CryoService

Plans for the Future with Descartes

Founded in 1970, UK-based CryoService provides its clients with cryogenic and specialty gases that are used in a wide range of applications in the Science, Leisure and Industry fields, including food processing for modified atmospheres such as salad bags – storing of biomedical samples – such as fertility treatments and blood – in nitrogen freezers; medical oxygen for hospitals; and the supply of nitrogen, argon and oxygen for laser and profile cutting for the metals and fabrication industries.

Of the company’s 275 employees, 100 are drivers responsible for making deliveries from one of 12 depots to 10,000 customers throughout the United Kingdom and Ireland. To ensure clients get the right volume of gases delivered, CryoService forecasts usage based on previous deliveries.

Progressive Company Embraces Visionary Thinking

As a progressive company, CryoService has always prided itself on being ahead of the curve with its use of technology to schedule delivery routes. While the company had been using Descartes’ Route Planner RS solution for more than a decade to address its need for flexible route planning, a decision was made to re-evaluate its existing technology systems to identify potential gaps and opportunities, ensure it was adequately prepared for the future, and at the same time further develop its responsiveness to customers.

According to Karen Hugill, Planning Manager at CryoService, during the evaluation the company uncovered a few areas of opportunity, “While our operations were already efficient, we wanted to look for new ways to deliver even better service. For example, we realised that if our scheduling software could query existing route plans, we could easily determine where a last minute or urgent customer delivery could be added to the schedule.” Although CryoService proactively schedules deliveries for 95% of its customers, it does receive inbound calls to request last minute deliveries.

According to Hugill, “We needed to find a way to better systemize our planning knowledge for use in the automated creation of route plans. That meant capturing all the history and account data that our schedulers had so that we could train new people into the role, or swap and cover those positions when needed.”

“With Descartes it was very easy to bridge the gap, and now that we have a fully integrated system, information is always live and updated in real time.”

Karen Hugill,
Planning Manager at CryoService
CryoService evaluated a variety of solutions providers, including consultants and software vendors. “We evaluated about 30 different companies, of which 12 submitted tenders. We then narrowed down the shortlist to four companies for closer review,” says Hugill.

A decision was made to implement Descartes Route Planner, a configurable, on-premise enterprise solution for organisations with multiple vehicles, locations and stops. According to Hugill, “Our decision to continue working with Descartes was not influenced by the fact that we were already using their Route Planner RS (solution). We started with a blank slate, and after looking at the different scenarios we found that out-of-the-box software solutions were designed for 90% of businesses that have simple routing needs, but that wasn’t us. Descartes provided the flexibility to tailor their offering to fit our requirements.”

During the implementation, CryoService also took the time to make changes to its order management and customer service management systems to ensure the integration between all three solutions would be seamless.

Optimising Performance Lowers Operational Overhead

According to Hugill, the work done to enable the seamless integration with existing systems was well worth the time and planning. She is pleased with the way Descartes Route Planner HTML messages interface with their other systems, and says, “It was very easy to bridge the gap, and now that we have a fully integrated system, information is always live and updated in real time.”

Descartes also integrates with the CryoService application (CORS) used to predict each customer’s gas usage based on data from statistical modeling or captured from telemetry systems on their gas tank. CORS runs continuous updates based on recently delivered gas volumes and product usage, and predicts changes in the gas product to be delivered. Orders are then opened and updated in Descartes Route Planner where delivery schedules are automatically balanced for optimal performance.

CryoService is now more proactive in scheduling the 650 deliveries it makes each week day and has greater visibility into future deliveries. “Instead of creating a run for the next day, we can now look forward two weeks. We are also more effective at load balancing, and if we have a last minute customer delivery, the system can easily be queried to determine the best place for it to fit into the schedule. For urgent orders, we can now get an answer back to our customers even more quickly than before.”

Descartes Route Planner is continually optimising CryoService’s dynamic route schedules in the background, creating plans for up to two weeks’ worth of customer orders. New orders are added daily and automatically integrated into the schedule. Once approved, schedules are published and sent to handheld PDAs used by drivers. Deliveries can also be added while drivers are on the road.

According to Hugill “Everyone in the organisation now has the same level of visibility into scheduled routes. Information is continually fed into the system, and routes are updated automatically and are self correcting.”

Looking ahead, CryoService plans to use Descartes Route Planner to suggest additional deliveries. “Even though routes may be full, the system will determine whether an additional customer call can be made – all without scheduling staff having to go through the route plans,” explains Hugill. “Using this feature will enable us to be even more creative in optimising our routes and servicing our customers.”

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**Challenge:**

CryoService wanted to identify potential gaps and opportunities within its currently routing technology, ensure it was adequately prepared for the future, and at the same time further develop its responsiveness to customers.

**Solution:**

Descartes Route Planner integrated seamlessly with CryoService’s existing technology investments. It provided the flexibility to proactively schedule deliveries and achieve visibility into its delivery operations.

**Results:**

- Delivery information is always live and updated in real time
- Delivery schedules are automatically balanced for optimal performance
- Deliveries can be scheduled up to two weeks in advance