## **ANTI-ICING SYSTEMS**





## **ADVANTAGES**

- Reduced risk of foreign object damage to the turbines
- Increased availability and reliability

 Ensures continuous operations in cold conditions

**Application** 

Air treatment system for gas turbines, industrial air compressors and diesel & gas engines in environments with risk of ice formation.

Anti-icing mechanisms are generally used on gas turbine inlets when the air temperature is between -5 to 5°C and the relative humidity is above 70%. Raising the inlet air temperature diminished the risk of ice formation in the turbine bell mouth to avoid damages to the equipment internals.

On static systems, they are also used to lower icing risk on the filters. Icing on the filters raises the pressure drop of the system, diminishing the power output and can lead to the turbine shutting down. As pressure drop increases, turbine efficiency and power output drop. A differential of 100 Pa (0.40" water) lowers power output by approximatively 0.2% at full load or raise fuel consumption by 0.1% at part load. In order to offer a viable defence against static filter icing inlet, air must be heated by at least 7-8°C