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SciTeeX Installs Grit Blasting and Paint Room Facilities at Fluorocarbon Surface Technologies Ltd

Metallisation's collaboration with SciTeeX S.p. z.o.o. has yet again resulted in a hugely successful project installation. Metallisation and SciTeeX have been working together for over twelve years and have recently completed a major blast and spray room project for Fluorocarbon Surface Technologies Ltd. The SciTeeX Group has been active in the surface treatment industry since 1992 and today is an international organisation with a modern factory located in Poland.

Metallisation has been providing thermal spray solutions for over 90 years and prides itself on its commitment to the continual development of engineering solutions around the globe. The level of customer service offered by Metallisation is second to none. From initial discussions through to the installation, training and after sales service and support the company is there for its customers every step of the way.

Stuart Milton, Sales Director at Metallisation, says: "Metallisation has a wide range of expertise and experience in surface coatings and protection. Having a collaboration with SciTeeX enables us to expand and diversify our offering to a wider audience. Fluorocarbon Surface Technologies' requirement was absolutely perfect for SciTeeX. Their factory site in Poland is first class, utilising the latest production technology. The blast and spray rooms are of excellent quality and I am proud to facilitate the introduction of SciTeeX to UK businesses. We pride ourselves on the service we offer and SciTeeX has exactly the same business values as Metallisation, which is why our relationship works so well."

Fluorocarbon Surface Technologies is part of the Fluorocarbon Group, one of the UK's largest fluoropolymer processor and global supplier of PTFE, polymer related components and engineering plastics and stock shapes. It has a diverse range of customers around the world including the pharmaceutical and chemical industry sectors. This latest project has enabled Fluorocarbon Surface Technologies to expand its service offering and increase the range of coating solutions to its customers.

At the start of 2015, Fluorocarbon Surface Technologies approached SciTeeX with a requirement for a new grit blast room at its UK head office in Hertford. Metallisation made the first approach and liaised with SciTeeX and Fluorocarbon Surface Technologies to formalise the full scope which ended up with the addition of a paint room as well. Fluorocarbon Surface Technologies uses aluminium oxide grit for the blasting of carbon and stainless steel objects, which are typically large vessels for the pharmaceutical and chemical industries. These objects are then subsequently coated in Fluorocarbon Surface Technologies' high performance polymer coatings. The blast and spray rooms were needed to match the existing capacity of the oven used for curing the specialist coatings at the site. The greater capacity and confidence gained from having the new blast and paint rooms has enabled Fluorocarbon Surface Technologies to explore new business opportunities previously not available to them.

Following initial discussions with Metallisation and SciTeeX the Fluorocarbon Surface Technologies team visited SciTeeX's state of the art Polish production facility to see a full demonstration of the blast and paint room facilities. As part of its customer support the Metallisation team travelled from the UK to Poland with the Fluorocarbon Surface Technologies team to offer additional expertise, advice and support during the site visit.

SciTeeX engineered the standalone spray booths and extraction systems, both of which are produced in the factory in Poland. The Cabilux blast room, which is 4 metres long, 4 metres wide and 4 metres high, has a floor scraper and blast grit recovery system, which sits on a flat floor, with a small 150mm step up. The installation on a flat floor is key to the project and a major benefit to Fluorocarbon Surface Technologies, as it does not require any floor excavations. The in-floor recovery system allows the efficient use of the grit, as it gives an even cleaning and recycling of the grit, which improves performance and allows continuous blasting of large items while the grit is recovered, cleaned and recycled.

The blast room has a specially designed, roller access door in addition to the service door. High performance lights on the roof and each side wall ensure a bright working environment for the operator. A well-engineered dust extraction system with cellulose-polyester dry filter cartridges also remove the majority of airborne dust, providing a safe, efficient working environment. A full set of operator protective equipment is provided which includes a blast hood, helmet and protective gloves.

Fluorocarbon Surface Technologies blasts a variety of objects in the blast room, the largest item blasted so far is a 2.5m diameter vessel weighing in at approximately 1.5 tonnes. Due to the success, high performance and efficiency of the new blast room, Fluorocarbon is using it more frequently for the blasting of general items. The object being blasted in the photograph is a thermal level sensor used in the chemical industry.

The Venus spray booth, which is 7 metres long, 5 metres wide and 5 metres high, has a large roller door at both ends of the booth to allow products to be introduced from one end and fed straight through into the curing oven if required. The internal walls are coated with a white, peel-able lacquer that can be easily removed and replaced when an overspray build up occurs. There is an in-floor ventilation system that vertically draws the air from the roof mounted air intakes providing a very efficient extraction and filtration of overspray, which ensures a clean working environment.

The ventilation system includes a gas fuelled heater which enables pre-heating of the booth and maintains a consistent temperature during all weather conditions. This has proven to have a positive effect on several of the high performance Fluorocarbon Surface Technologies coatings that benefit from tightly controlled environmental conditions during application. The filtered ventilation system has also greatly improved the finish of the coated products as well as creating a cleaner working environment outside the spray booth. These factors greatly reduce re-work, which saves time and money, and creates an optimised finished coating for Fluorocarbon Surface Technologies' customers. Again, as with the blast room, roof and side mounted high performance lighting ensures perfect visibility for the spraying operators.

Fluorocarbon Surface Technologies applies both wet paint and powder based coatings in the booth, including ceramic based coatings for the pharmaceutical and food industries. There are plans in the near future to use the booth to produce dipped powder coatings with the introduction of a fluidised bed powder coating plant.

In the final stages of the production process SciTeeX invited the Fluorocarbon Surface Technologies team to visit the factory again, this time to sign off the 'Factory Acceptance Test'. Once again a Metallisation installation engineer accompanied the team on the trip to Poland. This is all part of the standard high quality customer service provided by SciTeeX and Metallisation.

Richard Saunders, Head of Production at Fluorocarbon Surface Technologies, says: "We are pleased with the two new booths, which were installed within the agreed timescales. In fact the project from start to finish was completed much quicker than we had expected. The SciTeeX team were professional, helpful and knowledgeable, which was really important to us. We were very impressed with the fabrication facilities at the SciTeeX factory. What surprised us was the fact we could see the rooms fully built and in operation at the factory before they were shipped out to us in the UK, it genuinely was a true factory acceptance test. The installation was just as smooth and professional. Both teams worked well together and everything was installed on time without any hitches. Overall this project has been a really good, positive experience."

The ongoing support provided by Metallisation is a key component of its commitment to excellent customer service, this project highlights the ability to supply and support such systems. Metallisation has the engineering technological expertise and, combined with SciTeeX's specialist skills and facilities at its Polish base, they can offer a wide range of bespoke solutions. Metallisation is happy to assess all blasting, painting and metal spraying requirements, working in collaboration with SciTeeX, to deliver tailored solutions for specific blasting and coating needs.

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