



Table of Contents

Holiday Giving	1
Show & Shine	1
Mechanical Seals	2
Factory Contact Information	3
Price Pages	4
Technical Q&A	5
Snapshot in History	5

Kansas City Show & Shine

One of the biggest events at our Kansas City plant during 2010 was our Employee Show & Shine, which took place in October. Employees could enter in up to 8 categories, which included 1972 & earlier or 1973 & later for cars or trucks, American, metric, and custom categories for motorcycles, and one offroad category for tractors, ATV's, boats, and anything else to be displayed. Employees voted on their favorites, with trophies going to first and second place showings.

Holiday Giving

Layne / Verti-Line had the honor to take part in the Barrie Food Bank Raffle hosted by our Canadian Distributor, International Water Supply (IWS). We donated several prizes to include in the raffle, with ticket sales raising a total of \$485 for the Barrie Food Bank.



Above – An IWS drilling rig in tow across a frozen lake in northern Saskatchewan, used to drill dewatering holes for a uranium mine.

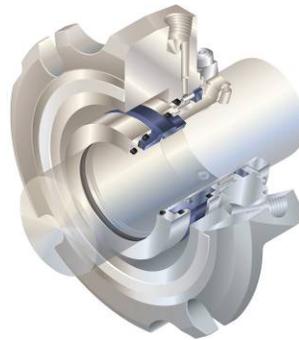


Show & Shine, Cont.

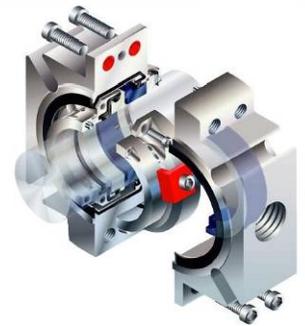


Mechanical Seals

Recently we've upgraded the mechanical seal offerings on our vertical turbines. Starting with Flowserve, their standard ISC outside cartridge seal has been upgraded to the new ISC2. One major benefit of the new ISC2 is its short term dry run capability. The design allows excellent heat dissipation from the seal faces. Regarding split seals, the PSS III split seal is now offered for 1 ¼" shaft, which enables it to also be used on a 1" shaft when using a top shaft sleeve.



ISC2



PSS III

Chesterton stays consistent with their proven 155 outside cartridge and 442 split seals, which are now available down to 1" diameter shafts.

John Crane has introduced a new 3740 split seal to replace the 3710. The new seal provides much simpler installation over the old 3710. Design improvements also allow the seal to handle higher operating pressures.



Please refer to the factory when the pumping fluid is other than clean water, or operating pressures of the application exceed the limits stated in our price pages.

Factory Contacts

Since our last publication, our team has reorganized and expanded to provide the best service possible for our customers. So let us take a moment to introduce ourselves!

It all starts with selecting a pump to develop a quote for your customer, and our sales team is here to help.

Pump Sales, Tech Support (Domestic)

- Chris Lula, P.E. – Manager
(913) 748-4254 phone
chris.lula@pentair.com
- Diana Underwood – Application Engineer
(913) 748-4255 phone
diana.underwood@pentair.com

Parts – Sales & Orders (Domestic)

- Debbie Smith – Manager
(913) 748-4287 phone
debra.smith@pentair.com
- Connie Groves – Parts Application Engineer
(913) 748-4286 phone
connie.groves@pentair.com

Pump & Parts Sales, Tech Support (International)

- Dave Rindom – Manager
(913) 748-4254 phone
dave.rindom@pentair.com
- Jitendra Mehta – Application Engineer
Europe, Middle East, and Asia
(913) 748-4271 phone
jitendra.mehta@pentair.com
- Alyssa Hernandez – Application Engineer
South America
(913) 748-4278 phone
alyssa.hernandez@pentair.com



Showing our Kansas City Chiefs Football Pride

Once you are ready to place an order, the following team will handle all your needs.

Pump Order Entry

Primary email to send all pump orders and order inquiries: lvproduct@pentair.com

- Carolyn Crews – Manager
(913) 748-4209 phone
- Carol Hampton – Domestic
(913) 748-4224 phone
- Eddie Fears – Domestic & Firepump
(913) 748-4282 phone
- Ana Linton – Canada & International
(913) 748-4293 phone

Parts Order Entry – See Parts Sales

Then after your order is entered, we make it easy to check production status.

Pump Order Status

Primary email for order status inquiries: lvdeliveries@pentair.com

- Carl Sutton – Manager
(913) 748-4250 phone
- Kellie Kerwin – USA & Canada
(913) 748-4225 phone
- Ana Linton – International
(913) 748-4293 phone

Parts Order Status – See Parts Sales

Finally, our Field Service and Warranty Department will take care of any issues you may encounter after your order ships.

