

Installation Focus: Tritón spol. s.r.o.



TRITON.

Nordson

Tritón At The Forefront of Technology

Tritón Pardubice spol s.r.o. was established at the beginning of the 1990's in Pardubice Starý Matěřov, Czech Republic. The company has developed gradually into the position of a leading supplier of data cabinets used mainly by the information technology and cloakroom equipment industries. In 2010 Tritón launched a new fully automatic manufacturing line which uses state of the art technology across two factory buildings. Tritón required effective and high quality manufacture of products and chose a Nordson paint plant to fulfil this requirement. The enclosures are manufactured by first class metal forming machinery and then are powder coated to create a hard and durable surface with a high mechanical and chemical resistance. Tritón use no solvents during the powder coating process and use powder coatings which are low in heavy metals & chromium compounds. Products are manufactured from recyclable raw materials and the paint plant technology uses a closed air circuit with minimal waste and energy. Tritón insisted strictly on an ecological solution for the whole manufacturing process of their products and hence bought Nordson equipment for their painting solutions.

The company recently converted to a Nordson Prodigy® system as it moved toward cost effective, environmentally friendly manufacturing operations and required the best technology on the market. Director, Alexandr Hlavsa quotes, "We have had good long term customer relations with Nordson and are very happy with existing plants. When Prodigy® HDLV® technology became available we decided to buy it." In 2010 Tritón invested in a new ColorMax³ fast colour change booth system with Prodigy® HDLV® dense phase application equipment. Tritón chose the ColorMax³ for its efficient operation, quick colour change and simple to clean and easy to maintain features. The system has minimal powder in process at all times due to high transfer efficiency and AirWash system contributing to a clean, and safe coating environment with less to colour change. The ColorMax³ booth also had automatic external cleaning of each gun surface for further reduced colour change time (Ref image on right).



Tritón's ColorMax³ system has seven Prodigy® automatic guns, two Prodigy® manual guns and an iControl application controller which offers full process control. The Prodigy® spray system precisely dispenses powder for superior finish quality, less waste and ultra-fast colour changes. Additionally the combination of the Prodigy® powder spray guns, controller and the Prodigy® HDLV® pump provides for higher transfer efficiency, higher powder output, softer spray and even pattern distribution. Alexandr stated "The changeover from venturi technology has been easy and straightforward. We use less powder and the operating costs per gun are significantly lower with the new Prodigy® spray guns."

The iControl application controller manages all the coating parameters, recipes, triggering and gun movers. In addition the system has beam array product detection and gun mover profiling for consistent gun to part distance regardless of the product, ensuring optimum spraying conditions are maintained. Powder savings have also been realised by precise gun triggering, ensuring the guns only spray powder when the product is positioned in front of the gun.



The revolutionary HDLV® dense phase gun pumps are neatly mounted and clearly visible behind a perspex panel within the Prodigy® PowderPort (left). The PowderPort is an integral part of the recycle system where all the powder in the system is fed from and recycled to. It incorporates a unique pick up tube design for quick purge and easy cleaning. Additionally integrated is an easy to clean sieve for recycled powder and a separate clean down and preparation area for service of next/last colour, all accelerating colour change time even further.

Overall Triton have observed the following benefits from their new technology:

- Improved stability of powder output from the gun
- Increased transfer efficiency with less powder waste
- Improved quality and coverage of product
- Reduced rejects
- Reduced maintenance time