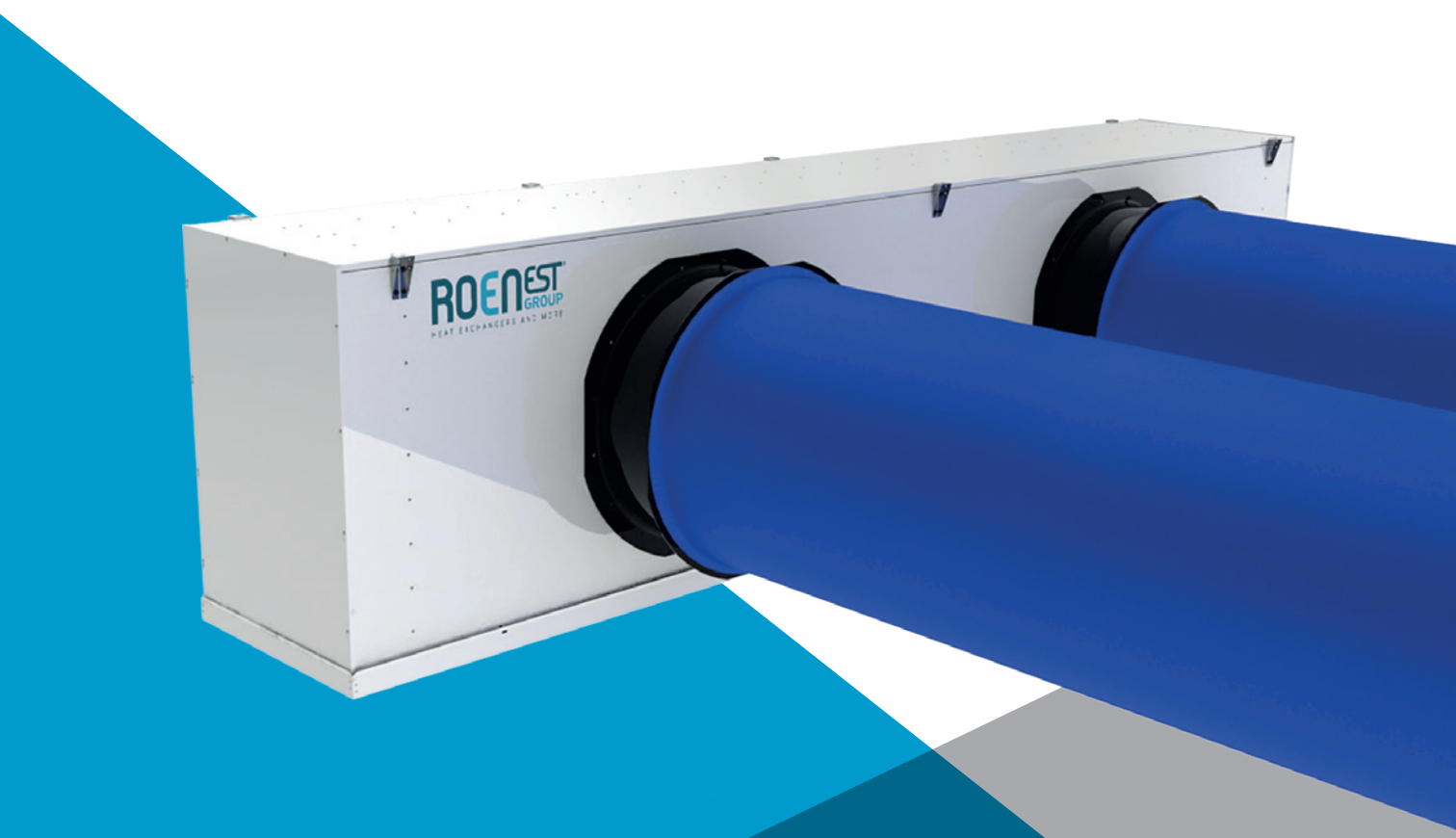
AIR TREATMENT AND RECIRCULATION SYSTEMS

ROENEST GROUP
HEAT EXCHANGERS AND MORE



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HEAT EXCHANGERS AND MORE

AIR TREATMENT AND RECIRCULATION SYSTEMS

These air treatment and distribution systems consist of special air cooling units combined with fabric diffusion ducts. The assembly is designed to provide the required thermal power and air flow rate, achieving optimal diffusion while minimising noise and power consumption. The air cooler is made with a double insulated tray, pre-painted aluminium casing, stainless steel metalwork and diffusers with anti-condensation treatment.

