



Anti-Icing System

Product Description

- Inlet icing can occur on LM series turbines at temperatures less than 40°F (4.4°C) and humidity greater than 65%.
- Ice formation can lead to significant ice debris and thus turbine blade damage.
- Waste heat from the combustion inlet air is used to heat the inlet air by 10 to 40°F above ambient temperature, preventing icing.
- **The waste heat recovery system is a skid placed alongside the turbine, consisting of:**
 - Pump system using a closed loop of glycol-water.
 - Chilling coils.
 - Air filter house.
 - Heat Exchanger connected to the combustion inlet air Waste Heat Recovery Unit (WHRU)
- Control logic allows system to be idle if icing is not present and to activate when icing detected. **There are 4 total states:** idle, anti-icing, air-purge, and full purge.
- This system does not come standard with the LM series packages.

Applicable Units:

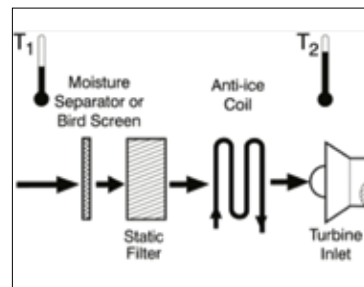
| | | | |
|--------|---|--------|---|
| LM6000 | ✓ | LM2500 | ✓ |
| LMS100 | ✓ | LM5000 | ✓ |
| LM1600 | ✓ | TM2500 | ✓ |

GE's global service network provides life cycle support for more than 3,500 aeroderivative gas turbines worldwide to help you meet your business challenges and success metrics – anywhere and anytime. Our global service network connects with you locally for rapid response to your service needs.

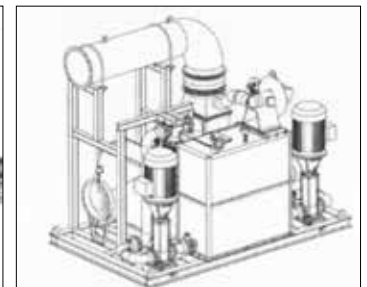
www.powergen.gepower.com

Customer Value

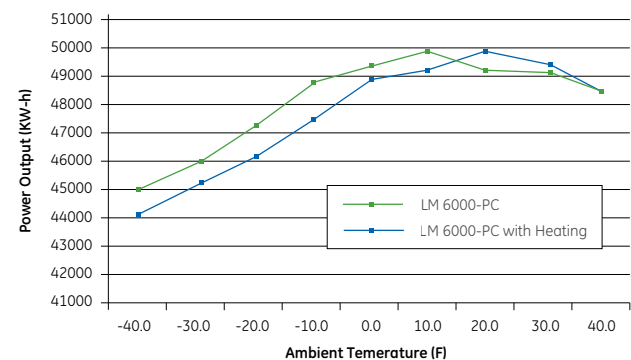
- Anti-icing system prevents ice related internal damage to engine blades, reducing turbine downtime and repair times.
- Anti-Icing system controls are automated to run only when ice detected.
- Increased efficiencies and power outputs as shown in the graph to the right.



Schematic of anti-icing system



Anti-Icing WHRU



LM6000-PC Estimated Power Output

The GE brand and logo are trademarks of the General Electric Company.
© 2015 General Electric Company. Information provided is subject to change without notice.
All values are design or typical values when measured under laboratory conditions.