

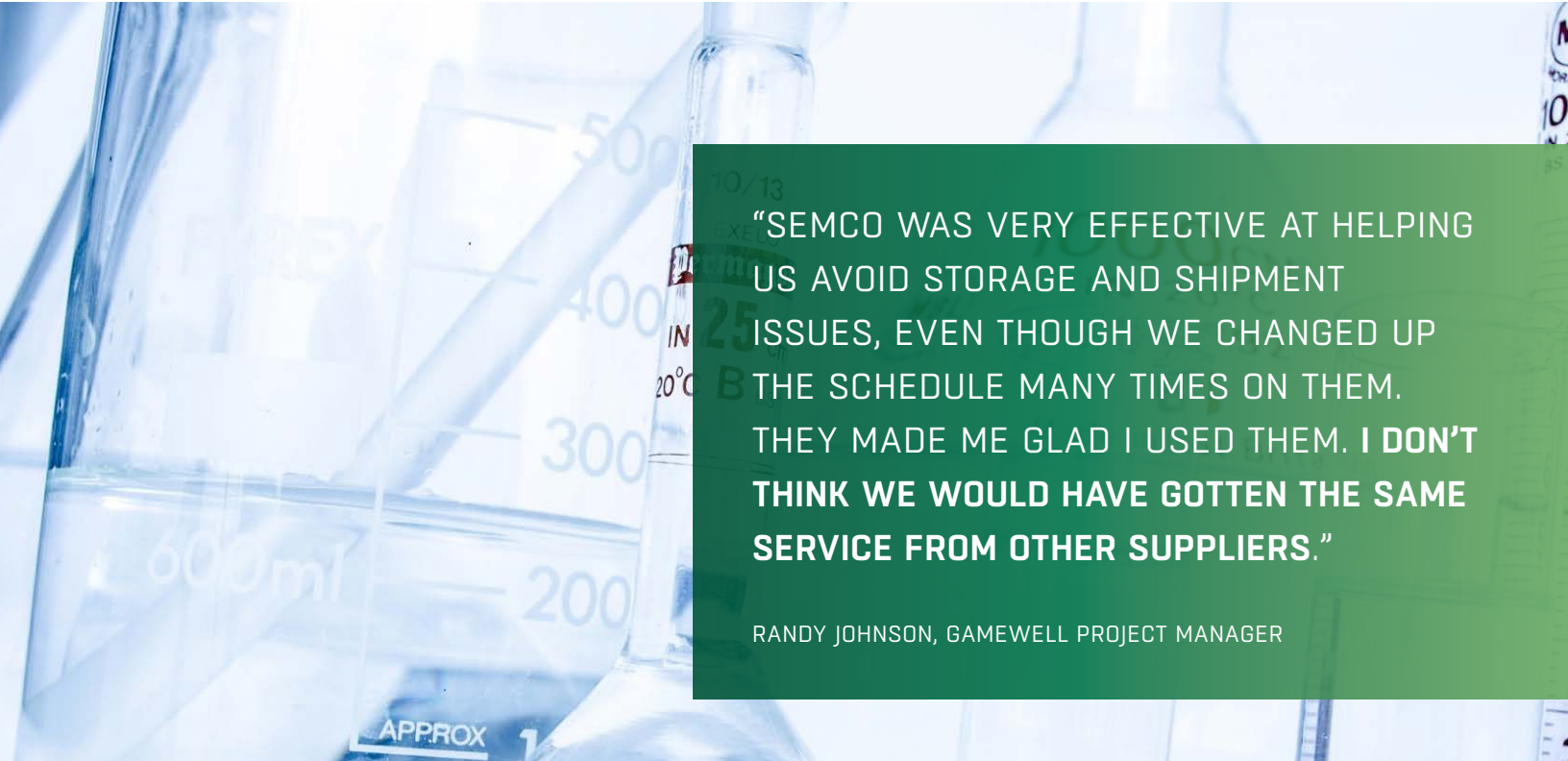


# NOVARTIS MANUFACTURING FACILITY CASE STUDY

## **RIISING TO THE CHALLENGE** **NOVARTIS, HOLLY SPRINGS, NC**

Like all large pharmaceutical construction projects, the new Novartis manufacturing facility for the pandemic flu vaccine in Holly Springs, NC involved a tremendous volume of paperwork that Gamewell & SEMCO had to provide to Novartis to submit to the FDA for final validation of the facility, along with extra quality assurance measures. Combine that with the coordination of any large sheet metal duct project and you begin to understand why pharmaceutical work is such a niche business.

