

OSTRO

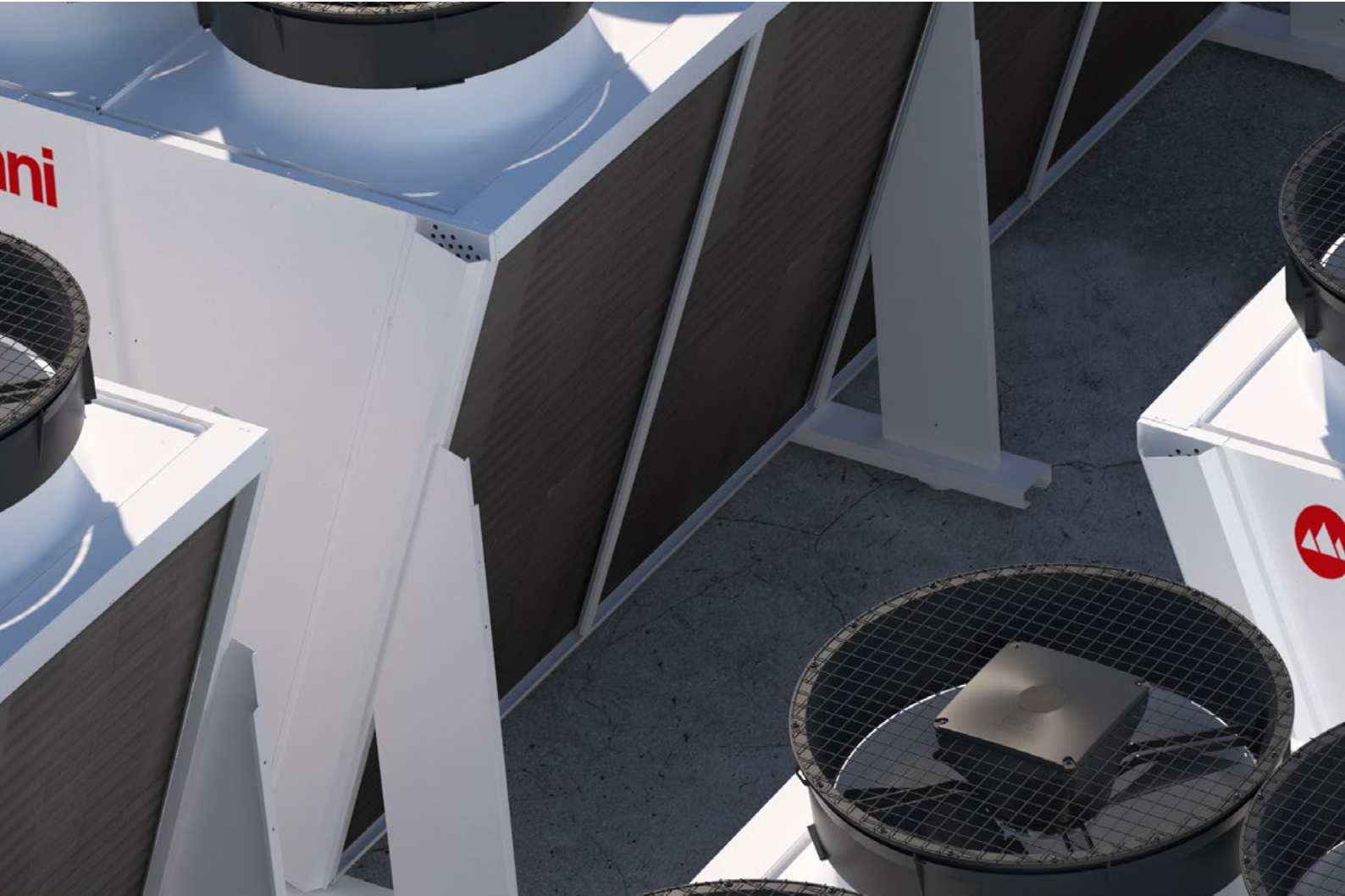
The new V-type double-row
dry cooler

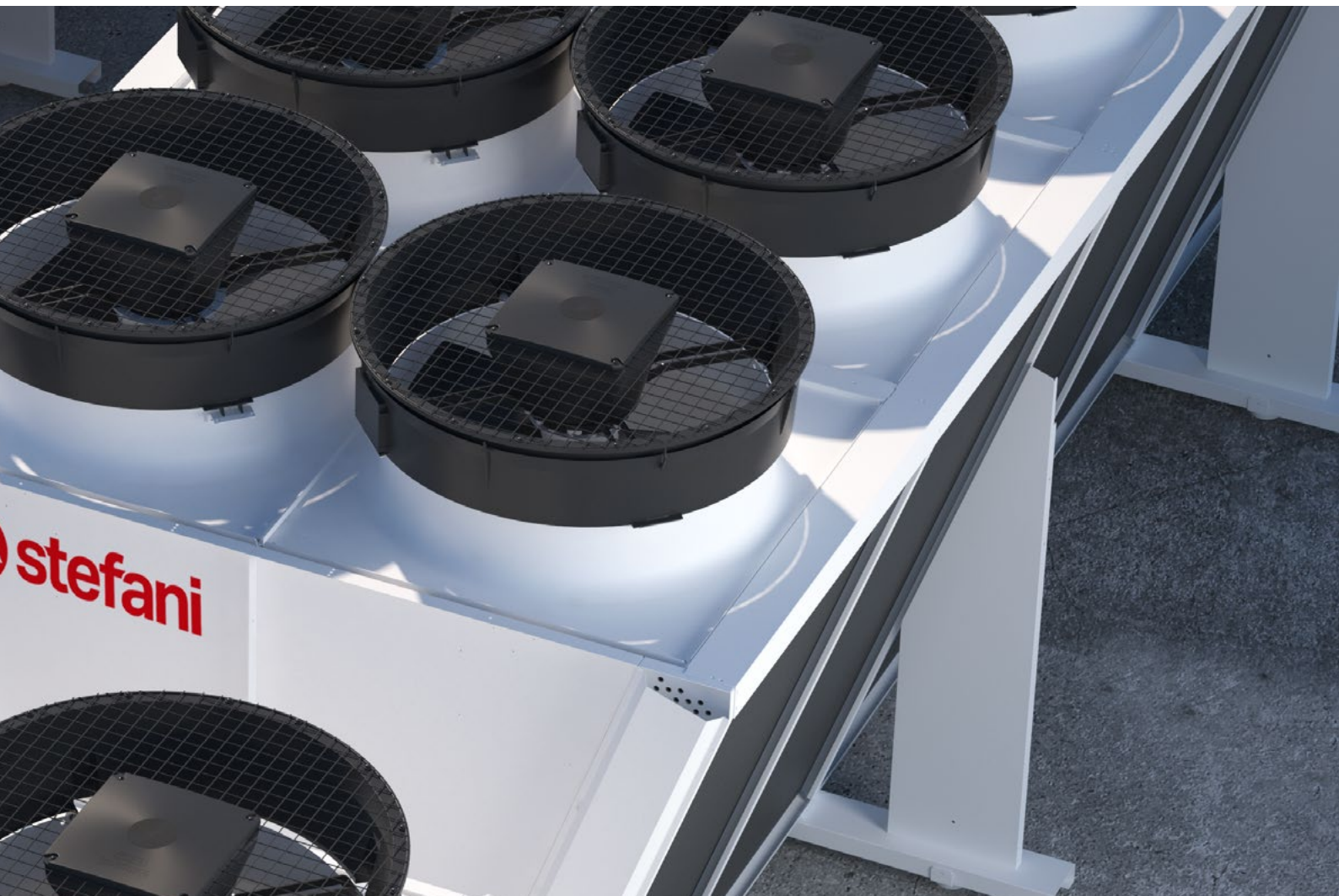
AIR HEAT EXCHANGER MANUFACTURER



OSTRO

The new V-type double-row dry cooler





OSTRO is a product range designed to meet the needs of high capacity exchange in dry cooler and condenser operation for the industrial process, HVAC air conditioning and refrigeration.

With the PAD or SPRAY versions the capacity increases, thanks to water injection, are very significant and guarantee a legionella-free solution.

OSTRO

The new V-type double-row dry cooler

- High heat exchange performance with the Large version.
- Decidedly robust coil and casing.
- Solution with triple configuration - Dry, Spray and PAD.
- A super complete range of fans and coolants.

FLUIDS AVAILABLE

- All synthetic refrigerants
- CO₂ - gas cooler 120 bar
- NH₃ - ammonia condenser
- Brine cooler

Capacities up to **2030 kW**

DT15°C, EG 35%
IN THE DRY VERSION

Capacities up to **3000 kW**

DT15°C, EG 35%
IN THE ADIABATIC VERSION

480 models

in 2 configurations

3

years of warranty

790 kW

DT15 EG 35% AC fan 44 db(A) 10 m.
High capacities with low noise

Up to **75 kW/m²**

DT15 EG 35%.
High capacity density



Performance



Performance in kW versus market (+5/+15%)
with the same ventilation and coil size.



Fan consumption at market minimums (-3/-10%)
with the same ventilation and coil size.



Consumption < 0.5% of the capacity exchanged,
up to 1.0 MW DT15°C, EG 35%
with EC motors.

Solidity



High thicknesses
of pipes and fins.



Casing in painted plate 20/10
for excellent strength.



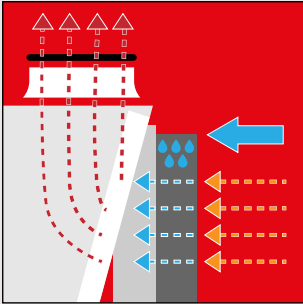
Connection protected
thanks to header protection pannels.



Optimised transport
with units sized for container
transport.

