

CASE STUDY

Failsworth



The issue

Trialling a new approach

The £2million Failsworth project required a 'fast-track' programme to achieve the overall project completion date.

Traditional construction techniques are to deliver all the supports and all the pipework and assemble on site at the Greater Manchester plant.

However, here given timescales and lack of assembly space we took a different approach. Instead we looked at key modules for the Failsworth project, considering which elements would be optimal, and decided to build and assemble them off-site.



The Solution

Suprafil are leaders in the field in the development of Nerada installations – and they took the opportunity to refine the process and evolve their solution on the new Nerada plant at Failsworth.

The programme was shared online on a common project website, accessible to the team at Suprafil and LiMA, so that all parties could see the model as it develops and track progress on site.

Our programme showed which modules were to be installed on which day. This allowed our team to track the progress and ensure we were consistently on, or ahead, of plan. The approach dramatically reduced the installation time by as much as 50% in terms of man hours.

The installation of innovative Nerada technology at Failsworth WwTw saw the introduction of Suprafil's 'off site' ethos. The Nerada solution is built in large sections of complex pipework – and constraints around haulage and crange on site posed challenges for Suprafil.

Another effect with this method was a reduction in the number of supports and fixings required. Instead we had common support structures holding up multiple elements rather than having supports for each individual part. This reduced on site drilling time.

The result

Pre-assembling the product meant a 30% reduction in the number of deliveries, a reduction in fuel, man hours, packaging and the carbon footprint. Suprafil also required only one crane on site. All of these economies created a financial saving to the client, and saved time.

The refined design and process built on Suprafil's previous Nerada projects – for example, reducing the number of fixings, which in turn has health and safety benefits as there is less drilling and hand vibrations for the workers. Less manual handling and working at height also reduced the health and safety risks. The factory build also ensured a tidier work area on site.

A previous job of a similar size took eight men around 20 weeks to complete, where Failsworth took four men 14 weeks to complete.

All of this saved time on site which means the project is inherently cheaper and safer.

Future projects will follow the Failsworth example and will be assembled off site. This will help to make us even more competitive.

