

Built by Air Cooler Specialists.

Most air-cooled heat exchangers are capable of significantly more than they deliver today.

We identify the real causes of thermal underperformance through independent engineering, measured field data and practical implementation experience.



INDEPENDENT BY DESIGN

- ✓ No OEM affiliations.
- ✓ No equipment sales targets.
- ✓ No preferred manufacturers.

Every recommendation is driven by engineering data—not by what we want to sell.



Led by specialists with **over a decade** of international experience across the LNG, Oil & Gas, Petrochemical and Power industries. **Experience that drives every ENTHALPEX engagement.**



10+

YEARS EXPERIENCE

Specialized in air-cooled heat exchanger performance with global project experience.



50+

PERFORMANCE ASSESSMENTS

Across refineries, LNG, petrochemical, power generation and process industries.



HTRI®

ADVANCED THERMAL MODELLING

Industry-leading software for accurate analysis and performance validation.



TURNKEY

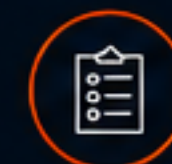
ENGINEERING SUPPORT

From concept to execution with detailed reporting, documentation and MoC support.

INDEPENDENT ENGINEERING.
MEASURABLE RESULTS.
GLOBAL EXPERTISE.



INDEPENDENT
ENGINEERING



MEASURED
DATA



PRACTICAL
SOLUTIONS



PROVEN
RESULTS



ENGINEERS FIRST.

We are engineers, analysts and field specialists. Our work starts where theory meets reality—on site. We measure, analyse and validate every conclusion.



INDEPENDENT BY DESIGN.

No OEM affiliations. No equipment sales targets. No preferred manufacturers. Our independence ensures the best technical solution for the client.



FOCUS ON WHAT MATTERS.

We identify the real causes of underperformance—whether it's fouling, air recirculation, vibration or design limitations—and recommend what will deliver the greatest impact.



BRIDGE ENGINEERING & EXECUTION.

We don't stop at the report. We support implementation, minimise operational disruption and remain accountable for results.



PASSION FOR PERFORMANCE.

Air coolers may be one part of a facility, for us, they are the entire focus. That's how we deliver measurable, lasting performance improvement.

INDUSTRIES WE SERVE



LNG



OIL & GAS



PETROCHEMICAL



POWER GENERATION



CHEMICAL INDUSTRY



Our mission is simple: maximize **cooling performance**, improve **reliability**, and help our clients get the most out of their **critical assets**.



A PROVEN PROCESS. MEASURABLE RESULTS.

We combine field measurements, advanced engineering analysis and practical insight to unlock the true performance potential of your air-cooled equipment.

IDENTIFY & UNDERSTAND

DELIVER & CONFIRM



ENTHALPEX

Measure. Analyse. Maximise Performance.

Data-driven insights for reliable, efficient and optimised air-cooled equipment.

Our performance assessment combines on-site measurements, advanced engineering analysis and practical experience to reveal the true potential of your air coolers and deliver clear, actionable recommendations.



DATA YOU CAN TRUST

Accurate field data and industry-leading tools for reliable results.



ADVANCED ENGINEERING

OEM software (HTRI®) and engineering expertise for deep, reliable analysis.



PRACTICAL SOLUTIONS

Actionable recommendations designed for your site and operating conditions.



MEASURABLE IMPACT

Clear ROI, improved efficiency and reduced energy consumption.



THE ENTHALPEX DIFFERENCE

We combine field experience, advanced analysis and practical insight to unlock the full potential of your air-cooled equipment.

Peak Summer. Full Output.

FOGGING-WEB™ delivers adiabatic cooling to air entering your API 661 air coolers. Installed beneath the fan section, it creates billions of micro-fine droplets that evaporate completely before the air reaches the finned tube bundles — lowering inlet air temperature by up to 12°C and unlocking up to 40% additional heat duty at peak conditions. No structural modifications. No downtime. Guaranteed $\geq 95\%$ evaporation rate — zero fin damage risk.



+40%
HEAT DUTY

At peak ambient
conditions



-12°C
INLET AIR

In hot, dry
climates



$\geq 95\%$
EVAPORATION

Zero fin damage risk
guaranteed



Bolt-On Install

No welding, no drilling, SS316 throughout



Quick & easy
installation



Minimal
maintenance



Built for
reliability



High Efficiency

Maximises cooling
performance without
compromising reliability.



Water Saving

Advanced system design
minimises water consumption
and operating costs.



Uniform Spray

Engineered nozzles
provide even coverage
across the entire cooler face.



Low Maintenance

Corrosion resistant materials
and clog-resistant nozzles
for long service life.



No Downtime

Online installation
with no impact on
operations.



Proven Technology

Trusted in critical
industrial environments
worldwide.