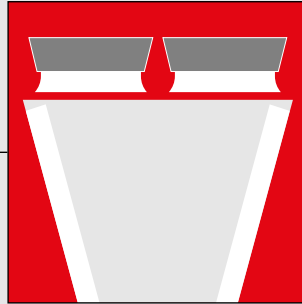
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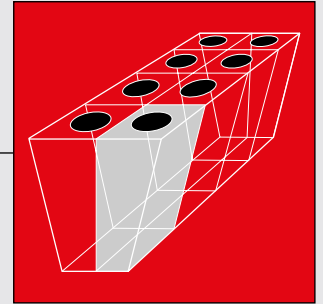
Versions with ADIABATIC operation

with non-organic PAD.



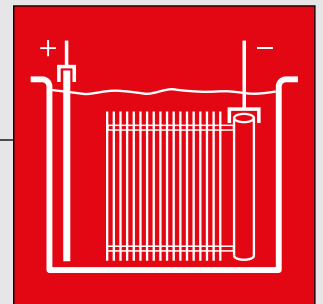
Super silent versions

using EC motors and silencers.



Excellent aeraulics thanks to air flow separation baffles

longitudinal and transverse.



High corrosion resistance

with electrolytic coating treatments.

Range

Length	up to 12.5 m
Versions available	with stainless steel pipes and casing
Fin material	Al, Al-Mg, Cu, Al pv, Al cath
3 fin spacing	2,1 - 2,4 - 3,6 mm
DT15°C EG 35% capacity	220 ÷ 2030 kW in the Dry version
Fan size	Ø 800 - 900 - 1000 mm
Number of fans	4 ÷ 18

Accessories

- High-temperature motors
- EC versions with silencer
- EC fan (option THD < 5%)
- Heat exchanger treatment resistant up to 6000 h in saline mist
- Adiabatic solutions: sprayed pack and spray system with nozzles
- Wired plug&play adjustment systems
- Recirculation system for legionella-free PAD
- Drainable circuits, vibration dampers and flanges
- Coil protecting wire nets



ADIABATIC PAD

CHARACTERISTICS

Reliability and high performance

- Complies with strict hygiene regulations VDI 6022
- Antimicrobial - anticorrosive
- Lasts the lifetime of the unit, so it is safe
- No puddles of water - No stagnation and recirculation of water
- Protects heat exchanger coil from corrosion
- High efficiency with low load losses on the air side
- Low water consumption per year with the same efficiency
- Designed to be self-cleaning
- Simple and fast installation > take off / put on
- Absence of spray - aerosol
- Anti-legionella smart water recirculating pump option
- Protective net against clogging with pollen and foliage

CONSUMPTION

Low water consumption

2 MW - Conditions Ambient T. 35°C - EG 35% DT 10°C

AT MAXIMUM EXCHANGE CAPACITY

- 3.8 m³/hour without recirculation
- 1.9 m³/hour with recirculation
- 18 X 900 6 POLE 34 kW consumption 1.7%
- 58 db(A) 10 m
- AT 50% EXCHANGE CAPACITY
- 1.7 m³/hour without recirculation
- 0.9 m³/hour with recirculation
- 5 kW consumption that is 0.5%
- 37 db(A) 10 m

SETTING

Simple system setting

Settings:

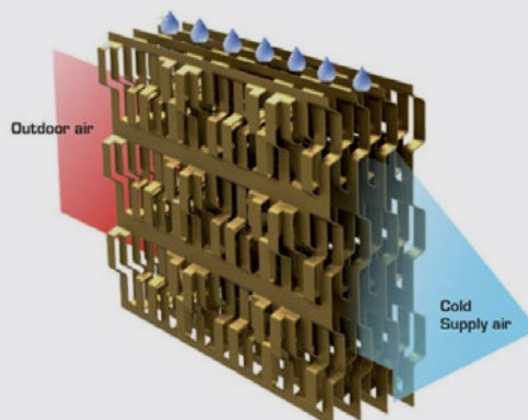
- fluid outlet temperature
- dry/wet switching temperature

Adjustment logic:

- water injection in PAD with impulses (T, RH, rpm, P)
- adjustment 0 - 10 Vdc EC fans

Calculation parameters:

- unit dimensions
- R.H. %
- ambient temperature
- air flow
- atmospheric pressure



Example of application of the ADIABATIC PAD on OSTRO L90 6p

Improvements of system performances

On the following conditions: Ambient T.35°C - E.G.35% DT10°

- **Condensation reduced** by 7°C from $\Delta T1$ 10°C to $\Delta T1$ 3°C.
- **Chiller off for 2 more months in the year:** FREE COOLING starts from Ambient T. 8°C instead of 5°C.

Improvements of unit performances

On the following conditions: Ambient T.35°C - E.G.35% DT10°

- **100% increase of exchange capacity:** 18 x 900 6P - from 1 MW to 2 MW - 58 dB(A) 10m
- or
- **Reduced capacity consumption** [on the same unit with EC motors + silencer]: minus 85% and minus 21dB(A).
- or
- **Space Saving ~ 55% and Money Saving ~15%:** unit with 18 to 8 fans.

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