



solutions for europe
natural refrigerants

19 & 20 April, 2016 – Barcelona



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ALFA LAVAL ABATIGO

REDEFINING ADIABATIC COOLING

New gas cooler concept for hot regions

The next generation in efficient cooling

- New level of efficiency with greater performance, sustainability and adaptability
- Closed-chamber adiabatic cooler
- Optimized to deliver long-term savings in water, energy, chemicals and maintenance time



Optimal cooling efficiency for different applications

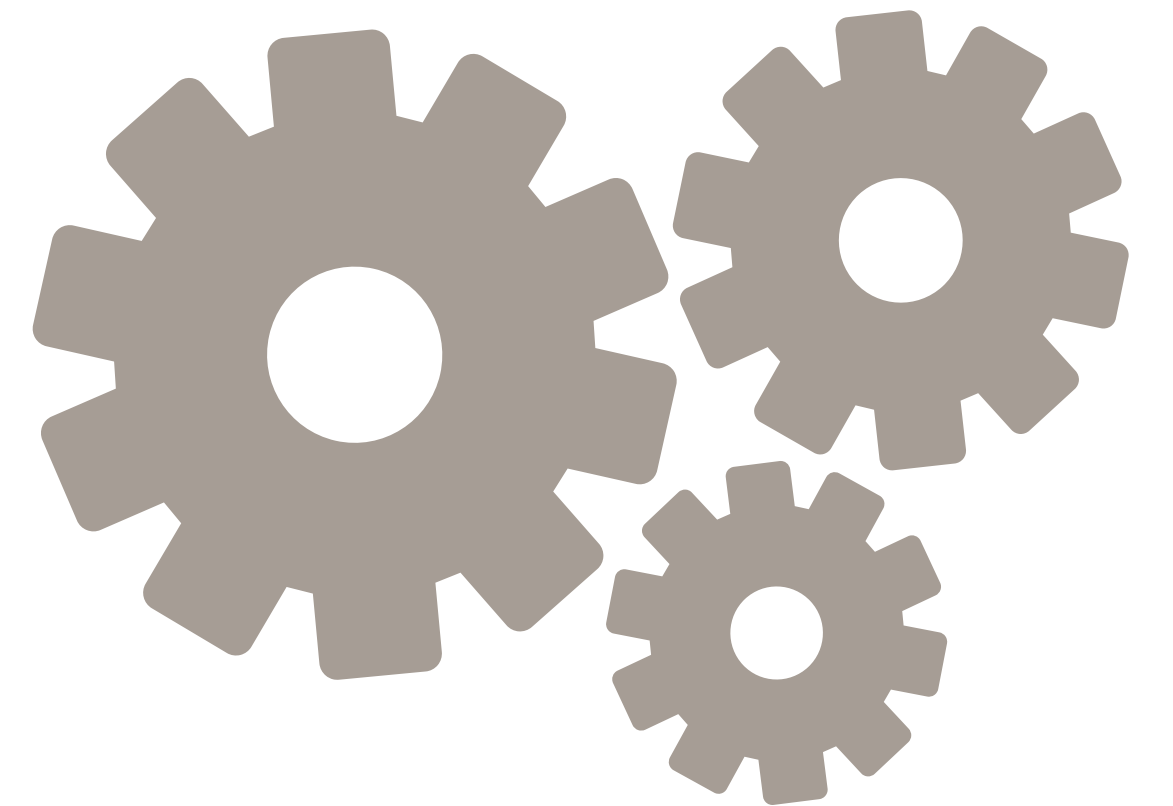
- Runs as dry as long as possible
- When needed, air is cooled in the closed adiabatic chamber before reaching the cooler coil
- Closed loop cooling system with moisture absorbent cellulose honeycomb interior
- Reduces water consumption and energy use
- Highly adaptable to different applications and climates



Alfa Laval Abatigo – Product benefits

Performance

- Minimal running costs and Total Cost of Ownership
- Reliability: supplies cooled water at the right delivery temperature at all times
- Lower water consumption by up to 95%
- Maximized uptime