It pays to have a specialty. Gamewell Mechanical Inc., based in Salisbury, North Carolina, has been serving the highly specialized pharmaceutical industry for over 30 years, as well as other advanced technology facilities. According to the company's president, Mike Heilig, Gamewell started doing pharmaceutical "before pharmaceutical got hard," meaning



**“SEMCO WAS VERY EFFECTIVE AT HELPING US AVOID STORAGE AND SHIPMENT ISSUES, EVEN THOUGH WE CHANGED UP THE SCHEDULE MANY TIMES ON THEM. THEY MADE ME GLAD I USED THEM. I DON’T THINK WE WOULD HAVE GOTTEN THE SAME SERVICE FROM OTHER SUPPLIERS.”**

RANDY JOHNSON, GAMEWELL PROJECT MANAGER

that his company entered pharmaceutical construction before the regulations became so complex. As such, the company has evolved along with the industry and its increasingly stringent construction requirements.

The new Novartis manufacturing facility for the pandemic flu vaccine in Holly Springs, NC is one of those projects that have helped sustain Gamewell through these tough economic times. Like all large pharmaceutical construction projects, the job involved a tremendous volume of paperwork that Gamewell had to provide to Novartis to submit to the FDA for final validation of the facility, along with extra quality assurance measures. Combine that with the coordination of any large sheet metal duct project and you begin to understand why pharmaceutical work is such a niche business. However difficult, it has allowed Gamewell to acquire a set of skills that keeps them competitive.

### **Reliability Beats Low Bids**

Mike Heilig knows that getting the job is only the first step toward making a profit. The sheet metal business can be particularly unforgiving when project delays cause unanticipated increases in labor and storage costs. These costs can quickly shatter any potential profit a contractor expects to obtain by accepting the lowest bid from a duct supplier. Herman Henson, Gamewell Superintendent for the Novartis project, is well aware

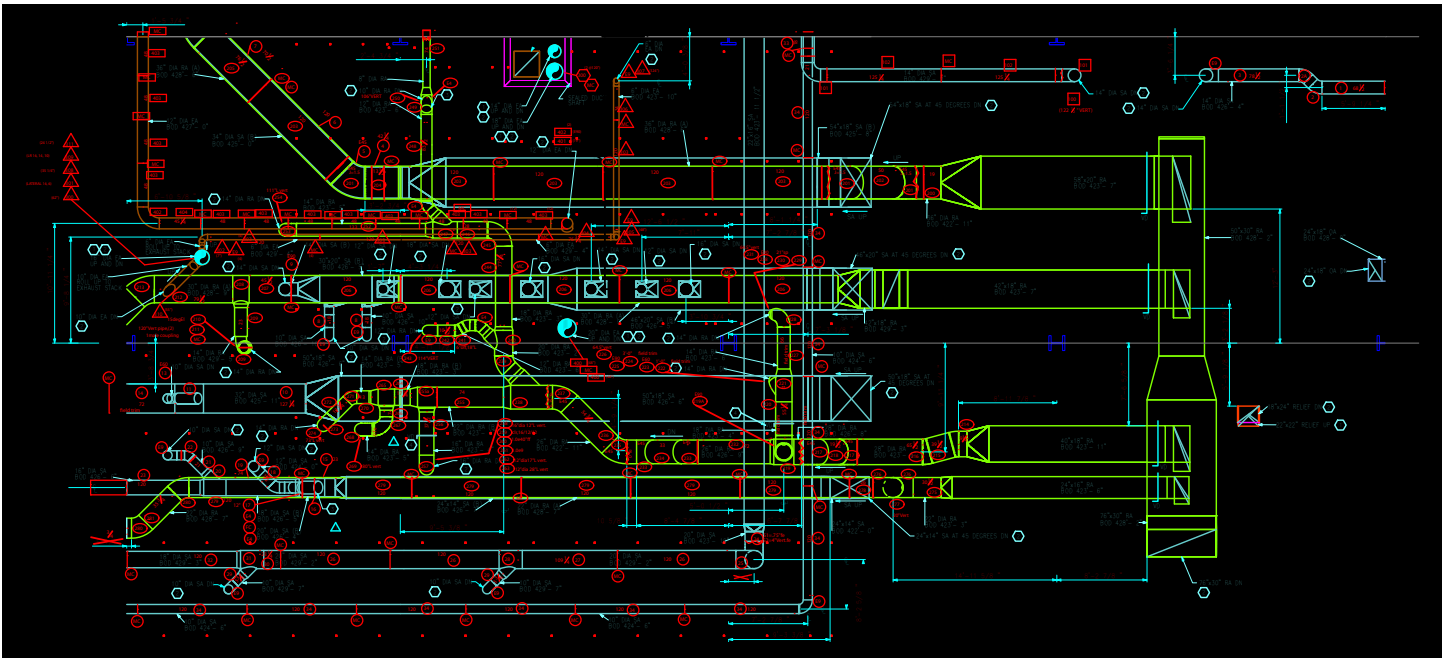
of this, which is why he insisted on SEMCO as the duct supplier for the Novartis project, even though there were lower bids.

“I knew what we needed for that project,” said Henson, a 35-year veteran in the mechanical contracting business. “It was going to have to be a drawing-by-drawing shipment with very complex scheduling. In the past, SEMCO has always done a good job with jobs like that.”

