

Unimec Chooses ARC140 System

Unimec, based in Romania, manufactures metal hardware for low and medium voltage power lines, has been using the Metallisation Arc140 system for over 4 years to spray small parts that historically have been hot-dip galvanised or zinc plated.

Metallisation's Romanian distributor, Straaltechniek Minex, who delivered the first Arcspray 140 system to Unimec, have since been cooperating with the company with technical support and materials supply. Unimec uses the Arcspray 140 system to metal

spray small pylon components to protect them from corrosion. The components include brackets, hinges, horizontal supporting consoles, stretching consoles, aluminium clamps and supporting rods. Metal spraying the components with zinc will ensure the longevity of the individual parts.



At the inception of Unimec, these small components were hot-dip galvanised or mainly electro zinc plated, which meant Unimec had to send the parts out to a third party. Both of these processes are commonly used for coating smaller parts for corrosion protection. However, the protection granted by these processes was not proving adequate in some of the more highly corrosive environments that the pylons were being installed. Now with the new Arcspray 140 metal spray system, Unimec has total control over the production and quality of all components and can deliver them to meet customers' timescales. Also, due to the harsh environment the components face, Unimec has found that metal spraying offers much greater anti corrosion protection than galvanising or electro zinc plating.

Due to the volume of parts Unimec sprays the company has to run two daily shifts to meet the demand for metal sprayed components. Each component is grit blasted to SA 2.5 and then coated with 50 to 100 microns of zinc.



Major Advantages of metal spraying are that coatings are available for almost instant use, with no drying or curing times, and there is no risk of damaging the component through heat distortion. The thickness of the coatings can be locally controlled by the operator, allowing variations in the level of corrosion protection depending on the environment. With increasing transportation costs becoming an issue, the process can easily be installed in-house. This not only reduces costs but also increases internal control over quality, production planning and shorter response times.

The Metallisation Arcspray process is normally used to protect large steel structures such as, vessels, tanks, buildings and bridges, but is also proving itself to be a viable option for smaller components as described here.

In the Arcspray process the raw material, in the form of a pair of metallic wires, is melted by an electric arc. This molten material is atomised by a cone of compressed air and propelled towards the work piece. The molten spray solidifies on the component surface to form a dense, strongly adherent coating suitable for corrosion protection or component reclamation. Sprayed coatings may also be used to provide wear resistance, electrical and thermal conductivity.

Straaltechniek Minex has been a Metallisation distributor for over ten years and is proud of its knowledgeable pre-sales and after-sales support. Adrian Hentulescu, Technical Director for Straaltechniek Minex, says: "Unimec needed a supplier that understood the problems corrosion can cause and could supply appropriate advice as well as the most flexible and reliable equipment. As a Metallisation distributor we always work with the client before they purchase any equipment, to ensure we understand his needs, and we pride ourselves on our excellent after sales service. The new Arcspray equipment has enabled Unimec to increase its output and respond much quicker to its clients demands, which is great news for all concerned."

For more information on Metallisation equipment contact Stuart Milton, Sales and Marketing Manager on +44 (0) 1384 252 464 or visit www.metallisation.com