The new V-type double-row dry cooler





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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.

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

480 models

in 2 configurations

790 kW

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

Capacities up to 3000 kW

DT15°C, EG 35%
IN THE ADIABATIC VERSION

3

years of warranty

Up to 75 kW/m²

DT15 EG 35%. High capacity density





Performance

Solidity



Performance in kW versus market (+5/+15%)

with the same ventilation and coil size.



High thicknesses

of pipes and fins.



Fan consumption at market minimums (-3/-10%)

with the same ventilation and coil size.



Casing in painted plate 20/10

for excellent strength.



Consumption < 0.5% of the capacity exchanged,

up to 1.0 MW DT15°C, EG 35% with EC motors.



Connection protected

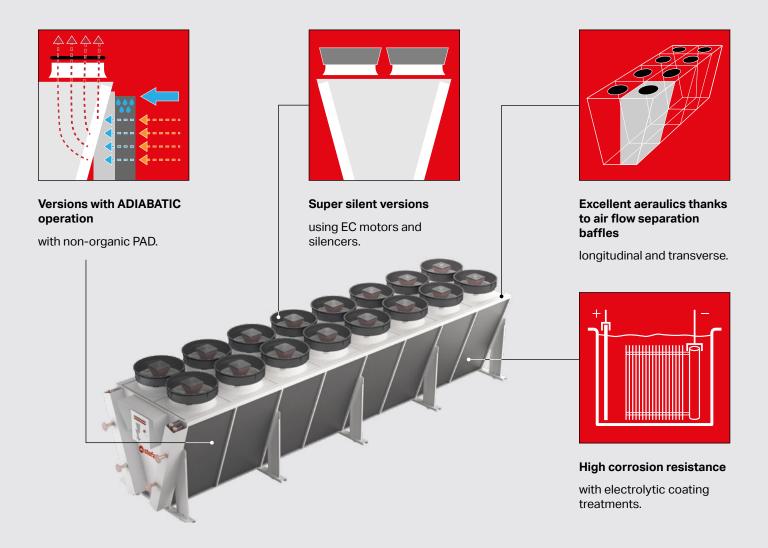
thanks to header protection pannels.



Optimised transport

with units sized for container transport.

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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

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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:

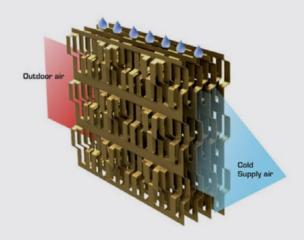
- fluid outlet temperature
- · dry/wet switching temperature

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).

Space Saving ~ 55% and Money Saving ~15%: unit with 18 to 8 fans.

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fani Great products for great customers