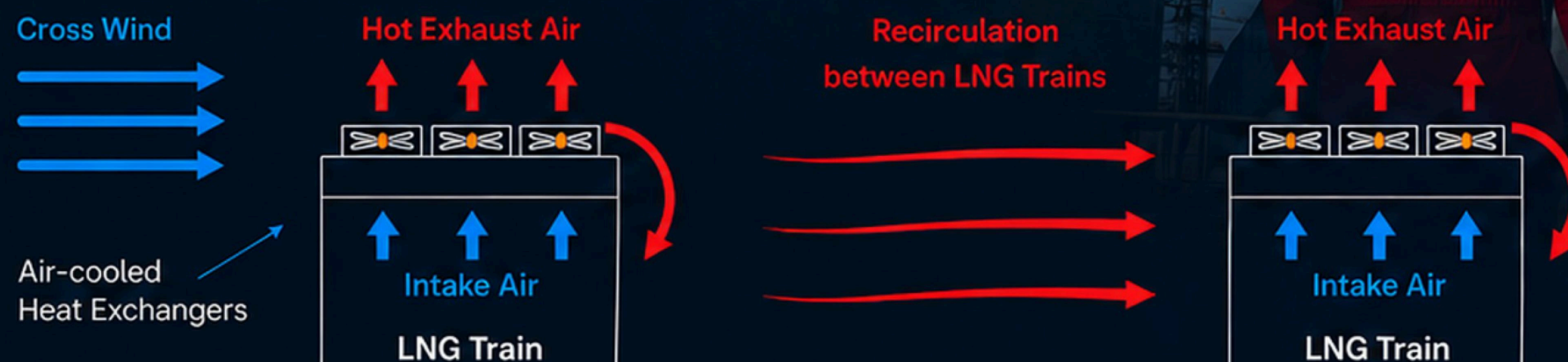
SCREENS TECHNOLOGY

Engineered For Performance.

Polyester screen technology delivers reliable, high-efficiency protection for your air coolers. Built to perform in the toughest conditions.

ENTHALPEX

HOW HOT AIR RECIRCULATION (HAR) HAPPENS



High Efficiency
Maintains optimal airflow and heat transfer.



Protects Equipment
Keeps out debris, sand and airborne particles.



Low Pressure Drop
Engineered for minimal airflow resistance.



Easy Maintenance
Lightweight screens for quick inspection and cleaning.



Longer Asset Life
Reduces fouling, corrosion and unplanned downtime.



High Efficiency
Keeps out debris while maintaining optimal airflow.



Durable Polyester
Corrosion resistant and built to last in harsh environments.



Precision Engineered
Tight weave for superior protection without compromising airflow.



Easy Maintenance
Lightweight screens designed for quick inspection and cleaning.



Longer Asset Life
Protects air coolers, reduces fouling and extends uptime.

DRYCLEAR™ TECHNOLOGY

Safe, dry online cleaning for
maximum air cooler performance.

DRYCLEAR™ Technology is a proven, non-abrasive cleaning solution that removes deposits and fouling from air cooler bundles while the unit is in operation.

Using specially formulated sodium bicarbonate, we restore thermal performance, improve airflow, and extend equipment life – without shutdown, without water and without damage.

 UP TO
+55%
**HEAT DUTY
RECOVERY***
Case dependent

 **ONLINE
CLEANING**
No production
interruption where
applicable.

 **ZERO
FIN DAMAGE**
Low-pressure sodium
bicarbonate.

 **Dry Online Cleaning**
Non-abrasive sodium bicarbonate
cleaning while the unit is in operation.

MORE THAN CLEANING

CONVENTIONAL CLEANING CONTRACTORS

Cleans bundles

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ENTHALPEX DRYCLEAR™

- ✓ Cleans bundles
- ✓ Measures airflow
- ✓ Measures airside pressure drop
- ✓ Evaluates thermal performance
- ✓ Assesses bundle condition
- ✓ Assesses fan condition
- ✓ Reviews structural integrity
- ✓ Provides engineering recommendations

KEY BENEFITS

- ✓ Online cleaning during operation
- ✓ No shutdown required – fans remain in service throughout the process.
- ✓ No plenum entry required
- ✓ No high-pressure water usage
- ✓ Biodegradable cleaning media
- ✓ Restores thermal performance
- ✓ Tailored execution strategy



Every Enthalpex intervention is performed by experienced **Air Cooler Specialists**, combining field execution with engineering expertise to deliver measurable performance improvements and long-term reliability.



Performance Verification

Before & after airflow, airside pressure drop and thermal performance measurements.



Air Cooler Specialists

Experienced API 661 engineers performing cleaning and engineering simultaneously.



Technical Condition Assessment

Inspection of bundles, fan systems, structures, bearings and mechanical condition during cleaning.



Safe for Finned Tubes

No abrasive media. No high-pressure water. Reduced risk for equipment and components.



Proven Technology

Successfully applied on critical air coolers worldwide.

— START THE CONVERSATION

YOUR AIR COOLERS. MORE POTENTIAL.

Whether you are facing performance limitations, reliability concerns or increasing cooling demand, the first step is understanding where the real opportunity lies.

Let's identify what is limiting your air-cooled equipment — and what can be done about it.

[DISCUSS YOUR AIR COOLER CHALLENGE →](#)

Not sure where to start? Start with the challenge. We'll help identify the right approach.



PERFORMANCE
ASSESSMENT



CONDITION
ASSESSMENT



ENGINEERING



PERFORMANCE
SOLUTIONS

ENTHALPEX
AIR COOLER SPECIALISTS

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Independent Engineering. **Measurable Results.** Global Expertise.