The system is supplied for ceiling installation complete with fasteners for the diffusion ducts.
On request, air intake filters, electronically controlled fans, and reheating with finned tube heat exchanger coil or electric resistances can be supplied.
If the system provides for two fans, you can choose the solution with two diffusion ducts or with blowing fans to convey the entire air flow into a single duct.

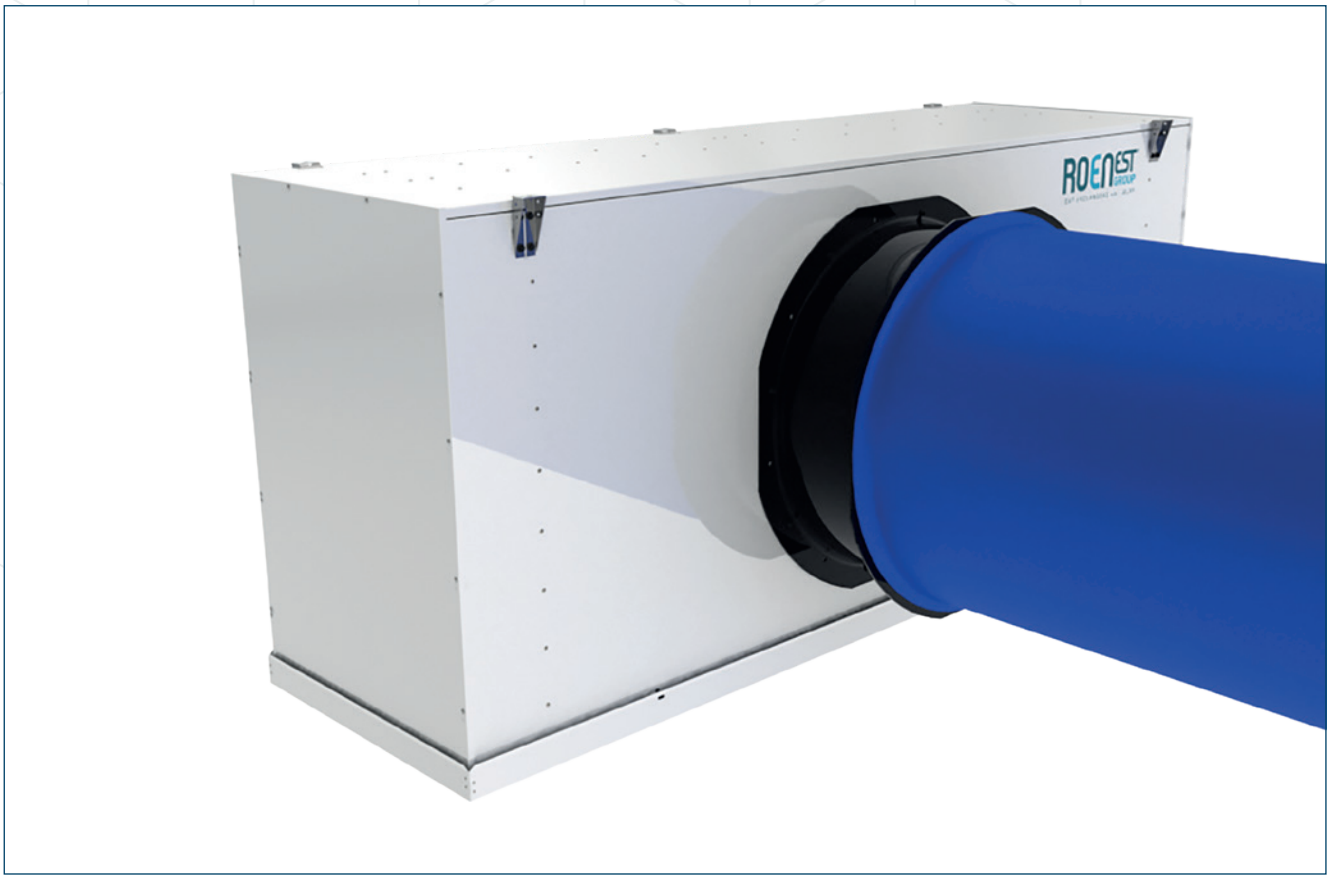
Generally speaking, standard air coolers feature a cubic design, but in case of height limitations we can build angular models with blowing fans and a single semicircular duct.

