Don’t let CUI ruin your investment

Corrosion under insulation (CUI) is one of the major challenges facing equipment operators in the process industries today. As a result, many companies face significant lost revenue from downtime, maintenance and the replacement of corroded parts. During plant operation, hot pipework and equipment can be exposed to extremely high temperatures and temperature fluctuations. This causes micro-cracking in the anti-corrosive coating, which can cause corrosion beneath the insulation.

Learn how Fluor Corporation protected hot process equipment on the Shaanxi Polysilicon plant to avoid future downtime and maintenance costs.

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Combatting CUI at the Shaanxi Yousr Polysilicon Plant

At a glance	
Customer	Fluor
About Fluor Corporation	Fluor Corporation is a global engineering and construction firm, headquartered in the US and with offices around the world, including China. Fluor Corporation delivers integrated engineering, procurement, fabrication, construction, maintenance and project management solutions to governments and private sector clients in diverse industries around the world.
Coating system	Versiline CUI 56990
Application	Air spray

The challenge

Owned by Shaanxi Tianhong Silicon Materials Co. Ltd., the Shaanxi Yousr Polysilicon Plant in China will produce polycrystalline silicon material for the solar photovoltaic and electronics industries. When engineering company Fluor was asked to design the plant, it was faced with a specific challenge.

Much of the plant's pipework and equipment is exposed to high temperatures, making it prone to corrosion under insulation. Fluor knew that conventional anti-corrosive solutions are often not able to protect equipment in these conditions, and the company was looking for an alternative but reliable and proven coating solution.

The solution

Fluor chose our Versiline CUI 56990 coating to provide long-term protection for pipework, equipment and other hot surfaces. Versiline CUI 56990 can resist temperatures up to 650°C/1202°F and thermal shock and cycling in dry or wet service conditions. Versiline CUI 56990 is extremely resistant to micro-cracking and corrosion, even in tough operating conditions. Its ability to handle a wide variety of operating conditions make it the ideal choice to help engineering companies simplify complex painting specifications.

Versiline CUI 56990 is used to protect all insulated hot pipework and equipment in the Shaanxi Yousr Polysilicon Plant, totalling more than 20,000 litres, and will help keep the plant in good operating condition with limited maintenance for years to come.

The Hempel Group Head Office
Hempel A/S, Lundtoftegaardsvej 91, 2800 Kgs. Lyngby, Denmark
Tel: +45 4593 3800 Email: versilinecui@hempel.com
versilinecui.hempel.com