Schramm Honored As 2012 Manufacturer of the Year

Schramm was honored to receive the Manufacturer of the Year Award for 2012 from the Greater Philadelphia Chamber of Commerce in December of 2011. Regional competition was intense, with more than 70 outstanding companies considered for this award. Schramm's compound annual growth, significant export sales and ongoing contribution to its local community all played a major role in the award decision.

Working in partnership with the Delaware Valley Industrial Resource Center (DVIRC) in Philadelphia, Schramm has over the past ten years leveraged its manufacturing strengths and strategic planning processes to illustrate the true strengths of “Made in America” around the world.

Schramm maximizes USA origin content of its drilling rigs to keep American manufacturing strong, and assure its customers the highest degree of reliability that current technology permits. This reliability issue is a key driver to Schramm's consistent double digit annual growth, given more than half of its rigs going overseas each year to exotic places like Uzbekistan, Senegal and Mongolia. When rigs are literally a thousand miles away from the nearest service supply chain, and operating down time can cost the owner tens of thousands of dollars per day in lost revenues, reliability is of paramount importance to customer purchase decisions.

Every Schramm customer has a different

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Did you know the Marcellus Shale formation is thought to be the second largest natural gas field in the world? And Schramm, based in West Chester, Pennsylvania is right next door. To fully engage in the Marcellus with both private and public interests, Schramm recently joined the Marcellus Shale Coalition as an Associate Member.

As the only land based portable drilling rig manufacturer in Pennsylvania, Schramm is rapidly expanding its product mix, manufacturing capacity, field service resources and community involvement in a manner that is consistent with the Guiding Principles of the Marcellus Shale Coalition that are summarized below:

• We provide the safest possible workplace for our employees,
• We implement state-of-the-art environmental protection across our operations;
• We continuously improve our practices and seek transparency in our operations;
• We strive to attract and retain a talented and engaged local workforce;
• We are committed to being responsible members of the communities in which we work;
• We encourage spirited public dialog and fact-based education about responsible shale gas development and;
• We conduct our business in a manner that will provide sustainable and broad-based economic and energy security benefits for all.

How does Schramm fit into all this?

Our patented TXD Telemast rig with automated pipe handling provides best in class safety, portability and production efficiency for top hole drilling across the Marcellus. The TXD sets up faster, takes up less space and operates at far lower daily cost than traditional technology rigs.

In business since 1900 with employees spanning four generations in multiple departments, Schramm is also committed to West Chester, the state of Pennsylvania and the industry it serves.

Schramm and the Marcellus Shale Coalition share core values that make sense, working together with fellow members and the industry to help America regain its energy independence as soon as public policy permits.

For more details visit: www.schramminc.com & www.marcelluscoalition.org
NEW! TXDi Targets Marcellus Shale Energy Sector

Nothing beats the safety, speed and ease of use of a 200,000 pound hoist Schramm TXD Telemast rig with integrated automated pipe handling system, until now. The new Schramm TXDi offers all the field proven attributes of the TXD, combined with a dedicated electric over hydraulic control system that takes performance and operator convenience to the next level.

NEW! TXDi Special Features:

- Improved operator control interface for all drilling and pipe handling functions via simplified joystick controllers
- Informative new displays and increased data availability to the operator to optimize total rig performance
- Enhanced system diagnostics to simplify serviceability
- Upgraded drilling functions, including faster feed speed and weight on bit control
- Next generation hydraulic efficiency and performance
- Enhanced top-head positioning system
- Easy interface to third party performance remote monitoring systems like Pason

The TXDi control system also introduces a separate control room in place of the traditional operator’s control panel. The fully enclosed, environmentally controlled work cabin has two operator workstations, one to control all drilling functions and one to control pipe handling. By getting the operators out of the elements, crews work more comfortably with less fatigue to the benefit of themselves and their companies.

Schramm Engineering continues to innovate in key areas to keep your operation out front with industry leading efficiency, safety and reliability.

Check out the NEW! TXDi at the 2012 Offshore Technology Conference in Houston, Texas this April, Booth #157.

