

Our mission is to provide our customers with exceptional engineered solutions and services. We accomplish this by partnering with our customers and principals from conception through implementation for our mutual benefit and by building lasting relationships with our principals, employees and customers.

PROVIDING EXCEPTIONAL ENGINEERED SOLUTIONS AND SERVICES SINCE 1940

MECO NEWS

TRIPLEX BOOSTER PUMP STATION



FARMVILLE— GREEN COUNTY ALTERNATIVE WATER SUPPLY

This project by McDavid Associates expands water service in Greene County and Farmville with new distribution piping, elevated tanks and booster pumps. Mechanical Equipment Company supplied a coordinated system of components with Aurora split case pumps, Allen-Bradley VFDs and SCADA-VFD coordinating controls by EG controls. Specialty valves by OCV and APCO added to the system control functions designed into this system. Each pump is complete with a 100 hp motor and sized to deliver 1300 gpm. EG Controls built the control panel with maximum flexibility. Under normal operation, the controls automatically sequence valves and start the pump motors with the VFDs. However, if automatic function is lost through PLC or SCADA failure, all system control valves and pumps can be operated manually to maintain the water supply to the system of elevated tanks and distribution piping. In the event of variable frequency drive failure, power can be bypassed through solid state, reduced voltage soft-starters. Now working in concert with Greenville's water system, Farmville and an extended area in Greene County will have a reliable water supply for years to come. - **Bob McCollum**



MUNICIPAL NEWS - VIBRATION SOLUTION



N^{PC} NATIONAL PUMP COMPANY, LLC

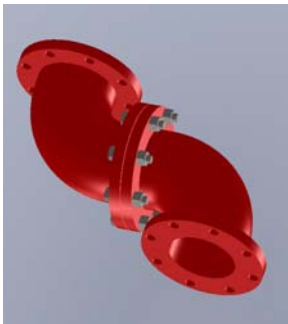
The City of Asheville, NC Water Resources Department required a booster station in the Weston Road area of Asheville. Working with the Asheville city engineers, Brown And Caldwell Environmental Engineers and Consultants of Charlotte, NC designed the booster station to utilize (3) multi-stage vertical turbine pumps in suction vessels with adjustable frequency drives (AFD). Mechanical Equipment Company (MECO) was asked by Buckeye Construction Co. of Canton, NC, the contractor on the job, to supply a value engineering proposal for these pumps and drives that would help reduce the city's expected outlay for the project. Walter Lee and Gerald Voncannon of MECO, who represents National Pump Company (NPC) got to work selecting appropriate pumps and AFD's to meet the stringent specification requirement of the job. NPC is a major manufacturer of Vertical Turbine Pumps and systems with domestic and international installations in municipal, industrial, defense, marine, mining and agricultural applications.

After completing the usual submittal process, NPC shipped (3) pumps and AFDs: (1) rated at 700GPM @ 240 ft TDH and (2) rated 350 GPM @ 240 ft TDH. Installation went smoothly; however, during start up, one of the pumps exhibited vibration greater than satisfactory. This not an unusual situation for vertical turbine pumps. The usual solution is to provide additional bracing to the base/support head to change the natural frequency of the complete assembly. In this case, however, National Pump decided to employ a unique solution using a set of "tuning plates". These tuning plates were installed between the pump support head and the motor and the result was as predicted and satisfactory without the unsightly braces. See photo 2 for the tuning plates – the two shiny discs.

The project start up was completed in the summer of 2010. We appreciate the opportunity, and assistance provided by City of Asheville, Brown And Caldwell and Buckeye Construction. - *Walter Lee*



ENGINEERING DESIGN TEAM NEWS



In our quest for greater accuracy & shorter lead times our Design Team is making the transition from traditional 3D Design to "SolidWorks." SolidWorks is a much more agile, 3D Parametric Design Software.

The sample photo (left) illustrates 2 ductile iron elbows bolted together. In only a few minutes this simple assembly can be illustrated for customer review and released for fabrication. SolidWorks includes a complete bill of material, weights and other important data. We will keep you posted as we strengthen our Design Team with this powerful design tool!

SC ENVIRONMENTAL CONFERENCE -



PARTNERING WITH OUR PRINCIPALS -

March 13th—15th: **MECO** Supported the SC Chapter of the AWWA and WEA by exhibiting at the SC Environmental Conference. **Process Waste Water Technologies** (Jim Heist), **National Pump** (Chuck Adcock), **Tank Connection** (Chasnie Vinson), **Cornell Pump** (Duane Hargis), and **IPEC** (Bob McGowan) participated with **MECO**.

