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→ Dry coolers

ARD

Industrial applications



ARD dry coolers are designed to meet most needs in processes involving liquid and gas cooling and vapour condensation.

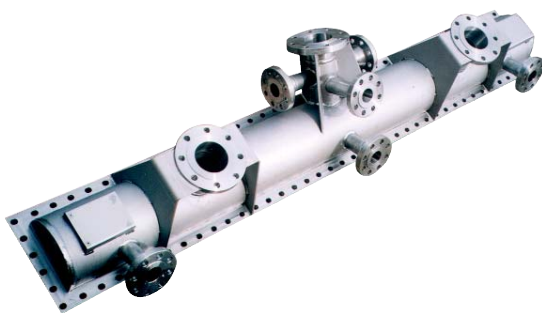
Placed on modular frames with standard dimensions, each exchanger bundle is sized and designed to customer specifications in accordance with CIAT's manufacturing standard or CODAP French pressure vessel design codes B or C.

Tubes		Fins				
Material	dia.	alu.	coated alu.	copper	carbon steel	stainless steel
copper	1/2"	●	●	●		
	5/8"	●	●	●		
cupronickel	5/8"	●	●	●		
carbon steel	5/8"	●	●	●		
	1"	●			●	
s/steel	5/8"	●	●	●		
	1"	●				●

A vast selection of finned tubes is available to meet your needs and optimise your heat selection. The core of your dry cooler, ARD finned tubes come in two distinct designs, each with its own benefits:

- strip fins for greater savings and a smaller footprint,
- spiral fins for high pressures and temperatures.

Tubes and fins are available in a vast range of materials (tube and fins).

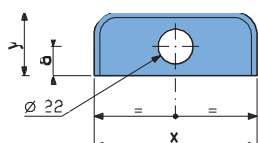
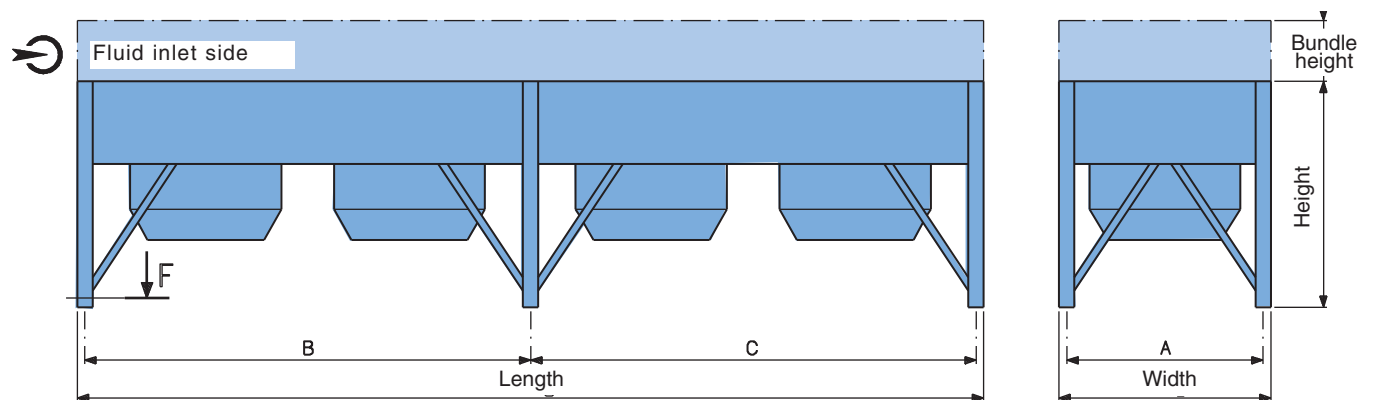


The design of the headers varies according to the operating conditions:

- tubular headers,
- welded boxes,
- removable boxes with O-rings.

The tubes are placed in the direction specified by the customer for easier installation.

Each unit comes standard with a hot-dip galvanised steel frame and Z275 galvanised steel panels. Customisable coatings*, thermal spraying* and all-stainless steel construction are also available. Fins can also be treated with special coatings* to protect them in corrosive atmospheres and reduce fouling.