Meet Delaney Erickson

Delaney Erickson, Schramm Regional Sales Manager

Schramm is pleased to welcome Delaney Erickson as its newest Regional Sales Manager! With 11 years of experience in sales, service and support of truck mounted portable drilling rigs; Delaney covers the Energy, Mineral Exploration and Water Well drilling markets in Oklahoma, Texas, Arkansas, Missouri, Kansas, New Mexico, Colorado, Louisiana and Mississippi.

Delaney specializes in hands on driller training and on site rig start ups and has a strong background in air drilling with DHD hammers.

Delaney Erickson
Regional Sales Manager
E-mail: derickson@schramminc.com

Everyone I have worked with here at Schramm has been so helpful as I begin my new responsibilities. I look forward to supporting my customers here at Schramm well into the future.”

- Delaney Erickson

Schramm has been a wonderful change in my life. I feel extremely fortunate to be working directly for a manufacturer with such a long and successful history.

Schramm Engineering
Breaking Ground, Building Trust

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There is water on your car’s windshield in the morning and it did not rain the night before. Where did the water come from? Psychrometry or Hygrometry are terms used to describe the field of engineering concerned with the determination of physical and thermodynamic properties of gas-vapor mixtures. Although the principles of psychrometry apply to any physical system consisting of gas-vapor mixtures, the most common system of interest is the mixture of water vapor and air, more commonly known as the Dew Point.

Dew point is the temperature at which water vapor begins to condense out of the air. Alternatively, it can be defined as the temperature at which air becomes completely saturated with moisture. In dehumidification by cooling and condensation, it is the temperature to which the moist air must be cooled to allow water removal. The lower the absolute amount of moisture in air, the lower the dew point of that air sample will be.

Dew points can be defined and specified for ambient air or for compressed air. The higher the pressure of the air, the higher the “pressure dew point” will be. Pressure dew point can be used as a proxy for allowable moisture content. In many cases, pressure dew points are specified for air drying and handling equipment to avoid condensation in compressed air distribution lines exposed to low temperatures.

So you ask “What does this have to do with my compressor maintenance?”

First you must understand that your compressor’s health is dependent upon the rotor bearings capability to maintain zero axial motion. When this capability is diminished, the rotors will begin to contact the compressor housing and failure is imminent. Second are the components that make up your unloading circuit that provide compressed air, or not, as the operator requires?

2. Use suitable compressor oil that meets the ASTM D665 rust inhibitor requirement that should prevent water in your oil from oxidizing on the axial control bearings.

3. Drain the coalescing filter in the unloading controls circuit as environmental conditions require. This could be as often as once an hour when there is a high relative humidity condition. Failure to drain this filter will cause water carry over that will lead to component failure in the pneumatic unloading controls, pilot valves, running blow down valve, inlet control cylinder, etc.

4. Change the coalescing filter element (Schramm Inc. part number 5000-7205) at 1,000 hour intervals or once a year.

Following these simple steps can lead to a long and healthy compressor life and proper operation of the pneumatic unloading circuit components.

Recognizing that we are headed into the winter months in the northern hemisphere, we need to remember the physical properties of water once the temperature goes below 32°F. Anyone who has started to operate their compressor on a day where the overnight temperatures were below freezing are familiar with the sound of safety valve blowing off when they expect the compressor to unload. Schramm has introduced the air-CONTROL unload system as an alternative to eliminate some of the maintenance issues associated with pneumatic unloading control circuits.

Read the article on the next page titled, “air-CONTROL” to learn more about what air-CONTROL can do to improve your operations and cut your operating costs (pg 5).

For additional service questions or to speak with a Service Technician today call 610-696-2500 or email service@schramminc.com
At Schramm, innovation isn’t hype; it’s a promise— a promise we’ve been backing up for over a century now. Because we listen to our customers, we understand what they need out there, and we aggressively develop new technologies. We are proud to present the revolutionary patented air-CONTROL system. This groundbreaking system manages the compressor and variable speed fan controls to maintain a constant pressure and temperature on the system with one simple interface. The program logic controller (PLC) is the brain of the automated air-CONTROL system. The controls on the control panel send commands to the PLC. The PLC then translates those commands to control the cylinder connected to the inlet control valve. The compressor will run at a constant speed dictated by the opening of the inlet control valve. The maximum amount of air can be limited to the compressor system by turning the Volumetric Limit rotary knob on the control panel. This is just a limit of the maximum volume; the actual volume is determined by the compressor pressure set point and loading conditions. The compressor control system monitors engine load and reduces the compressor volume as necessary to prevent the engine from shutting down due to being overloaded.