Field Service and Warranty

- Steve Wilson – Manager
(913) 748-4279 phone
steve.wilson@pentair.com
- Justin Carpenter –
West Coast & International
(913) 748-4214 phone
justin.carpenter@pentair.com
- Cody Herbster – Midwest
(913) 748-4212 phone
cody.herbster@pentair.com
- Daryl Palmer – East Coast
(913) 748-4277 phone
daryl.palmer@pentair.com



Layne & Bowler/ Verti-Line

Address 3601 Fairbanks Ave.
Kansas City, KS 66106
Phone (913) 371-5000
FAX (913) 748-4030

Email
layne_info@pentair.com

Website (all go to one site)
www.laynevertiline.com
www.vertiline.com
www.laynebowler.com
www.lvlpump.com

Price Pages

It is a good idea to check that the most current price pages are being used. Below is the list of these pages with the latest multipliers.

Standard Vertical Turbines – **Blue** pages dated July 1, 2010

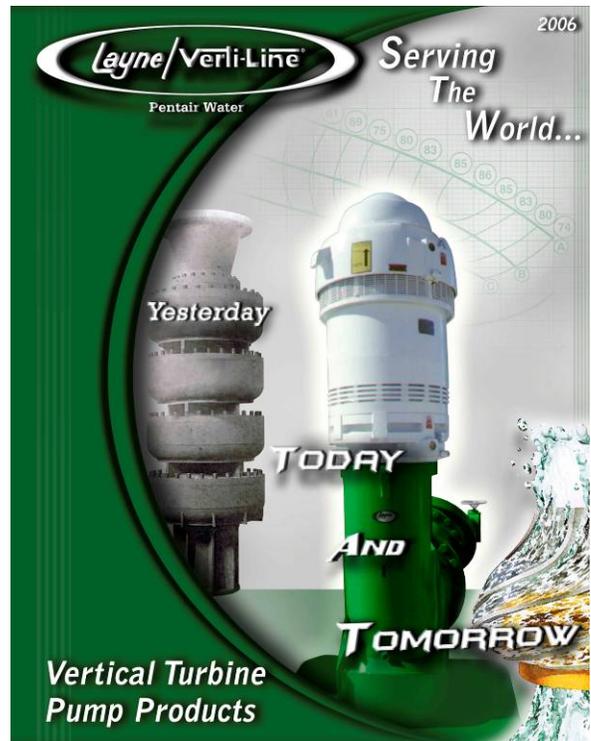
Quick Ship Vertical Turbines – **Green** pages dated Jun 11, 2010

Firepump Vertical Turbines – Electronic Excel files (provided after Jan 1, 2011):

Rev 18 VTFP ELECTRIC-AURORA
Rev 18 VTFP DIESEL-AURORA

Distributor Price Multiplier Schedule for Pumps and Parts – **Yellow** pages dated July 1, 2010 and Jan 1, 2009 respectively.

Distributor Price Multiplier Schedule for Vendor Equipment (Motors and Gears) – **Yellow** pages dated Jan 1, 2010



Technical Q&A

Question: When is it appropriate to employ a pre-lube system on a vertical turbine?

This is a common question, and the answer use to be simple. In the old days, standard rule of thumb was that if the static water level was less than 50 feet below the discharge head (assuming an above ground discharge where the stuffing box or mechanical seal is located), a pre-lube system was not required. Reasoning behind this was due to the fact that historically vertical turbines almost always employed across-the-line starting. When the pump starts, water rushes up the column and lubricates the lineshaft bearings and stuffing box within a matter of seconds. With across-the-line starting and less than 50 feet of static lift, there is no fear of the bearings running dry for too long of a time.



Note the pressurized prelube line (to the right) going to the discharge head.

Over the past two decades, soft start and variable speed/frequency drives have become quite common. When this type of starting is employed, it takes much longer for the pump to come up to speed. The draw-back to slower starting is that it takes longer for the water to reach the upper lineshaft bearings and stuffing box. When these bearings are not lubricated immediately after startup, heat generated from dry-run friction can melt rubber lineshaft bearings and severely score the bronze stuffing box bearing. If such starting systems are employed, it is best to

use a pre-lube system if the static water level exceeds 35 feet below the discharge (assuming an above ground discharge where the stuffing box or mechanical seal is located).

To summarize – if you have a standard across the line starting system, a pre-lubrication system is needed when the static water level exceeds 50 feet. If you are employing a variable speed drive or soft start, a pre-lube system is needed when the static water level exceeds 35 feet.

Snapshot in History

This old photograph was shared with us by Andrew Crawford, our southeast regional manager covering the municipal market for Aurora, Layne and Myers. Andrew's family has a long history of well drilling dating back to his grandfather. The photograph below is of Andrew's grandfather standing next to a well he drilled, and what caught our eye was that it had a Layne & Bowler pump installed!

