

Why Accessibility is the Number One Factor to look for in a Diaphragm Seal System Supplier

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Abstract

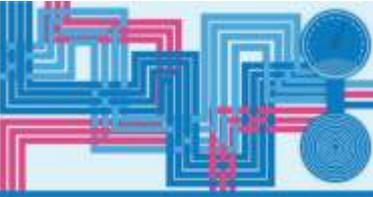
Everyone managing a part of a production plant for the petro-chemical industry wants to maintain a continuous and high output, safely and efficiently. Having control information from instrumentation is essential, as it provides the necessary adjustments needed to keep the output steady. However, (un)scheduled downtime due to pressure measurement failure or unreliable or failing measurements seems unpreventable and are cumbersome to fix, especially with pressure being the most measured entity. And managing this day-to-day cause of stress, often takes the focus of structural and long-term improvements. To what extent those issues slow your processes down and consume your valuable time depend heavily on who you select to be your service provider. Choosing the right supplier allows you to focus on activities that add value to your business and maintain the promised process output.

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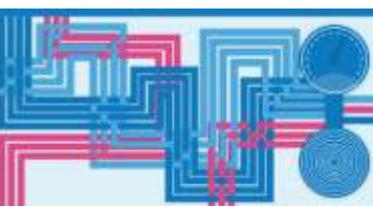
Why accessibility is the number one factor to look for in a diaphragm seal system supplier

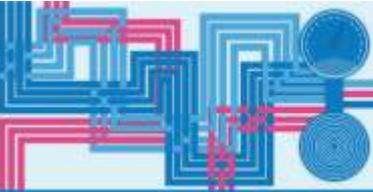
Everyone managing a part of a production plant for the petro-chemical industry wants to maintain a continuous and high output, safely and efficiently. Having control information from instrumentation is essential, as it provides the necessary adjustments needed to keep the output steady. However, (un)scheduled downtime due to pressure measurement failure or unreliable or failing measurements seems unpreventable and are cumbersome to fix, especially with pressure being the most measured entity. And managing this day-to-day cause of stress, often takes the focus of structural and long-term improvements. To what extent those issues slow your processes down and consume your valuable time depend heavily on who you select to be your service provider. Choosing the right supplier allows you to focus on activities that add value to your business and maintain the promised process output.

In this document we'll first address the most common challenges for instrumentation- and maintenance managers in the (petro)chemical industry, and how this puts a heavy burden on the day-to-day operations keeping the factory up and running at the highest levels. Subsequently, we will emphasize why accessibility and communication are important to prevent or resolve these challenges.

Over the last few years, we have observed a handful of main trends that make it harder to get mechanical instrumentation issues resolved fast and effectively.

1. **Efficiency and load:** every day, more is expected to be done in less time with limited resources. There is a growing administrative load and an increase in compliance requirements. Everyone in the plants is working to produce as much product as possible in the most efficient, most safe, and most reliable way, according to the strict regulations and guidelines.
2. **Complex decision making:** mechanical instrumentation is a complex world with lots of variables and a day is never the same. Many times, decisions need to be balanced with several factors in mind (safety / reliability / durability / price / contingency cost).



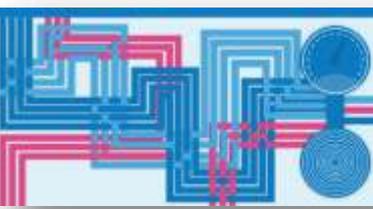


Too much to do, to check, to discuss and to decide in a day. Especially considering the growing shortage of capable technical personnel and a significant knowledge drain in the field of mechanical instrumentation within the petrochemical industry. This is due to the retirement of employees that have been educated in mechanical instrumentation. Nowadays, it is a discipline that new employees no longer master. Therefore, there is less and less understanding of the details of mechanical instrumentation with its virtues and limitations.

3. **One-size-fits-all solutions:** larger suppliers focus on large complex products and services with higher value and returns. They go for digitization and software developments and might not have the “mindset” to go the extra mile needed to solve the urgent issues in the field pragmatically. Therefore, it is increasingly more difficult to reach out to specialists or to get personal attention for your hardware. This is unfortunate, as pressure is the most measured entity and takes place in the harshest process conditions. It is essential that these diaphragm seal systems are of the highest quality, to ensure the most durable, reliable, predictable, and safe measurements.



Example of a slightly unusual way to use diaphragm seal systems: flow measurement by means of a differential pressure measurement. This is especially useful when there are elevated process temperatures or corrosive applications.