Lower noise, elimination of control system freeze-ups, and cooler operation are some of the benefits of air-CONTROL. But the biggest benefit is fuel savings. Schramm has documented fuel savings in excess of 10 percent with air-CONTROL compared to conventional air regulation systems. Depending on the current configuration of your rig, fuel costs, and operating hours, Schramm can project your annualized savings.

The air-CONTROL system is available for all new Schramm rigs with a compressor and can be retrofitted onto older Schramm rig models. For a savings evaluation of your rig retrofitted with air-CONTROL and a quote for a retrofit kit please visit www.schramminc.com or email our service department at service@schramminc.com for a complete evaluation and quote.

**air-Control Benefits:**

**Efficiency**
- Factory tests show potential fuel savings of up to 10 percent
- Automatically matches air volume to DTH pressure requirements
- Cooler operation

**Eliminates Freeze-Up**
- No air regulators, air controls or pilot lines
- No coalescing filter

**Quiet Operation**
- Reduced air noise when the compressor is unloaded
- Slower cooling fan speed

**Operator Control**
- Operator adjustable pressure and volume from the control panel

For more information on Schramm rigs that use air-CONTROL visit: www.schramminc.com/products
idea of its specific needs, particularly when a drilling rig can cost several million dollars. Schramm has standard products to maximize manufacturing efficiency and customer value; nevertheless, every rig is custom built to meet very specialized customer requirements. This can range from major component changes to cosmetics like custom paint to match end user corporate identity. Throughout this customization process, our fourth generation employees take pride of craftsmanship that cannot be duplicated offshore. Every rig is manufactured in West Chester, Pennsylvania.

Schramm invests in plant and equipment to maintain its edge in markets served, with major upgrades planned for 2012. Equally important, we invest in our employees through technical training and career development programs across all levels of the organization. These programs drive game changing innovation as we respond to the needs of our customers in over 80 countries around the world.

As Schramm looks forward, world class products made in America provide continued opportunities for growth well into our second century of continuous operation.

Upcoming Events

**Wisconsin Ground Water Conference**
January 11th & 12th 2012
Kalahari Resort & Convention Center - Wisconsin Dells, WI

**Empire State Water Well Association Meeting**
January 26th & 27th 2012
The Beeches Inn & Conference Center • Rome, NY

**Pennsylvania Ground Water Association Winter Meeting**
January 26th & 27th 2012
Holiday Inn Hershey/Harrisburg • Grantville, PA

**North Carolina Ground Water Association Show**
January 27th & 28th 2012
Embassy Suites • Greensboro, NC

**Maryland/Delaware Water Well Show**
February 9th & 10th 2012
Martin’s West Convention Center • Baltimore, MD

**Mountain States Ground Water Expo**
February 9th - 11th 2012
Aquarius Casino Resort • Laughlin, NV

**Virginia Water Well Association Show**
February 15th - 17th 2012
Holiday Inn Select • Richmond, VA

**Prospectors & Developers Association of Canada Show**
March 4th - 7th 2012
Metro Toronto Convention Centre • Toronto, Canada

**Schramm Service School**
March 13th - 15th 2012
Schramm, Inc. • West Chester, PA

**China International Petroleum & Petrochemical Technology & Equipment Show**
March 19th - 21st 2012
China International Exhibition Center • Beijing, China

**New England Water Well Expo**
March 30th - 31st 2012
Marriott Courtyard • Fitchburg, MA

Schramm Store

Didn’t get your favorite Schramm T-Shirt for the holidays this year as you had wished? Log on to the Schramm Store and order one today! The Schramm Store is the official online shop for everything Schramm.

Choose from a variety of Schramm apparel and safety items including Polos, Dress Shirts, Jackets, Sweatshirts, T-Shirts, Caps, Levels, Tape Measures and Hard Hats. We are also currently featuring a limited edition Commemorative Chile Mine Rescue Long Sleeve Shirt.

For your convenience, we have automated the order fulfillment process to accept major credit cards. In association with UPS, we can also ship domestically and overseas to many areas.

Show your Schramm support this New Year by checking out the Schramm Store and ordering all your favorite Schramm gear. Log on to www.schramminc.com/store and order today!