Innovative recycling

Interview with Jörn Ettenhofer and Oliver Thurnes

At its factory in Saarland, our customer Pyrum has developed an innovative thermolysis process for extracting pyrolysis oil from old tyres. SPIE is responsible for planning and constructing the energy supply systems there. Oliver Thurnes, Project Manager, and Jörn Ettenhofer, General Manager of the Building Technology & Automation operational division, were interviewed by the French journal *Mat Environnement*.

How was SPIE involved in the early-stage planning and realisation of the energy supply systems?

Oliver Thurnes: SPIE was heavily involved in designing and implementing the supply systems. When we won the tender, Pyrum had defined the objective and the scope of the required services, but all of the technical planning was still open.
These details were worked out in intensive discussions involving engineers from SPIE and Pyrum in order to best fulfil the customer's needs.
SPIE Buchmann has the internal expertise for such complex jobs, so we were able to manage everything related to supplying electricity. The teams set up the transformers and the middle- and low-voltage switchgear. We also took care of the wiring for all components, so the system can be handed over to the customer ready for use. One of the challenges was working in a very confined space with very strict safety regulations. It's an extremely precise process; millimetre precision is needed for the installation.

Was SPIE's expertise the decisive factor? What were the reasons?

Jörn Ettenhofer: As an independent multi-technical service provider, SPIE always aims to offer its customers the highest level of service. In this case, one of the things we could advise Pyrum about was how to safely implement a production system powered by gas turbines.

Oliver Thurnes: SPIE specialises in the planning of production facilities. So we suggested installing two-storey transformer stations. The need for this became apparent in the initial phase of the project, because it was clear that the customer needed as much space as possible for their production facilities. We needed a space-saving solution that still complied with all safety requirements.

From SPIE's point of view, how can the problems around two-storey transformer stations be dealt with? What's involved in the implementation processes?

Oliver Thurnes: When implementing two-storey transformer stations, we benefit from our extensive experience in previous projects. In this case, we met the challenge with a modified standard transformer from Scheidt, one of our trusted business partners.
First we built the foundation, then we used a lorry-mounted crane to stack prefabricated concrete elements. The challenge was that the top part, which alone weighed 33 tonnes, had to be positioned with centimetre precision so that the fixed part would hold.
Another difficulty was positioning the switchgear, with a weight of 700 kilogrammes per unit, at a height of 4 metres, while of course complying with workplace safety regulations to the letter.

Jörn Ettenhofer: At SPIE we're used to working in a very well organised team. We prepare for every step perfectly by always taking the risk assessments into account and anticipating the safety measures that need to be taken. That way we minimise the risks for our employees and provide our customers like Pyrum with the best possible service.

les usines de recyclage
de Pyrum en Allemagne

Pyrum Innovations est une société allemande basée à Dillingen, principalement engagée dans le développement, la construction et l'exploitation de technologies de recyclage dans les pneus usés, les déchets plastiques, les PREC, les mélanges, le bitume et d'autres déchets complexes. SPE Deutschland & Zentraleuropa, filiale allemande de SPE, leader européen indépendant des services multi-techniques dans les domaines de l'énergie et des communications, s'est vu confier par Pyrum un contrat pour l'installation clé en main de deux postes de transformation et le câblage des composants associés à destination de sa nouvelle usine de production d'huile pyrolytique.

This interview appeared in the French journal Mat Environnement >