"A big MECO THANK YOU to these principals for supporting SC's environment and MECO's interests". - Chadwick Johnson

The World's Largest Pump Station



Fairbanks Morse (Pentair Water) was chosen to design, develop and manufacture eleven enormous pumps for the GIWW in Louisiana. The West Closure Complex pumps will pump an estimated 9 million gallons of water per minute. Each pump weighs 70 tons and is powered by a 5,444 HP Diesel engine.

For the full story; visit www.mechequip.com/blog/



"I truly hope the victims of the disaster never give up hope, take care of themselves, and live strong for tomorrow," Emperor Akihito

MECO VALUES : INTEGRITY, EXPERTISE, CUSTOMER CARE & DEPENDABILITY

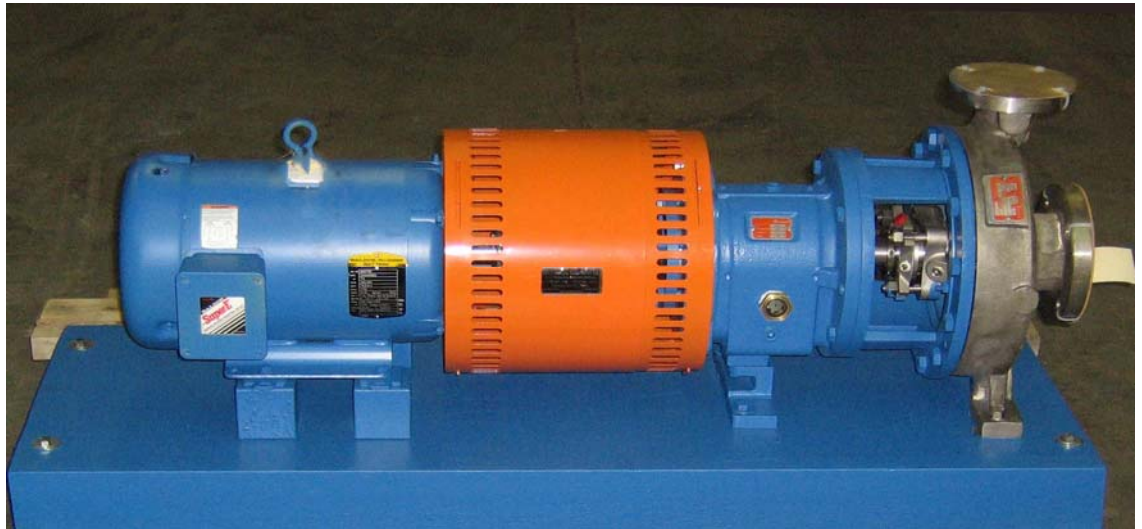


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MECO **stocks** Aurora **ANSI Pumps** and parts for our customers' needs. Call us with your most demanding pump applications.

*Providing Exceptional
Engineered Solutions
And Services Since 1940*

CORPORATE OFFICE -

Engineered Sales -

Walter H. Lee
Chuck Parnell
Mike Smith
Robert Wood

Inside Sales -

Gerald Voncannon
Jon Rusmisell
Mike Ostergren
Pat Armstrong

Michael Godsey - CFO

Sales Support Asst. -

Sheryl Harmon -

Accounting Asst. -

Angela Tice
Michelle Poplin -

RALEIGH OFFICE -

Engineered Sales -

Bob McCollum
Ken Hicks

SIMPSONVILLE OFFICE -

Engineered Sales -

Ben Crider
Jackson Riley

Inside Sales -

Dan Sherbert
Joann LaFoy

Project Designers -

Brian Hitchcock
Sherry Radford

Scott Fletcher - CEO

Corporate Sales Mgr. -

Chadwick Johnson

Newsletter Editor/Marketing Dept. -

Sheila Norwood

Fabrication Dept. -

Tim Crider
Pat Fults
Jud Storey
Chris Zietz
Don Cooksy

IMPORTANT DATES —

April 22nd - Good Friday,
Offices Closed

May 18th—20th - AFSA Show,
Myrtle Beach, SC

May 30th - Memorial Day,
Offices Closed

EMPLOYEE BIRTHDAYS —

March 10th - Robert Wood

April 9th - Dan Sherbert

April 13th - Chadwick Johnson

April 25th - Ken Hicks

May 15th - Joann LaFoy

May 29th - Chuck Parnell

WISH THEM A HAPPY BIRTHDAY!!



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