Advanced Compressor Coating for Siemens Gas Turbines

Trends such as population growth, climate protection and resource scarcity will continue to drive considerable amounts of capital spending in order to secure safe, economical and environmentally compatible energy supplies. As part of our ongoing commitment to meet the changing requirements of your operating assets, Siemens Energy offers the latest technology to help you enhance your operating plant reliability and performance. Siemens gas turbines are renowned for their high availability and reliability as well as high power output at lower emissions.

One of the innovative solutions offered by Siemens Energy to help you improve the performance of your gas turbine and your competitiveness is the Advanced Compressor Coating.

Our product
The Advanced Compressor Coating can help improve the profitability of your power plant as it is designed to recover power output and efficiency caused by aging. The gas turbine power output can increase through a complete cleaning of the compressor blades and vanes and applying the coating to all compressor stages. The coating of the stationary and rotating blades provides a smooth blade surface finish, improves the aerodynamic profile, which can help recover compressor aging.

Your benefits
The Advanced Compressor Coating can be a highly cost-effective modernization that helps to increase reliability, availability and performance.
Benefits may include:
- Up to 1% gas turbine power output aging recovery
- Up to 0.3 %-pts. gas turbine efficiency aging recovery
- Minimization of corrosion and erosion
- Surface roughness reduction

Further benefits can be obtained with applying a routine online compressor washing procedure such as offered through the Siemens Advanced Compressor Cleaning System.

Scope of supply
The scope of this upgrade includes:
- Improved duplex aluminium-ceramic coating

We recommend that the Advanced Compressor Coating be performed at a major inspection. The coating can typically be executed on-site using a mobile coating unit. We offer a full range of field service capabilities to help you manage your maintenance and outage schedules.

References
Siemens Energy has successfully implemented the Advanced Compressor Coating in more than 30 units of frame types V64.3, SGT5-2000E (V94.2), SGT5-4000F (V94.3A) and SGT6-4000F (V84.3A). *

Examples include:
- Malaysia
- New Zealand
- Philippines
- Singapore
- United Kingdom and Vietnam

More than 30 million operating hours have been logged on nearly all V- and W-Frames with the Advanced Compressor Coating. *

*) As of March 2012

For more information please contact your local Siemens sales representative.