Alfa Laval Abatigo – Product benefits

Sustainability

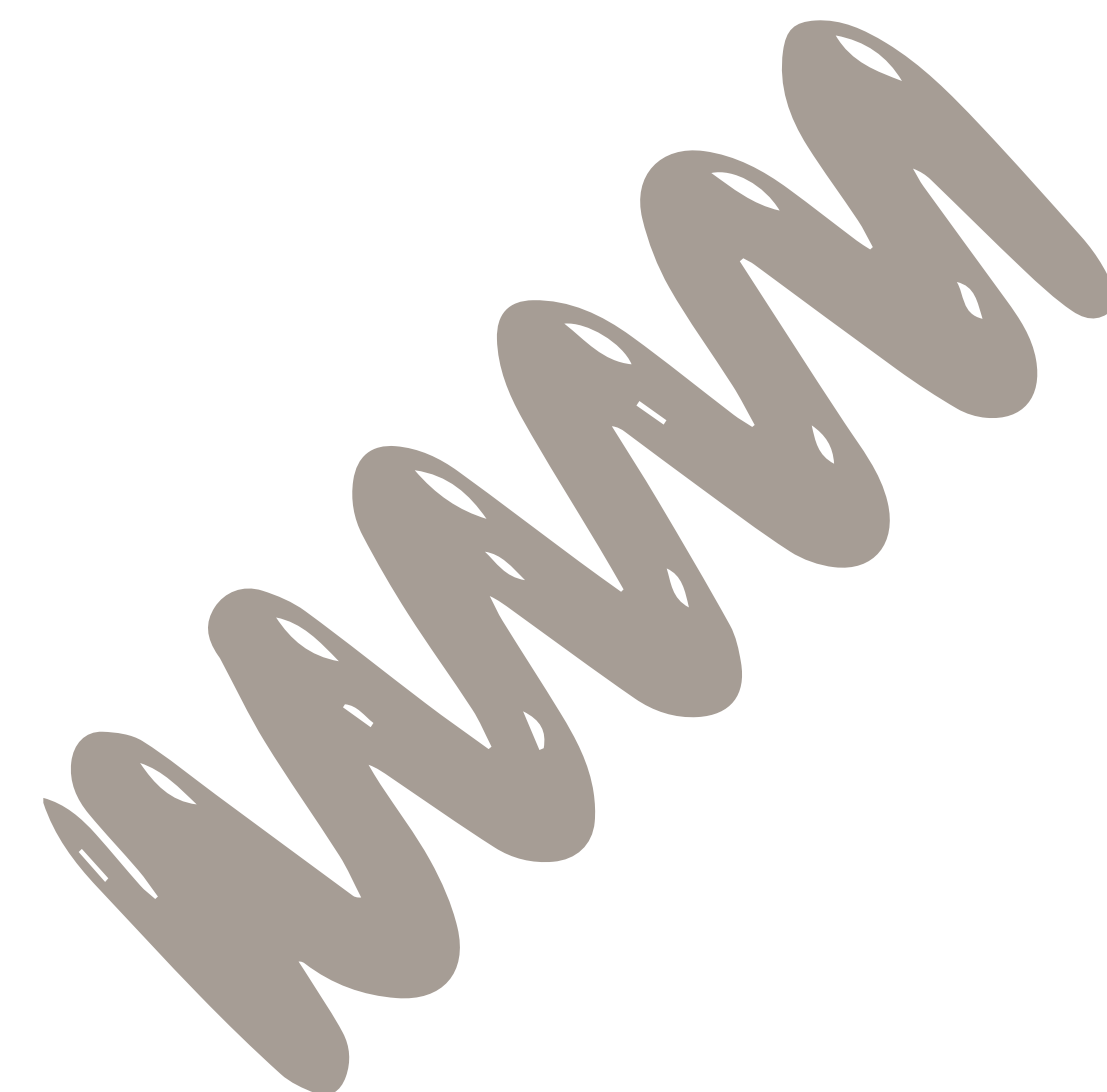
- Designed to work dry, adiabatic spraying activated only when needed
- Minimum water consumption. No water treatment needed.
- Reduce chemical requirements and completely eliminate chemical discharges