View from F
6 mm thick anchor plate
Optional anchoring kit

ARD	x	y	a
80 - 100 - 125	130	55	20
125L - 140L - 160L	175	70	30



Regardless of its size, each unit comes with four lifting points which greatly facilitate handling. Each unit is **delivered assembled and ready to be connected**. ARD 80 & 100 models can be placed inside containers.

The direct-drive motors **keep maintenance costs to a minimum**. All the fans have blades that can be adjusted when the unit is not in operation. In some cases, postponing lubrication of the motor bearings* may be appropriate.

Each unit resists winds of up to 150 km/h and snow up to 30 cm deep. A reinforced frame* is available for extreme conditions.



(*) optional equipment: CIAT knows that not all situations are the same in each field of industry. That is why the ARD range features **a wide choice of options** to meet all your needs (explosion-proof motors, self-adjusting fans, dampers, steam coils, electrical protection and control panels, speed control systems, etc.).

ARD	1 fan	2 fans	3 fans	4 fans	5 fans	6 fans
80	Height = 1520 Width = 1330 Length = 1310 A = 1290 B = 1180	Height = 1520 Width = 1330 Length = 2510 A = 1290 B = 2380	Height = 1520 Width = 1330 Length = 3710 A = 1290 B = 3580	Height = 1520 Width = 1330 Length = 4910 A = 1290 B = C = 2390	Height = 1520 Width = 1330 Length = 6110 A = 1290 B = C = 2990	Height = 1520 Width = 1330 Length = 7310 A = 1290 B = C = 3590
100	Height = 1720 Width = 1580 Length = 2010 A = 1540 B = 1880	Height = 1720 Width = 1580 Length = 3910 A = 1540 B = 3780	Height = 1720 Width = 1580 Length = 5810 A = 1540 B = 5680	Height = 1720 Width = 1580 Length = 7710 A = 1540 B = C = 3790	Height = 1720 Width = 1580 Length = 9610 A = 1540 B = C = 4740	Height = 1720 Width = 1580 Length = 11510 A = 1540 B = C = 5690
125	Height = 1850 Width = 2350 Length = 2010 A = 2310 B = 1880	Height = 1850 Width = 2350 Length = 3910 A = 2310 B = 3780	Height = 2100 Width = 2350 Length = 5810 A = 2310 B = 5680	Height = 2100 Width = 2350 Length = 7710 A = 2310 B = C = 3790	Height = 2100 Width = 2350 Length = 9610 A = 2310 B = C = 4740	Height = 2100 Width = 2350 Length = 11510 A = 2310 B = C = 5690
125L 140L 160L	Height = 2250 Width = 2620 Length = 2240 A = 2560 B = 2065	Height = 2250 Width = 2620 Length = 4340 A = 2560 B = 4165	Height = 2250 Width = 2620 Length = 6440 A = 2560 B = 6265	Height = 2250 Width = 2620 Length = 8540 A = 2560 B = C = 4182	Height = 2250 Width = 2620 Length = 10640 A = 2560 B = C = 5232	

The ARD range results from the know-how behind a product that is particularly suited to demanding conditions:

- *corrosive or explosive atmospheres,*
- *high temperatures and pressures,*
- *fouling fluids.*

Fields of application:

- *industrial processes,*
- *chemicals, petrochemicals,*
- *pollution control facilities,*
- *iron and steel works,*
- *incineration plants,*
- *natural gas processing plants,*
- *cooling of compressors,*
- *cooling of diesel motors, etc.*
- *refrigerant condenser with specific constraints (ATEX, off-shore drilling, etc.)*

ARD dry coolers have been chosen by:

- *BP Chemical*
- *CEA Cadarache*
- *Exxon*
- *Five babcock*
- *GdF*
- *Jacobs Serete*
- *Küttner*
- *Krebs Speichim*
- *Mobil Oil*
- *Naphtachimie*
- *Shell...*
- *Total*
- *Arkéma*



CIAT also replaces bundles on existing units.

This document is non-contractual. As part of its policy of continual product improvement, CIAT reserves the right to make any technical modification it feels appropriate without prior notification.

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CERTIFIÉ ISO 9001

