



## FARR GOLD SERIES® FOR THERMAL SPRAY PROCESSES

### PRODUCT INFORMATION

<b>Product:</b>	<b>Farr Gold Series® dust collector</b>
<b>Size:</b>	<b>GS40 ATEX Compliant</b>
<b>Air Volume:</b>	<b>30.000 m<sup>3</sup>/hr</b>
<b>Application:</b>	<b>Thermal spray processes, HVOF, plasma</b>
<b>Customer:</b>	<b>Thermico GmbH &amp; Co.KG, Dortmund, Germany</b>
<b>Installation date:</b>	<b>January 2011</b>

### COMPANY PROFILE

Thermico GmbH & Co.KG, a German-based company, develops, produces and distributes robot-based coating centres. They specialise in plasma and high velocity flame spray systems that provide coatings for a wide range of products from aircraft turbine blades to Teflon® frying pans.

### CHALLENGE

Thermico required a new extraction system to handle the dust and fumes from the plasma and HVOF spray systems that were being installed in their new premises.

Owing to their long-term relationship with Camfil Air Pollution Control (APC), Thermico approached Camfil APC for the purpose of proposing a solution to meet the requirements of this demanding application.



A Farr Gold Series® GS40 dust extractor located at Thermico's factory, in Dortmund, Germany. The most sustainable dust collector from Camfil APC on thermal spray.

### SOLUTION

Camfil APC addressed the issue by supplying one of their ATEX compliant Farr Gold Series® GS40 dust collectors, complete with a supply air system.

The Farr Gold Series dust collector was fitted with explosion venting panels and 40 high efficiency fire retardant HemiPleat® Gold Cone® cartridges to handle the thermal spray dust and fumes.

This configuration was chosen as it offered high efficiency filtration in a special package for all of Thermico's thermal spray processes.

Following discussions, Camfil APC also included an energy saving setup that incorporated a heat exchange system.

In summer, fresh air is provided through the supply air system whilst the warm air from the factory processes is simply exhausted to the atmosphere, therefore contributing to keep the factory cool.

In winter, the heat exchange system is switched. The warm air from the dust collector is passed through the heat exchanger which heats up the incoming fresh air before discharging into the building, thus saving on winter heating costs.

In fact, the system was tested during the winter and it was so effective that Thermico will not have any need for additional winter heating.

Thermico is delighted with the solution which provides their workforce with a safe working environment meeting all legislative requirements, whilst saving on energy costs and ensuring sustainability.

Due to the success of this state-of-the-art system for thermal spraying, further extraction systems have been ordered from Camfil APC for other Thermico projects.



The GS40 is installed outside the factory providing more space, less noise and a cleaner working environment.



A view of the heat exchange system installed above the dust extractor.