APPLICATIONS

The application is particularly suitable for:

- processing rooms
- loading and unloading areas
- cold store access areas
- ageing rooms
- industrial air conditioning

SINGLE-FAN AND SINGLE-DUCT MODELS

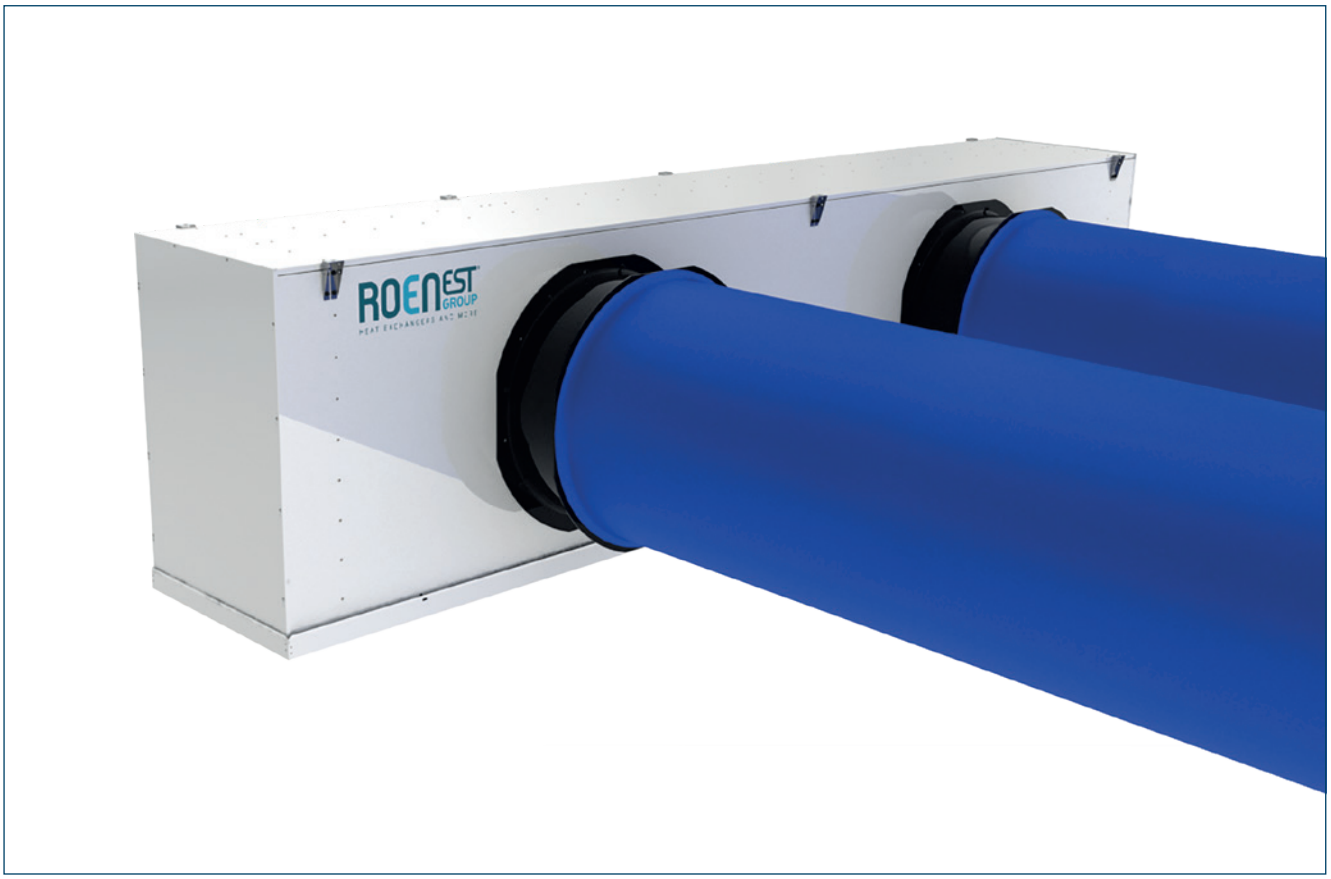


MODEL	Air flow	Nominal capacity (1) (2)	Nominal capacity (3) (4)	Sound pressure level at 5m	Power consumption	Indicative above-ground dimensions:			Duct lenght (5)
						l	d	h	
	m³/h	kW	kW	dB(A)	W	mm			m
C1-2.5	2500	18	10	38	150	1250	900	850	3 to 15 m
C1-5.0	5000	28	16	47	400	1550	1100	1300	5 to 20 m
C1-10.0	10000	70	40	51	900	2650	1100	1300	10 to 40 m
C1-15.0	15000	105	60	52	1900	2650	1100	1400	10 to 50 m
C1-20.0	20000	140	80	53	2000	3200	1300	1700	15 to 60 m

Cooling power

(1) R410A Tev = 7°C and Tair = 26°C 52%
(2) Chilled water T = 7/12°C and Tair = 26°C 52%
(3) R404A, SC1: Tev = 0°C, Tair =10°C RH 85%
(4) ETHYLENE GLYCOL 15%, SC7: T = 4/8°C, Tair = 16°C RH 70%

DOUBLE-FAN AND DOUBLE DUCT OR DOUBLE BLOWING FAN AND SINGLE DUCT MODELS



MODEL	Air flow	Nominal capacity (1) (2)	Nominal capacity (3) (4)	Sound pressure level at 5m	Power consumption	Indicative above-ground dimensions:			Duct lenght (5)
						l	d	h	
	m^3/h	kW	kW	dB(A)	W	mm			m
C2-5.0	5000	35	20	41	300	2150	900	850	3 to 15 m
C2-12.0	12000	81	46	51	1400	2650	1100	1300	5 to 20 m
C2-20.0	20000	140	80	54	1800	4850	1100	1300	10 to 40 m
C2-30.0	30000	210	120	55	3800	4850	1100	1400	10 to 50 m
C2-40.0	40000	280	160	56	4000	5950	1300	1700	15 to 60 m

