



Press release – September 16th 2013

SWS UK takes the most out of high performance Inobell sprayers

Established in 1985, SWS UK is **one of the UK's largest** manufacturers of physical security products, garage doors and awnings, **manufactured from** mild steel and aluminium. Selling its merchandise through a successful nationwide distribution network, the company prides itself in processing all its orders from its Cloughton, Lancashire facility, employing **70 employees**. Since 2008, SWS UK has been part of the FTSE 100 CRH Group, a worldwide leader in building materials, operating in 35 countries and generating over €18.5 billion sales revenue.

Keeping production locally for SWS UK was made possible by optimizing all stages of its industrial process, and especially by improving its polyester powder coating operations. When starting the Inobell project with SAMES and its local partner Professional Finishing Supplies **Ltd**, (PFS) in 2011, Mick Speight, SWS UK's Production Supervisor had one key target in mind: to reduce powder consumption.

More than 20 % in powder savings, added flexibility

SAMES replaced a 7-year old installation composed of 8 automatic and 2 manual powder guns with 2 Inobell automatic powder bells and 2 e-Jet manual units, thus reducing the number of sprayers by 60%. But less guns does not mean lower performance! Thanks to Inobell's unique turbine bell technology, which combines a rotating electrode with a counter electrode for maximum powder charge, and allowing efficient high flow rate up to 30 kg/h, SWS UK has achieved powder savings of more than 20% over **their previous** equipment. In Mick Speight's words: "We have saved on the powder but also we have increased what we get out of it", which means 20 % more finished products at the end of the coating line for an equivalent powder consumption, averaging at 45 tonnes per year.

An immediate consequence of the new installation was to rationalise labour, by splitting the initial 6-crew coating shift into two teams. The first one, starting at 6 am and made up of only 2 men, is now in charge of all standard parts in white plain colour, whose size ranges between 1m to 7m length. Without the need of any colour change, the workers basically let the Inobells coat in intensive mode, hang and unhook parts



and do the occasional manual touch up. Creating the early shift has been a very efficient way to build up internal stock for SWS UK, as the standard parts represents 60 % of the total production of the line. At 8.15 am, 4 men join in until the end of working day at 5 pm, to coat remaining non-standard parts. These are usually smaller items, requesting additional manual gun application to penetrate into the deeper recesses. Extra workforce is also needed to deal with the repeated colour changes, as SWS UK always answers orders with customised finishes, covering the whole spectrum of RAL or BS (British Standard) colours.



To sum up, in addition to improving the bottom line in terms of powder savings, installing the Inobells greatly enhanced manufacturing operations in general. It has enabled an effective “separation of men”, leading to even higher flexibility and responsiveness in processing customers’ orders, which are placed by distributors 24/7 on the company website. **Our return on investment was less than three months using powder savings alone.**

A “Plug and Spray” and “Service First” approach

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The SWS UK project has been delivered through joint effort by SAMES UK and its local distributor and partner for more than 7 years Professional Finishing Supplies Ltd. A trial involving 2 Inobells at the customer’s premises, conducted by David Goodeve, representative for PFS, demonstrated in only two weeks full compliancy to powder savings objectives aimed by SWS UK over existing automatic guns installation, thus enabling the customer’s order. During this period, all settings have been fine-tuned with the customer such as powder flow rate, pattern size of the powder cloud, turbine rotation speed and creation of pre-set application tables. Validation of the control parameters with demo equipment, fully customised according to SWS UK’s operational needs, lead to extra fast installation time when the new equipment arrived: only one day has been required to plug and setup the 2 Inobells and 2 e-Jet manual units with perfect results at first application. During trial, SWS UK **received** all necessary in-house training to master Inobell solution and experience the user-friendliness of TCR control module. To this date, SWS UK has not experienced any operational issues with both Inobells.

SWS UK also had a special request upon placing their order: they wanted to make sure to keep the demo equipment until they received their own equipment. This was answered positively by SAMES, as a cornerstone of a “Service first” approach establishing to this day a long term trusting relationship between SWS UK, PFS and SAMES. Mick Speight has been particularly appreciative of the professional and responsive assistance from PFS, whose offices are located only 20 km away from SWS UK. SAMES, led



in the UK by Paul Gorton, Area Service Manager, has indeed put a strong focus into developing a trusted network of local distributors and integrators for its powder and liquid product ranges.

Class-A finishing by Inobell: safety in style

More unexpected by SWS UK with adopting the Inobell was a huge improvement in finishing quality. Turbine bell technology, invented by SAMES in the 1980s for wet application in the automotive industry, has proven compliant with class-A finishing results. The bell has since been adapted in powder for general industry with the Inobell, whose quality of finishing meets the most stringent and tight DOI (distinctness of image) criteria. Inobell's large impact, between 350 and 450 mm, guarantees an excellent regularity of film built, especially compared with conventional automatic powder guns, whose impact does not exceed 250 mm.

With the new Inobell installation, SWS UK has been able to maintain 80 µm coating thicknesses with a precision of 5 µm, which was totally unthinkable with the previous guns. The bells removed as well the "orange peel effect", thanks to the presence of a dedicated counter-electrode. It collects the ions which are not necessary for charging the powder, thus charging efficiently the powder whatever is the distance from the sprayer to the part. It then avoids the negative effects linked to back emission, which are caused to over accumulation of ions onto the part to coat.



With the help of Inobell's top finishing quality, SWS UK now showcases the higher aesthetic value of its safety product ranges against its competitor designs. As garage or shutters doors are often the first thing one sees when approaching a private property, this makes perfect sense.

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