

BACKGROUND

Air Liquide are a global leader in providing industrial gases and services across a number of industries including medical, chemical and electronic manufacturers. Founded in 1902, they now serve over 3.8 million customers and patients in 78 countries. They are committed to sustainability, with considerations for climate change and energy transition at centre of their business strategy.

We were thrilled to have the opportunity to work with their team in the Northwest of England to provide a system that not only fit their requirements but aligned with their commitment to reducing environmental impact.

CHALLENGE

Air Liquide came to us with a need for a CO2 pack filling system. This was to accommodate new business through supporting the micro-brewery industry that is currently emerging and to also support the growth of Air Liquide and Energas in the Northwest. This region is a relatively new area of opportunity for the company and over recent years has grown substantially to become a PowerZone in a strategic point. To supply their diverse range of customers, Air Liquide needed CO2 packing capability that was local and able to full both fresh and liquid gas.

SOLUTION

We worked with Air Liquide initially to understand what their needs and requirements were in any sort of solution that was to be implemented. We learned that they needed a system that would allow packs of up to 12 tall gas cylinders to be filled together in unison. More specifically, the system needed to be able to fill empty cylinders as well as top-filling half empty cylinders – a process not done previously in the business.

The system we developed for this involved these cylinders sitting in a cage together, where they are filled via the use of an indicator that was custom programmed by us. The way this works is that the Systec Indicator, with inbuilt I/O, sends a signal to an external relay that then turns on an auto-release to allow the gas to come through to fill the cylinders to the necessary capacity.

The indicator in question is a Systec IT6000E, one of our substantial, programmable indicator terminals that is designed for use in demanding industrial use. It is built within stainless-steel housing with IP69K rated protection, making it ideal for intensive environments.

RESULT

Since implementing the system on their site, Air Liquide have reported a huge improvement in the site's capability and the overall performance of their regional and national operations. Before this they had to transport both full and empty packs for off-site refilling around the country, costing money, extending lead time for customers, and impacting the environment.

This is no longer the case. With on-site filling capability via our system, customer satisfaction has improved thanks to reduced lead times and transport costs are no longer required. Their environmental impact and CO2 footprint is also minimised, thanks to our systems top filling capability, which has eliminated unnecessary wastage due to half full CO2 packs being blown down in transit.



Our team did a great job in providing the innovative top filling system. Air Liquide's Regional Operations Manager for the Northwest noted our engineers were "quick to react and work out a program solution to implement the top filling which has never been done in our business before."