

# Increase in power output

# Reduction of NOx

“The Fog Engineers”  
 H. IKEUCHI & CO., LTD.

# INLET AIR COOLING SYSTEM FOR GAS TURBINES

Semi Dry-Fog®, a fine fog with a mean droplet size of 10–30 μm, cools gas turbine intake air and improves power generation output during hot weather.



Latent heat of water evaporation achieves

**Up to 6°C cooling effect**

Use of temp. & humidity sensors enables

**Hassle-free automated operation**

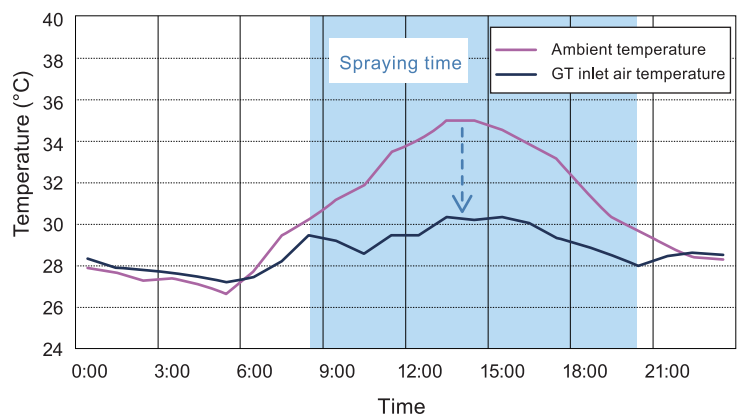
Even during operation of gas turbine,

**Installation and maintenance can be done**

**Cooling by 5°C increases power output by approx. 3%.**

Effects may differ depending on site conditions and power generation efficiencies of gas turbines.

**Effect of humidification by water spraying helps to reduce NOx**



Ask for our calculation of cost-effectiveness.

## Proposal for the cooling system

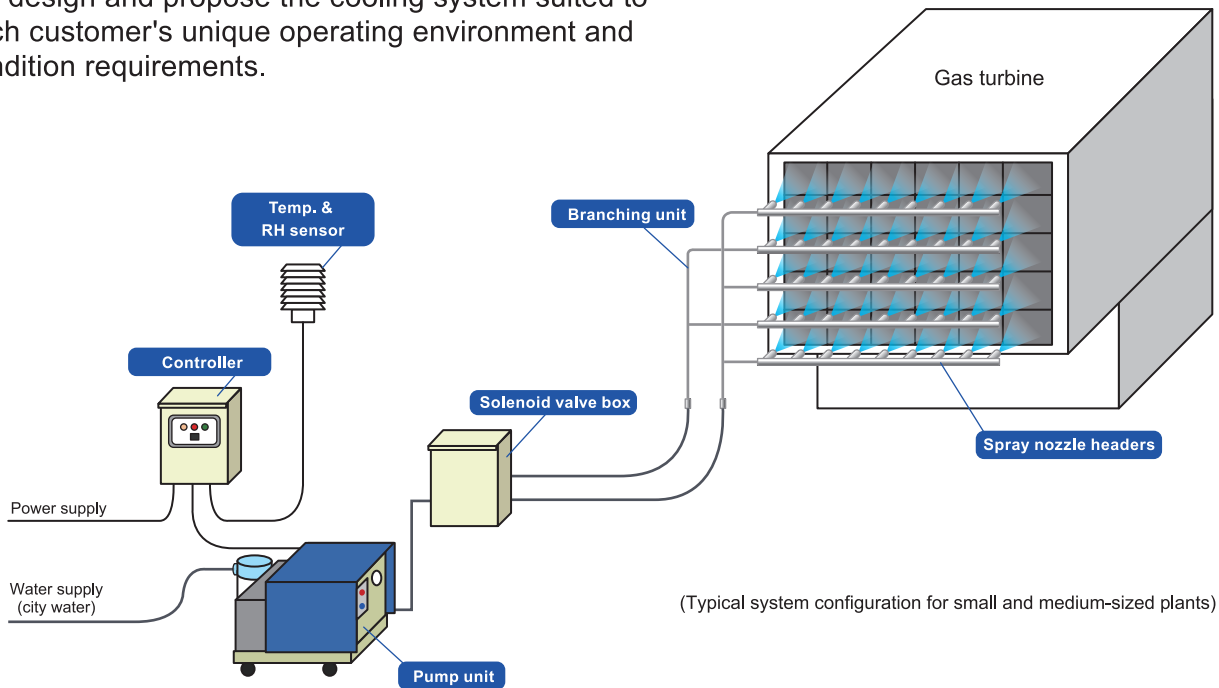
We propose a system with an optimal spray volume to the rated power output and amount of inlet air of your gas turbine.

Use of the ambient temperature & humidity sensors allows for an automated operation.

We propose a layout and a method for installation of the system.

## System configuration

We design and propose the cooling system suited to each customer's unique operating environment and condition requirements.



## Track records

### ■ Installation results in small and medium-sized electric power plants

Industries	Chemical	Petrochemical	Steel	Automotive
Capacity x number of installation results	0.6 MW x1, 7 MW x1, 21 MW x1	4 MW x1, 6 MW x1, 7 MW x1, 50 MW x1	30 MW x1, 32 MW x1	50 MW x 3

Industries	Painting	Pharmaceutical	Food	Textile	Pulp & Paper
Capacity x number of installation results	12 MW x1	6.5 MW x1	4.2 MW x1, 5.2 MW x1	5.5 MW x1	5 MW x1

### ■ Installation results in large-sized electric power plants

Industries	Electric power station	Steel
Capacity x number of installation results	110 MW, 115 MW, 125 MW, 217.5 MW, 243 MW, 245 MW, 285 MW, 296 MW, 400 MW, 423.7 MW, 500 MW (each x 1)	132 MW x 1

Our customers include:  
 TEPCO Fuel & Power, Inc.  
 Tokyo Gas Bay Power Co., Ltd.  
 Kawasaki Natural Gas Power Generation Co., Ltd.  
 Tohoku Electric Power Co., Inc.  
 Chubu Electric Power Co., Inc.

Please feel free to send any inquiry, request for information or quote on this product to the contacts below.

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