

Application Case Study: Cutting OEM Delivery Times with Strategic Instrumentation Sourcing



In the fall of 2020, industrial manufacturing was in a precarious state. Several concurrent ‘world’s first’ global dilemmas were in full effect, compounding atop each other to the point that worldwide manufacturing was functionally brought to its knees.

Raw materials and finished products alike were very difficult to procure, produce, and distribute at a time when many goods were hitting unfathomably high levels of demand. When the Medical

Device industry was faced with either finding new ways to produce its equipment or leaving medical professionals without the life-saving devices they required, several key OEMs turned to Whitman Controls' Strategic Instrumentation Sourcing practices for answers.

About Us

As a veteran-owned business, Whitman Controls is dedicated to supplying premium quality, reliable, technologically advanced instrumentation for use in nearly any OEM application. Our Bristol, CT manufacturing facility embodies over 40 years of engineering, fabrication, and customer service expertise, serving both end-user and manufacturing customers nationwide through direct and distribution channels.

Application Summary

In the Medical Device arena, a product category known as Medical Gas Distribution and Supply Equipment was hit especially hard by manufacturing and procurement constraints. Hospitals, clinics, medical transporters, emergency responders, and home therapy users all require these specialized devices in order to route medical-grade oxygen, carbon dioxide, nitrogen, medical air, and nitrous oxide from bulk containers to supporting systems and ultimately direct to patients.

Most of this equipment is automated, using instrumentation and control devices to properly monitor and meter out the correct flow of gas and liquids, and to alert staff when errors may occur. Pressure sensors, pressure switches, flow switches, and temperature sensors are all commonly found in this equipment.

The Challenge Faced By Texas Medical Device & Our OEM Customers

As 2020 neared its final weeks, the demand for medical gas distribution and supply equipment was at a breaking point. Given the harrowing logistical issues with their normal contract manufacturing centers overseas, multiple US OEMs responded by quickly moving equipment assembly and parts supply back to domestic facilities where they had better control.

Clearly, it was not viable to wait on foreign suppliers, given such unprecedented issues as lack of raw materials, foreign factories shuttered by their health departments, low worker availability, and shipping channels maxed out several times over.

While local markets were able to provide most of the necessary components, instruments and sensors remained a challenge, having few suppliers who could source entirely with local means. Sensor vendors were quoting lead times in excess of 6 months, and also had no time horizon for when lead times would return to normal. Given these excessive time frames, a solution was required both for critical immediate as well as long-term needs.

“We were being quoted lead times of 24-48 weeks – what used to take a few weeks now was going to take many months [to deliver sensors]. We were even being told that this was the new normal, and we should get used to it. Whitman Controls proved that wrong with consistent 2-4 week lead times during a time of broader industry disruption.

[Whitman’s] Strategic Sourcing practices saved a lot of very costly, no-win decisions.” -

Senior Buyer, Medical Device OEM

Solution

Over several weeks, Whitman Controls received a handful of Request for Quotation inquiries from Medical Gas Distribution OEMs, and we knew these requests must share a common thread. In discussing the issues with these customers, Whitman immediately recognized that the issue was instrumentation lead times, and we knew exactly how to tackle that concern. With a long history of erring on the conservative side of inventory management, we already had the tools and processes ready to deploy. We jumped into action in several key ways:

- Whitman performed thorough customer onboarding assessments, fully understanding the clients’ exact instrument needs, their volumes, the priorities in their backlogs, and their procurement process.
- Solving immediate priorities first, we immediately shipped direct-match items from stock – this resolved about half of the orders instantly, thanks to our extensive in-stock volumes.
- Next, Whitman assigned project engineers to specify devices that would meet the users’ needs, selecting from tangent products that weren’t exact matches to the OEMs’ specifications, but could work with minor tweaks on both sides (such as changing output

scale ranges or adjusting electrical connection needs). This effort resolved another quarter of the orders.

- Where no good crosses could be found in catalog configurations, Whitman engineers designed and built custom sensors, shipping these custom units in an unheard-of 1-2 weeks. With these custom solutions, we resolved the remaining quarter of the open orders with complete success.
- As a value-added benefit, Whitman provided wiring harnesses and custom wire lead lengths on many of the orders placed, further reducing the OEMs' time to fabricate their equipment.
- Looking to the future, Whitman set up multiple long-term sourcing solutions for several of the OEMs that wished to make Whitman their primary supplier, including: recurring automated order placement, assured minimum stock levels on mission-critical components, adopted catalog numbers for custom-spec parts, and set up online accounts for fast reordering through our E-Store at any time night or day.

Results

Within six months of partnering with Whitman Controls, our Medical Gas Distribution and Supply Equipment OEMs recognized incredible improvements in their procurement process. Instrument lead times were drastically reduced, enough critical parts were delivered in the short term to take pressure off of manufacturing times, and several long-term work processes were put in place to maintain or beat lead times on future orders.

All in all, Whitman's partnership with these medical device OEMs has been rewarding for all parties involved – our customers have obtained the lead times that they demand, and we've earned the privilege of becoming their preferred instrumentation vendor.

Data Bullets

- **82%** reduction in standard Instrument Lead Times (from 4-6 weeks to 5 days)
- **88%** reduction in custom Instrument Lead Times (from 10-12 weeks to 10 days)
- **75%** reduction in order placement time (using Whitman's E-Store)
- **100%** order fulfillment success

Here at Whitman Controls, our values drive us to provide the highest level of servant partnership that you can find. To discuss your applications or to learn more about our



Whitman Controls
<https://whitmancontrols.com>

capabilities, please contact us at (800) 233-4401, via email at info@whitmancontrols.com, or online at www.whitmancontrols.com.