Alfa Laval Abatigo – Product benefits

Adaptability

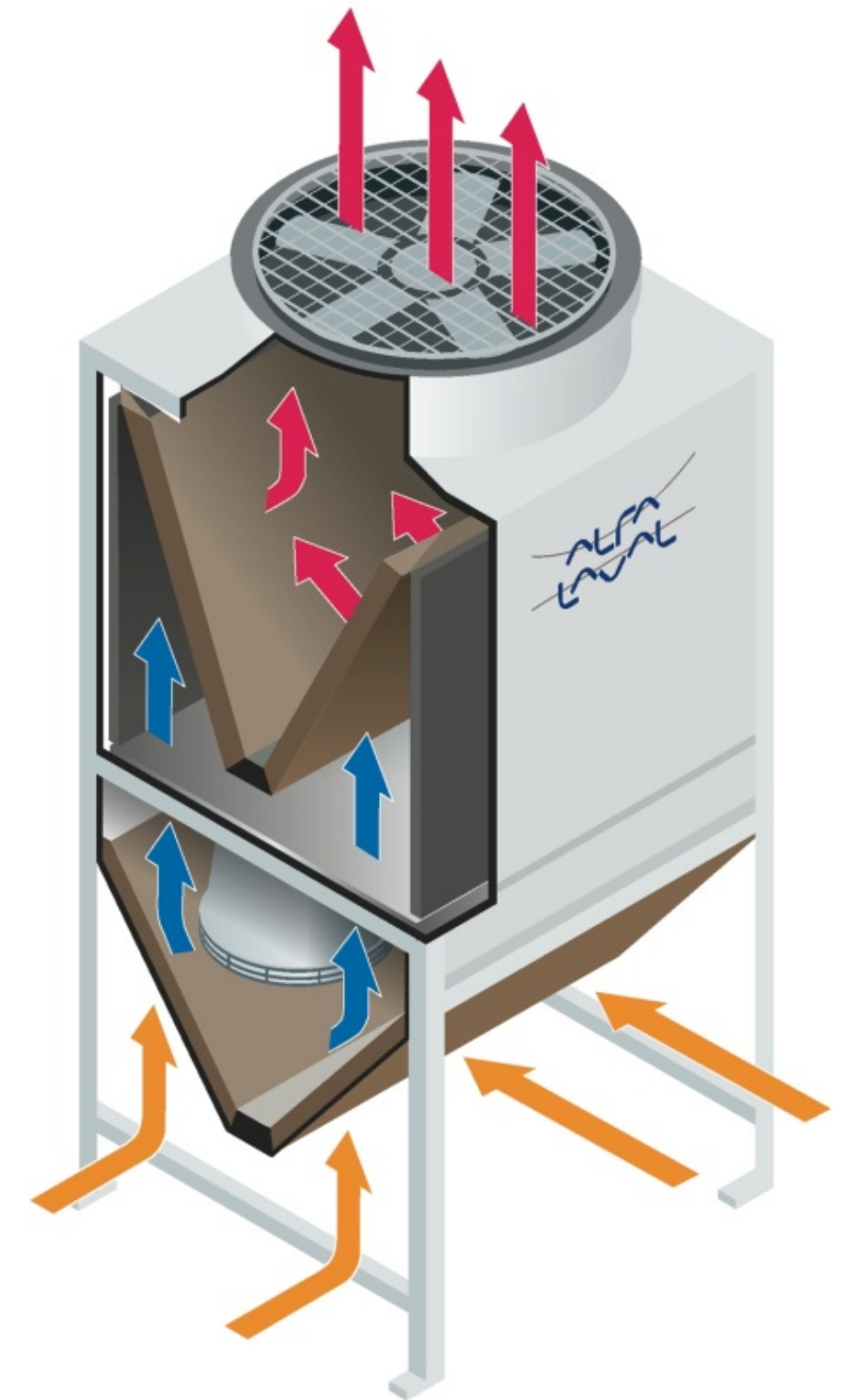
- Easily optimized for any location and application
- Saves footprint by up to 30%
- Air flow optimized in tight spaces