Diffusion ducts

(5) Made in polyester " Trevira " of class 1 fire-retardant

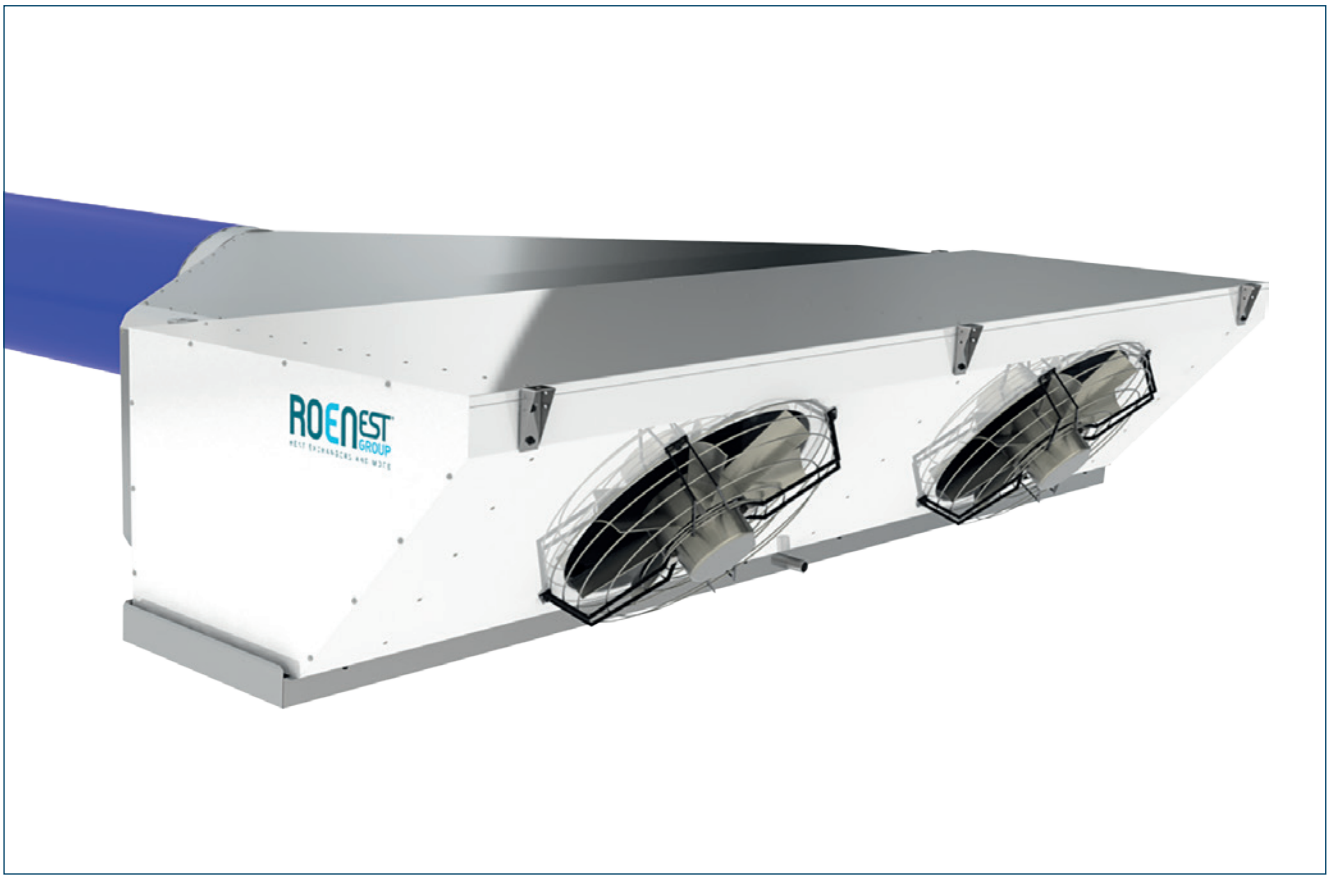
SINGLE BLOWING FAN AND SINGLE DUCT ANGULAR MODELS

MODEL	Air flow	Nominal capacity (1) (2)	Nominal capacity (3) (4)	Sound pressure level at 5m	Power consumption	Indicative above-ground dimensions:			Duct lenght (5)
						l	d	h	
	m³/h	kW	kW	dB(A)	W	mm			m
A1-1,7	1700	11	6	47	140	1200	800	410	3 to 15 m
A1-5.0	5000	33	19	47	660	1800	1100	740	3 to 15 m
A1-8.0	8000	49	28	48	1000	2150	1350	810	5 to 20 m

Cooling power

(1) R410A Tev = 7°C and Tair = 26°C 52%
(2) Chilled water T = 7/12°C and Tair = 26°C 52%
(3) R404A, SC1: Tev = 0°C, Tair =10°C RH 85%
(4) ETHYLENE GLYCOL 15%, SC7: T = 4/8°C, Tair = 16°C RH 70%

DOUBLE BLOWING FAN AND SINGLE DUCT ANGULAR MODELS



MODEL	Air flow	Nominal capacity (1) (2)	Nominal capacity (3) (4)	Sound pressure level at 5m	Power consumption	Indicative above-ground dimensions:			Duct lenght (5)
						l	d	h	
	m^3/h	kW	kW	dB(A)	W	mm			m
A2-3,4	3400	21	12	50	280	2100	800	410	3 to 15 m
A2-10.0	10000	67	38	50	1320	3250	1100	740	3 to 15 m
A2-16.0	16000	98	56	51	2000	4050	1350	810	5 to 20 m

Diffusion ducts

(5) Made in polyester " Trevira " of class 1 fire-retardant

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ROEN EST GROUP
HEAT EXCHANGERS AND MORE

Roen Est S.p.A.
Via dell'Industria, 4
34077 Ronchi dei Legionari
Gorizia — Italy

T. +39 0481 474140
F. +39 0481 779997
info@roenest.com

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GRUPPOPRAGMA.COM

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ROEN EST GROUP

www.roenest.com