Exploring accessibility

So, you might wonder. What makes a good supplier? You want your supplier to unburden you and guide you through the process, so you can fully concentrate on your daily work. The ability to get service from knowledgeable and reliable personnel who think along and are pro-active with solutions should be standard within companies.

So then, what factors do you consider when selecting your instrumentation supplier? It is our strong conviction that the number one factor is **accessibility**. Because proper communication between you and your supplier results in the right engineering and failure could become a problem of the past. Let us try to explain why.

The benefits of accessibility

So where do you turn to if you want all the information quickly and be assured that someone helps you out for your pressure instrumentation issues? So that you can spend your time focusing on the many other issues that are on your desk? Especially for the critical diaphragm seal assembly, you require a partner that helps you solve the issue, who can increase your uptime, and takes ownership of the process.

1. Quick access to a Specialist in diaphragm seal systems

It is obvious that you want a supplier that has experience in building similar systems or knowledge about every asset of a diaphragm seal component. But have you ever considered the added value of a supplier that is easy to contact? A supplier who always has the specialist on the front line, ready for all your questions or concerns? A specialist who speaks your language, is backed by design and engineering principles, and can fill in your



Example of specialists' solution: a series of pressure transmitters with direct mounted blind flanged diaphragm seals with a temperature cooling option. This temperature cooling system reduces the elevated process temperature of up to 400°C to below the temperature limitations the pressure transmitter sensor can handle.

knowledge gaps by thinking beyond the surface of the issue you are facing. And since it is the core of the business of the specialist, this is what they do. Day in and day out. How nice would it be if that specialist is accessible to a level that starts to feel like they are your direct colleague?

2. Access to experience and knowledge of this specialist product

So you need the specialist to quickly guide you through all the small details. But you also need someone who understands the big picture. The engineering, quotation, manufacturing and supply of diaphragm seal



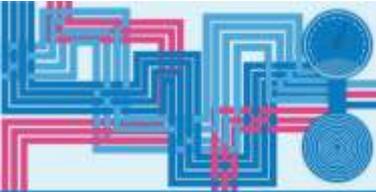
systems is often a large and complex logistic puzzle. Gathering all required information in the chain of commands via the different channels from end-user to EPC to system integrator to the diaphragm seal specialist is a challenge. Larger projects often consist of a large variety of different constructions, materials and components. Once engineering has been done and instruments are designed, the turnaround time is a critical factor in the pricing and lead time of the instruments.

3. Access to the manufacturing knowledge

Getting all the information structured and collected in a quick and timely manner and getting all people involved aligned is the job you should entrust to your supplier. They have access to the supply chain, by having many of the manufacturing processes inhouse and having materials on stock. It would be even better if your supplier is “around the corner” and has a strong grip on managing the logistics around the diaphragm seal system integration.

4. Access of knowledge regardless of pressure transmitter brand

And lastly, your supplier should really know the market and all the pressure transmitter manufacturers and can communicate with all those parties regardless of communication protocol. That is how they can tailor components for each transmitter brand and types. And have all the test equipment and tools to properly test the instrument to the maximum pressures possible. They know what is possible and can design with the customers' interests in mind.



Are you ready to experience our services?

An accessible supplier has a strong team of specialists who are readily available, understand your problem and realize that it is not only about solving the defect but also about the speed with which this is done and the guidance and timeline provided.

Let us deliver our promise

At Badotherm we have learned from interacting with companies in the petrochemical industry for decades that accessibility is paramount and have translated those needs into the service we offer to the market. As a manufacturer, we own every part of the process of the diaphragm seal manufacturing and assembly to the pressure instrument. Hence we have access to all the needed information to supply our customer with a quick response, being it a quick response to an engineering question, a swift response for a quotation with lead times adjusted to the requirements. And we can offer support on topics related to logistics such as lead time, urgent deliveries and going that extra mile. Especially because of our headquarters being in Dordrecht, only 45 minutes to large industrial sites of Antwerp and Rotterdam, and our other offices being located near large industrial areas.

Do you recognize yourself in the challenges as described above? Are you dissatisfied with the way in which your diaphragm seal systems challenges are being solved or repairs are being handled? And are you interested in how Badotherm does it?

Contact our team of specialists, who are happy to tell you more.

[Contact form](#)

or email us at info@badotherm.com

Badotherm! The diaphragm seal system company

