

Too Much Information? Not When Selecting Pumps –

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Too much information, or TMI as it's called in social circles, is a slang term meaning *"I really didn't need to know that"*. It's used every day in high schools all over the world, on Twitter and in the lunch room at your workplace, but it's never used by the applications and technical sales engineers who size your pumps. At SANI-PUMP, we utilize several tools which assist us in sizing and recommending the correct pump for your specific needs, including pump sizing programs, calculations and conversion software and **well over seventy years of experience and knowledge in our sales and technical engineering departments.**

The first task in sizing the proper pump is to obtain as much information about the client's application as possible. Let's review some of the data we request and why it's important.

Flow Rate Usually one of the first and most important required data, because in certain environments like breweries, for example, there may be a need to run the pump at a lower speed to prevent damage to the product, but require a high speed for CIP. This is accomplished with the use of an AC inverter, a.k.a. a VFD.

Discharge and Suction Pressures must be calculated to get proper performance. This is the reason we ask questions like line size, vertical and horizontal feet of pipe run, number of elbows, tees and reducers, presence of spray balls, filters, heat exchangers, etc. All of these factors combined tell us the friction loss in the application and is calculated and converted into TDH, or total head-in-feet. The source of the liquid entering the pump inlet, like from an open tank, is critical to ensure it will be adequately fed to the pump.

Fluid Information will assist us in selecting which pump is best suited, Rotary Lobe, Piston, or Centrifugal Pump.

Temperature Selecting the right seals and elastomers for each application, will result in minimal maintenance and down time. In the case of Positive Displacement Pumps, it could also determine if the possibility of thermal expansion exists, in which case, undersized rotors would come into play.

Seal Type is an important choice for the long-term performance and reliability of the pump selected for your application. Is the fluid abrasive or tacky? Does it "set-up" and crystalize when cooled? Single mechanical or double mechanical, carbon or silicon carbide material. FKM, EPDM or Buna? We will help you make the right selection. The primary reason seals fail is improper seal selection. Selecting a seal of improper geometrics can result in abnormally high friction and wear. In short, improper material selection can result in material failure or accelerated wear, causing costly down time and emergency parts purchases.

Viscosity is important information to the determination of what type of pump to use. Higher viscosity liquids won't move with a centrifugal pump and extremely high fluids may even cause suction problems which need to be considered.

Specific Gravity is necessary in determining pump model selection as well as power required to run it.

Power Requirement accuracy is essential and we will determine the horsepower and speed requirements for you. What is often left unknown or unspecified is what type of motor enclosure is required. We offer Premium Efficient TEFC, wash down, stainless steel wash down, or explosion proof enclosures as well as special service motors like 575volt and 50Hz power.

To help you select a pump now, we've created a "Pump Application Data Worksheet" which ties together all of the information listed above. Once completed, we will have the necessary information to prepare a quotation for a top-quality pump, specific to your needs. It's available right on our website in the C-Series tab, then select Data Sheet. www.sani-pump.com Fill out the sheet with as much information as possible and email it to jmccormick3@att.net