Adiabatic technology

How it works

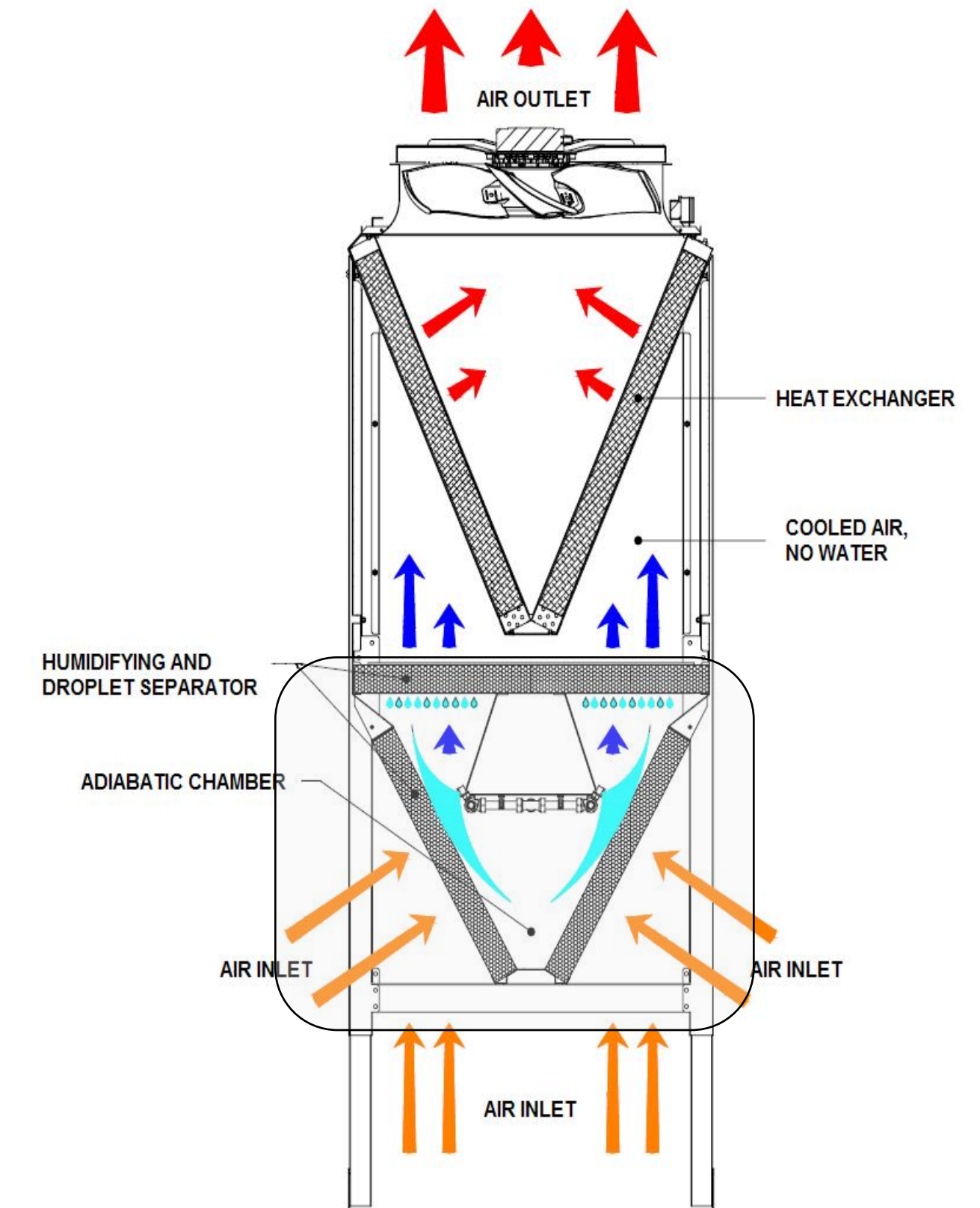
1. High-temperature ambient air passes through lower adiabatic chamber
2. Inside this chamber, nozzles spray the pads with a fine mist of water
3. The air is cooled due to humidification, prior to contact with finned coil heat exchangers
4. The chamber's design prevents any water drift outside the chamber when the cooled air travels to the finned coils
5. Digital control system continuously adjusts the amount of water sprayed to ensure consistent cooling



Adiabatic technology

Internationally Patented Adiabatic Chamber

- Used for years in process applications
- Temperature control for any environment with minimum water consumption.
- Adiabatic system enclosed in moisture absorbent cellulose honeycomb sections.
- Easy access for cleaning or replacement.
- No external, wind-blown spray nozzles that saturate adjacent building structures and clog the heat exchanger surfaces.



Adiabatic technology

Gas cooler

Process on the way to define a test installation together with a leading super market chain in applicable hot region

Questions and answers

Please feel free to talk to me or my colleague Harald Hoogendoorn

harald.hoogendoorn@alfalaval.com

Mobile: +31 653298396

kari.salonen@alfalaval.com

Mobile: +358 40 540 33 85



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Thank you very much!