Arlize LNG

JGC Corporation (日揮株式会社)

Air-cooled LNG Plant

HAR Air Recirculation (HAR)

Wind Direction Change

13:00 14:00 15:00 16:00

Production Fluctuation

LNG Production

Day Night

Sudden Drop = $ Loss

100% 80%

- JGC built LNG plants account for over 30% of the world’s current total LNG production volume.
- ARLIZE LNG™ has improved Plant Operation Stability & Production Rate by mitigating the impact of unstable weather.
- ARLIZE LNG™ has contributed over 20 Projects throughout plant life cycle (FS, Pre-FEED, FEED, EPC, Revamps).
- ARLIZE LNG™ contributes to minimize the CO₂ emission by improving air cooling performance and reducing the gas turbine power.

ThermoMap™
Advanced and Proven Tool of Visualizing Plant Hot Spot

How to forecast when and where hot spots occur in the whole plant area?

Joint Developed Technology

Optic Fiber Cable

Real Time Air Temperature Monitoring of ACHE Air Intake Area

Advantages of Optic Fiber Cable Temperature Sensors
- Capable of Monitoring Temperature in Real Time
- Capable of Generating 2D Temperature Map
- Compatibility with Advanced Process Control
- Compatibility with Automated Evaporative Cooling

HARview™
A Novel Engineering Tool of ARLIZE LNG™

Technology-1: Weather Simulation
Weather Simulation versus Actual Measurement

Technology-2: CFD Analysis
ACHE Intake Temperature Comparison

CFD Predicted Hot Spot

- CFD Simulation is a powerful tool to visualize hotspots, air flow behavior inside/around YOUR plant.

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RESEARCH & INNOVATION SHOWCASE
研究与创新展示