According to Henson, a delay in delivery can have a very costly domino effect on a job like Novartis. If duct doesn’t arrive on time then that holds up other subcontractor work – and Gamewell could be held liable for the extra labor cost incurred by these other subs. From the standpoint of Gamewell’s own labor, a missed delivery could mean relocating over a hundred workers to another jobsite, losing a half-day or more of labor. It’s a scenario that most contractors have experienced at one time or another and one that all want to avoid.

### **Making It Work**

Novartis was a complex duct job with multiple systems, and duct sizes, and pressure classes – plus all of the certification requirements for welds and materials that are typical of pharmaceutical work. There simply was no room for error – certainly not in terms of delivery. Jason Lyons, project manager for SEMCO, recalled the challenges supplying the Novartis project.



CAD drawing showing the 5 different systems needed.

“The initial schedule for the Novartis project, approximately 5 months from start to completion for the ductwork, seemed to be on the edge of physical impossibility. Midway through the project, the onsite material storage area was exhausted, but Gamewell and SEMCO knew that in order to meet the aggressive schedule, production and shipment had to continue,” said Lyons.

To make this happen, SEMCO worked closely with their carriers to keep material flowing out of the shop and into trailers, while sitting on select loads in order to allow Gamewell to get material hung and make way for new. In the end, 96% of the material was shipped in a 4-month period – spanning most of the allotted installation time.

Without time or space for storage, SEMCO’s take-off-to-build department detailed the plans to exact measurements and provided custom length pipe sections between fittings to ensure that all taps, transitions, and changes in direction were located spot-on without the need for time consuming field adjustments. Furthermore, SEMCO provided full-bodied fittings in lieu of field installed loose taps, and where beneficial, fittings were customized to eliminate as many field joints as possible in an effort to save Gamewell field labor.

“SEMCO was very effective at helping us avoid storage and shipment issues, even though we changed up the



Precision cut custom length spiral pipe.

schedule many times on them,” said Randy Johnson, Gamewell Project Manager on the Novartis project. “They made me glad I used them. I don’t think we would have gotten the same service from other suppliers.”

On projects like these, timing is everything. Gamewell Mechanical has cultivated a reputation for reliable service in demanding pharmaceutical projects—a reputation the company isn’t willing to risk on a low bid supplier who can’t help them rise to the challenge.



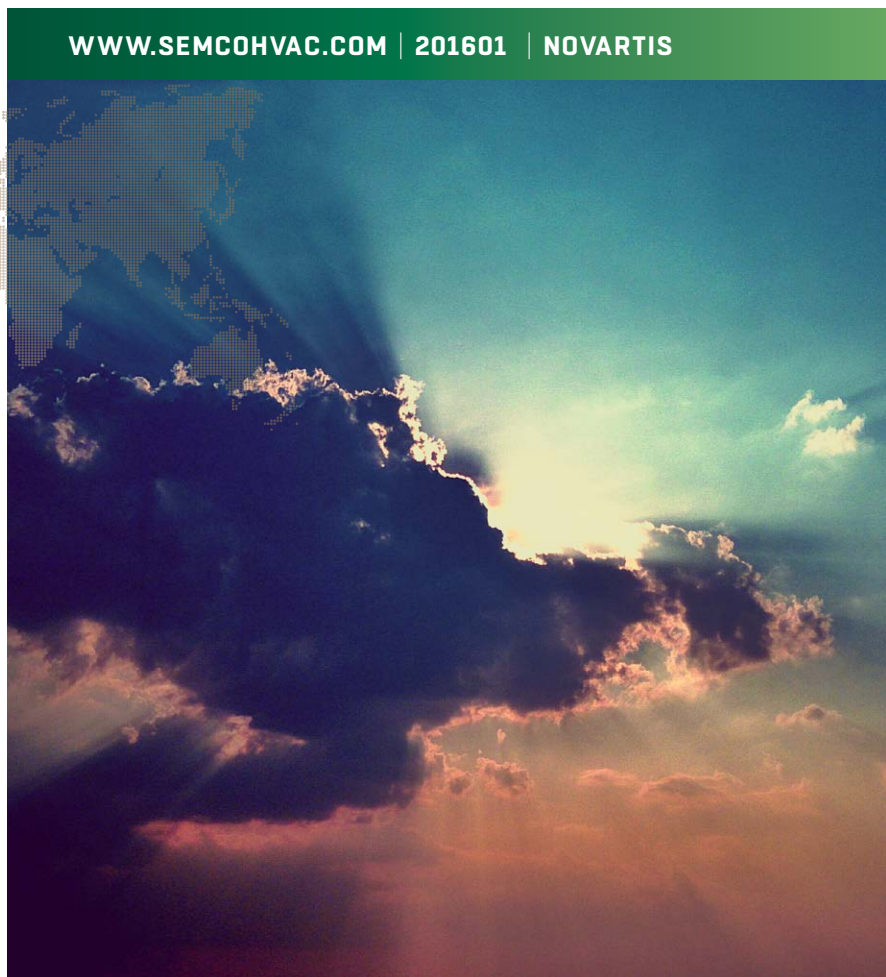
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