

Monday, March 18, 2019

# Bell & Gossett Hits One Out of the Park with their New Double Suction Pump

Monday Morning Minutes | by Norm Hall, March 18, 2019

The 2019 MLB season will be starting soon and it is fitting to announce a home run by Bell & Gossett (B&G). They did it again. Last week we mentioned the Department of Energy 2020 pump standards. Bell & Gossett exceeds these standards after investing millions in engineering, design, and tooling of their end suction and in-line pumps. Fresh on the heels of that investment, B & G announces a complete redesign of the horizontal split case double suction pump.



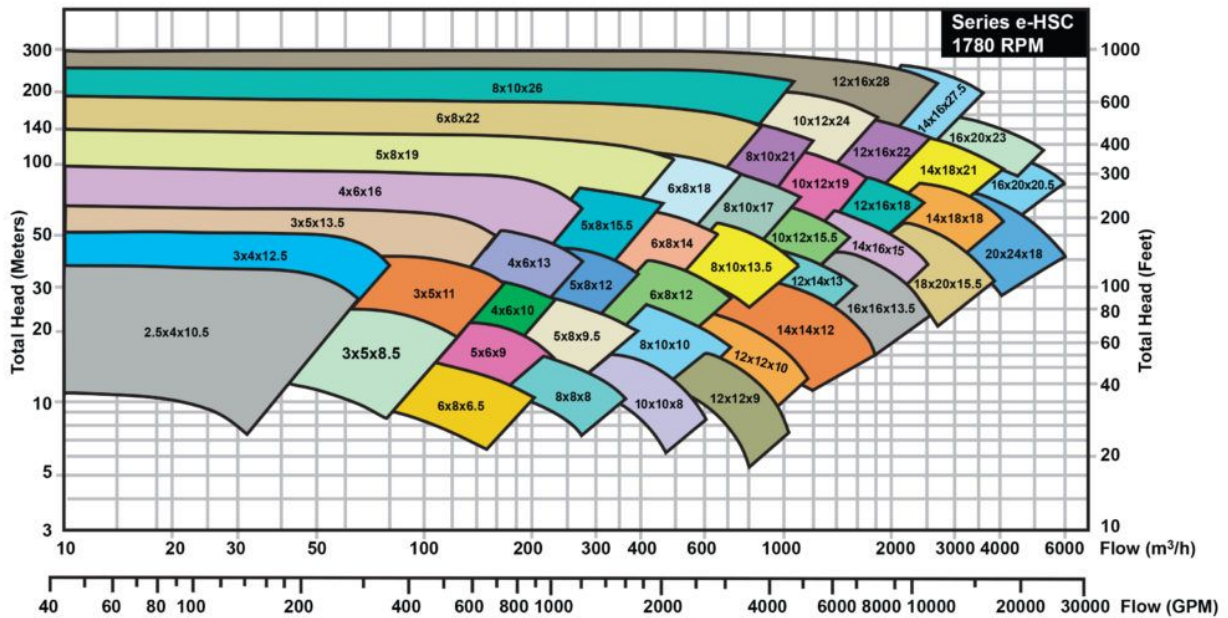
The B&G e-HSC series double suction pump was designed from the ground up to meet the needs of the heating, cooling, and plumbing systems we see in institutional, commercial, and water process systems. Let's look at a few highlights of this new pump.

## First Base: Energy Efficiency and the e-HSC Double Suction Pump

The first thing they set out to do was to improve the efficiency of split case double suction pumps. They already have the highly efficient VSX series double suction pumps which has a top suction and top discharge model as well as a side suction top discharge model to save floor space. Using the latest technology, the global engineering team at Xylem went to work and the results are some of the most efficient pumps in the game.



The sheer number of pumps, over 90 models, assures the engineer that their GPM capacity will always be right in the sweet spot of best efficiency. When we couple the e-HSC with the VSX series of double suction pumps, the engineer can find the most efficient pump for any application.



## Second Base: Built for the Long Lifespan You Expect from B&G

The end users, the people who own the pump, clearly demand Bell and Gossett for its robust and long lifespan. The engineers at B&G took that expectation seriously when they designed this new pump. This pump was designed primarily for the building trades market, specifically for heating, cooling, and plumbing systems. They selected the materials of construction from the impeller through the bearings, seal, and shaft across the coupler and all the way down to the base with our market in mind.



This design employs a shorter stainless steel shaft for a reduced L/D ratio providing longer bearing and seal life.

- This pump has bearings with a L10 rated lifespan of 100,000 hours. Put in perspective, if this pump ran 24 hours a day, seven days a week, within its performing range it would have a bearing lifespan of almost 11 ½ years. And that's at full maximum capacity. It does not even consider the easier variable speed operation most of these pumps will see.
- This pump has a silicon carbide seal with an internally flushed chamber for long, trouble-free life.

These are just a few of the many life-extending features of this pump.

## Third Base: Ease of Maintenance and Service

When I started in this industry over 40 years ago, it did not take me long to understand how easy it was to service B&G pumps. I remember Andy Sturgeon, a prior RLD principal, having me try to replace a bearing in a competitor's pump while our phone operator, a 62-year-old, 4-foot-tall lady, replaced the bearing in a VSC pump. I did not even have the bolts off the competitor's pump before she was done with the service. That's something that gets burned into your memory.

The e-HSC continues in that tradition. This pump comes standard with:

- A spacer style coupler that allows service of bearings and seals without moving the motor and destroying the alignment.
- A four bolt cover on either end so bearings and seals can be inspected and replaced, if necessary, by one maintenance person.
- Jacking screws to assist in the serviceability--decades after it's installed. Ports providing easy access for temperature, pressure and vibration sensors.
- A QR code which will allow the owner to access parts lists and availability, maintenance and repair instructions, and videos all while working on the pump.

There are even more features, but this article is called Monday Morning Minutes -- not Monday Morning Hours.

## Home Plate: Competitively-Priced and Easy to Select

The reality is we live in a world where the construction and renovation of building systems are often competitively bid. Bell and Gossett recognized this as they were designing the pump, and even with all of its owner benefits, it is still priced competitively.

In addition to competitive pricing, this pump is easy to select, schedule and specify. The B&G pump selection program, ESP – Systemwise, is available at the click of a mouse.

This horizontal split case double suction pump, the e-HSC, gives a side suction, side discharge piping arrangement that many competitors also provide. We continue to offer the space-saving VSX-VSC with its top suction, top discharge design and the VSX-VSCS with its side suction, top discharge design.

Check out our recent Monday Morning Minute, “Department of Energy Pump Standards – Modify Your Specification”.

In the next R L Deppmann Monday Morning Minutes, we'll start a journey to review the specification for double suction pumps along with enough description so you understand exactly what you are specifying.