impeller Type (Right)

Why Go Vertical?

Mega-FLOC (VPWF)s offer a wide range of flexibility with easy installation, and the proven process performance of a paddle wheel design. JMS Mega-FLOC (VPWF)s follow the "Ten States Standards" and are optimized to produce the highest quality floc particles. With hundreds of our Mega-FLOC (VPWF) installations in operation, JMS has refined our design with unique and important features for maximum equipment reliability and longevity.

Advantages: Mega-FLOC (VPWF)

Maintenance Advantages

- Very little maintenance required
- All moving parts above the water line
- Minimal wear items
- Easy access for operator maintenance

Process Advantages

- Optimum process control
- Follows "Ten States Standards"
- Low tip speed
- Homogeneous mixing

Experience Advantages

- JMS is the leading supplier of VPWF systems in the country with hundreds of successful installations over the past 50 years
- Utilizes proven design enhancements critical for the longevity of the system
- Proven system design based on numerous installations and field testing data

Under the Hood

Engineered in a range of sizes to meet process demands, every Mega-FLOC (VPWF) drive assembly (gear motor, drive stand weldment, chain coupling, thrust collar, radial thrust bearing, and drive shaft assembly) is designed and built to uncompromising standards. The result is powerful, reliable, uninterrupted performance.

To protect the gear reducer and ensure the longest possible component life, a radial thrust bearing takes the brunt of all loads (vertical, axial, radial, etc.). This common-sense design and accessibility makes operational and maintenance procedures a breeze.



Ashland, OR Mega-FLOC (VPWF) Installation with Bridge Assembly and Integral VFD (MOVIMOT®)

Bridge Work

To minimize the need for fabrication subcontractors, every JMS Mega-FLOC (VPWF) is designed, manufactured, assembled and tested as a complete bridge-mounted unit. The VPWF/bridge assembly, identical in design to hundreds already in place at locations throughout the U.S., ships fully assembled and ready for installation.

JMS in Control

Because no two operations are alike, we custom-configure JMS controls to best meet each client's unique system requirements. Utilizing the latest technology, our team of seasoned electronics technicians (working in a UL-approved assembly environment) constructs each panel, quality testing it throughout fabrication. In addition, a rigorous routine of point-to-point wiring testing and power-up verification is done before final approval and certification for delivery.



Mega-FLOC (VPWF) Drive Assembly





Success Stories

Located about 50 miles east of Charlotte, N.C., the City of Albemarle's Public Utilities Department operates a wastewater treatment plant and two water treatment facilities. One of the latter, the 12 million gallons per day Highway 52 Water Treatment Plant was experiencing wear and maintenance issues from its outdated Vertical Paddle Wheel Flocculator and treatment system. JMS was contacted and asked to offer its expertise in replacing those units and getting the process back on track.

Working with key utility and engineering personnel, JMS was able to replace a few VPWFs per year, improving the overall process while, at the same time, keeping the utility within their annual maintenance budget. Today, the entire system has been converted to VPWFs from Jim Myers & Sons, and the plant is reporting better performance, lower maintenance demands, and a much higher degree of reliability. Their level of satisfaction was so solid that plans are in the works to replace their old sludge removal system with a JMS Mega-VAC Sludge Removal System in the near future.



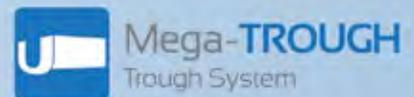
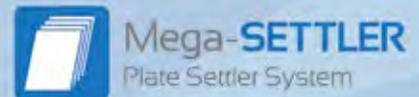
System Integration

In addition to Mega-FLOC (VPWF), JMS expertise extends to the other products and systems listed at right. Having such a broad and varied range of experience means your water and wastewater needs, whether individual component or full-system, are understood. Optimized efficiency and process performance are yours for the asking. **Contact JMS today.**



Jim Myers & Sons, Inc.
 PO Box 38778, Charlotte, NC 28278
 Phone: 704-554-8397 Fax: 704-554-9113
 Email: sales@jmsequipment.com
 Web: www.jmsequipment.com

"Making a Difference for Generations"



Your JMS Sales Representative: