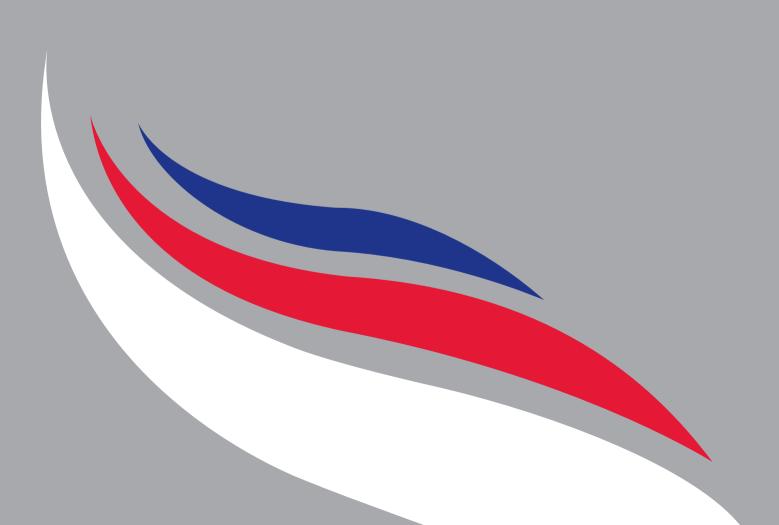


AIR COOLERS CONDENSERS DRY COOLERS SPECIAL PRODUCTS



REFTECO



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The Company

A dynamic, young enterprise staffed with per- Innovation sonnel with over twenty years' experience in the Whether standard or special, our products are sectors of industrial refrigeration, air condition- designed through the use of the most modern ing and process cooling. technological and information technologies. Our For every project we propose solutions of high background of solid technical skills enables us to efficiency, minimizing the environmental impact focus constantly on product innovation. of our customer's systems and guaranteeing the minimum CO2 emissions in the atmosphere. Quality Our mission is to ensure the maximum qual- We ensure the quality of our products, selecting ity of our services at all times, whether they are only parts and materials of certified reliability concerned with food conservation or complex and following with the maximum attention to industrial cooling processes. every stage of the production cycle and to the At Refteco our customers' expectations and design, construction and testing off all the main those of the end users are our main concern and product parts. that means that we will always offer the most appropriate solution, insuring optimized invest- Flexibility ments, minimum environmental impact and We are committed to handling and solving every maximum efficiency. type of problem promptly and professionally, in Our main goals are the following: our customer's best interests whether they need specially designed solutions or can select standard products from our vast catalogue.

REFTECO

Service

Our goal is to satisfy the customer's needs in every way. We offer a series of support services not only for the clients but also for the engineers and installers of every stage and during the entire life cycle of the project. Our after-sales staff is always willing and able to provide answers and rapid, qualified solutions to every type of problem.

AIR COOLERS

Angled air cooler REA / RGA



Angled air coolers super compact for small storage cold rooms with volume from 10 to 50 m3. Thanks their heavy metal construction they are suitable for storage of fresh or frozen food with temperature from -25 to +20°C.

0,5 – 4,2 kW

Main features:

Fluid refrigerants HFC's and glycol 12 different models Fin spacing 4 – 6 – 8 mm Fan diameter 250 mm Number fans 1 – 4 Defrost: electric, hot gas in the coil and electric in the drip tray

Dual discharge air cooler REDC / RGDC / RBDC



Range of dual discharge air coolers suitable for working and handling rooms or small and medium storage cold rooms with volume from 20 to 200 m3. Thanks their reduced height they are recommended for installations in low rooms or in limited space between conveyor and ceiling.

0,4 - 39 kW

Main features:

Fluid refrigerants HFC's, Glycol and CO2 27 different models Fin spacing 4 – 6 – 8 mm Fan diameter 230 – 350 – 450 mm Number fans 1 – 5 Defrost: electric, hot gas in the coil and electric in the drip tray AIR COOLERS

Cubic air coolers super compact for small and medium storage cold rooms with volume from 20 to 600 m3. Thanks their heavy construction they are suitable for storage of fresh or frozen food with temperature from -30 to +20°C.

1 – 78 kW

Main features:

Fluid refrigerants HFC's, Glycol and CO2 436 different models Fin spacing 4 – 5 – 6 – 7 – 8 – 10 mm Fan diameter 250 – 350 – 450 – 500 – 630 mm Air volume 1500 – 62000 m3/h Defrost: electric, hot gas in the coil and electric in the drip tray

Industrial cubic unit coolers for medium and big storage cold rooms with volume from 200 to 2500 m3. This range of air coolers has developed for heavy duty for cooling and storage of fresh or frozen food with temperature from -40 to $+20^{\circ}$ C.

15 – 167 kW

Main features:

Fluid refrigerants HFC's, Glycol, NH3 and CO2 9000 different models Fin spacing 4 – 6 – 7 – 8 – 10 – 12 mm Fan diameter 500 – 560 – 630 – 710 – 800 mm Air volume 7600 – 83000 m3/h Defrost: electric, light electric, hot gas, hot glycol, water, combined defrosts Heat exchanger: L configuration with square geometry with high ratio between the secondary fins surface and primary tubes surface, suitable for cold rooms with high humidity and freezing process. S configuration with staggered geometry with high specific cooling capacity, suitable for cold rooms with low humidity or packed products.





Cubic air cooler REC / RGC / RAI / RBC



Cubic air cooler REL/RGL/RAL/RBL



AIR COOLERS

Dual discharge air cooler REDI / RGDI / RADI / RBDI



Dual discharge air coolers suitable for working and handling rooms or small and medium storage cold rooms with volume from 150 to 1600 m3. This line of air coolers has developed for heavy duty for cooling and storage of fresh or frozen food with temperature from -40 to +20°C.

14 – 93 kW

Main features:

Fluid refrigerants HFC's, glycol, NH3 and CO2 156 different models Fin spacing 4 – 6 – 7 – 8 – 10 mm Fan diameter 500 – 630 mm Air volume 7200 – 59000 m3/h Defrost: electric, light electric, hot gas, hot glycol, water, combined defrosts

Evaporator for heat pump REP



Split evaporators suitable for outdoor installation of heat pump split systems. This line of evaporator has developed for heavy duty with ambient temperature from -15°C. Thanks the hoods in the air inlet and outlet, the defrost is extremely efficient and fast.

13 – 105 kW

Main features: Fluid refrigerants all HFC's 20 different models Fin spacing 4 – 6 – 7 – 8 mm Fan diameter 630 mm Number fans 1 - 5

Defrost: electric, light electric, hot gas

Unit air coolers for agricultural applications, especially designed for fresh fruit and vegetable storage, working with small difference temperature between air temperature and fluid temperature, to prevent dehydration of the product.

11 – 64 kW

Main features:

Fluid refrigerants HFC's, Glycol and CO2 120 different models Fin spacing 4 – 6 – 7 – 8 mm Fan diameter 400 – 450 mm Number fans 2 - 6 Air volume 6800 – 31000 m3/h Defrost: electric, light electric, hot glycol, combined defrosts

Air coolers for floor mounting applications, especially designed for storage of agricultural products such as: potatoes, carrots, unions, etc. These air coolers offer convenient ventilation and cooling for storage of boxed and bagged products. This line of air coolers can be equipped with "air mix system" that mixes the air from the storage with outside air.

17 – 85 kW

Main features:

Fluid refrigerants HFC's, Glycol and NH3. 35 different models Fin spacing 4 – 5 – 6 – 7 – 8 mm Fan diameter 630 – 800 mm Air volume 31000 – 86000 m3/h Defrost: electric, light electric, hot glycol, water



Fruit air cooler REIB / RGIB / RBIB



Air cooler REM / RGM / RAM



AIR COOLERS

Banana ripening cooler REDB / RGDB



Range of banana ripening air coolers designed for application in airbag and side curtain ripening rooms. Thanks the fan motors with high additional pressure and their complete reversibility they provide uniform banana ripening. These units have hinged fans panels for easier cleaning and maintenance operations.

8 - 46 kW

Main features:

Fluid refrigerants HFC's and glycol Banana rooms with 1, 2 or 3 pallet levels Banana rooms from 6 to 36 pallets 140 different models Lighting integrated in the air cooler Air heating with electric heaters

Air cooler **REIR / RGIR**



Air coolers especially designed for installation in cold room where the air is distributed by metal or textile ducts. These air coolers are equipped with radial fan motors that provide high available static pressure with low power consumption.

14 - 93 kW

Main features:

Fluid refrigerants HFC's and glycol 130 different models Fin spacing 4 – 6 – 7 – 8 mm Available static pressure 120 – 250 Pa Defrost: electric, light electric, hot glycol, water AIR COOLERS

New line of blast freezers for fast freezing of meat, fish, ice cream and ready to serve meals in tunnels where it's required high cooling capacity in a limited space. This range of shock freezers is designed

especially when the food is deposited on trolleys and it grants perfect and fast food freezing thanks special fan motors that provide high additional air static pressure.

24 – 97 kW

Main features:

Fluid refrigerants HFC's, NH3, Glycol and CO2 122 different models Fan diameter 630 – 710 mm Fin spacing 6 – 7 – 8 – 10 – 12 mm Available static pressure 80 – 150 Pa Defrost: electric, hot gas, water, hot glycol, combined defrost

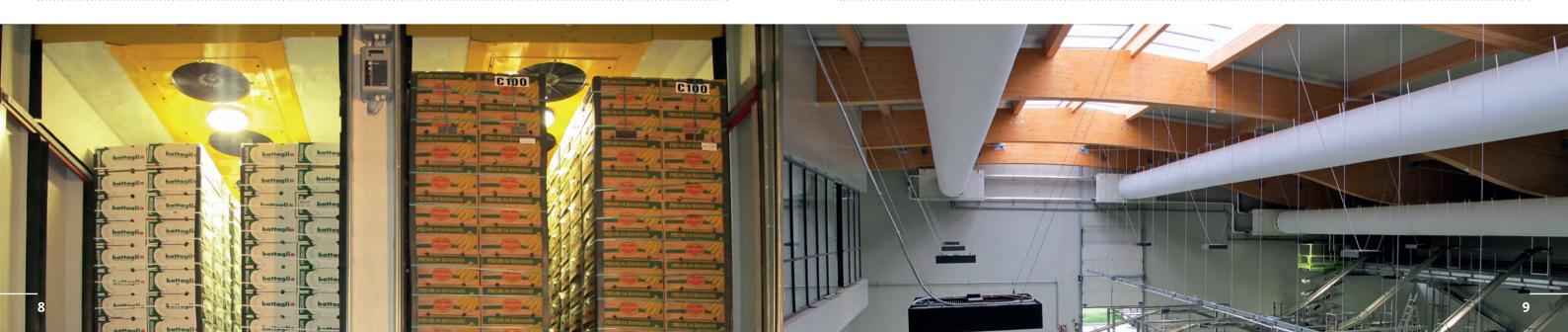
New line of blast freezers for fast freezing of meat, fish, ice cream and ready to serve meals in tunnels where it's required high cooling capacity in a limited space.

This blast freezer range is equipped with fan motors that provides additional air static pressure to grant a fast and uniform food cooling.

21 – 106 kW

Main features:

Fluid refrigerants HFC's, NH3, Glycol and CO2 136 different models Fan diameter 500 – 630 – 710 mm Fin spacing 6 – 7 – 8 – 10 – 12 mm Available static pressure 80 – 150 Pa Defrost: electric, hot gas, water, hot glycol, combined defrost



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Shock freezer REBFT / RABFT / RBBFT



Blast freezer REBF / RABF / RBBF



Fast freezer REV / RGV / RBV



AIR COOLERS

Innovative line of blast freezers designed for small and medium size freezing tunnels where the food is deposited on few trolleys. These fast freezers have hinged fans panels for easier cleaning and maintenance operations.

11 - 35 kW

Main features:

Fluid refrigerants HFC's, Glycol and CO2 85 different models Fan diameter 450 – 500 mm Fin spacing 6 – 8 – 10 – 12 mm Available static pressure 50 – 100 Pa Defrost: electric, hot gas, hot glycol, combined defrost

AIR COOLERS

Air coolers accessories



Stainless steel tubes

This execution is required for aggressive environments or sanitary working conditions.

Shock cooler REX / RGX / RAX



New line of air coolers especially designed for shock cooling meat, fish and poultry. Thanks the special fans that provide high static pressure and high air flow, these units grant fast cooling of the products. These shock coolers can be equipped also with inlet hood for blast freezing in slaughter houses.

32 - 164 kW

Main features:

Fluid refrigerants HFC's, NH3 and glycol 190 different models Fin spacing 6 – 7 – 8 – 10 – 12 mm Available static pressure 50 – 100 Pa Defrost: electric, hot gas, water, hot glycol, combined defrost





cataphoresis treatment, Blygold treatment, Heresite treatment) This execution is required for aggressive environments.

Coil coating (epoxy painted fins,

Stainless steel casing

This casing and frame execution is required for aggressive environments or sanitary working conditions.

Stainless steel fins

This execution is required for aggressive environments or sanitary working conditions.



EC fans

These electronic fans are equipped with electronic commutation speed control. This technology provides high efficiency and controllable air volume.



Air cowl

Air outlet diffuser increases air throw and keep air flow near the ceiling for maximum product storage in the cold room.

Most of Refteco air coolers can be optimized with a wide range of accessories and construction variants, to grant long product life, better efficiency, fast installation and easy cleaning and maintenance.



Shut-up

Polyester shut-up sock reduces defrost time and defrost power consumption, avoid to distribute frost on the ceiling and increases air throw.



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Mounting legs Mounting feet.

Fan ring heater The electric heater avoids ice buildup in the cowling and around fan, to prevent fan damage.

Drip tray insulation Double drip tray with 10 mm elastomeric foam internal insulation.



Safety switch Fan motor ON/OFF switch for safety maaintenance.



Expansion valve and solenoid valve The DX evaporators can be equipped with mechanical or electronic valve and solenoid valve.

CONDENSERS

Condenser RCS / RCL / RCSD / RCLD



This new line of condensers with axial fans is suitable for refrigeration and air conditioning installations. Thanks wide range of models with different noise level and dimensions this range of condensers fulfill every customer needs. These condensers are available with one or two refrigerant circuits and they are available for horizontal or vertical installation.

9 – 1170 kW

Main features:

Fluid refrigerants HFC's and NH3 on request 920 different models Fan diameter 350 – 500 – 630 – 800 – 910 mm Fin spacing 2,1 – 2,3 – 2,5 – 3,0 – 4,0 mm Noise level from 28 dB(A) at 10 m

Condenser RCVS / RCVD



Wide range of V type condensers very compact suitable for refrigeration and air conditioning installations. RCVS condensers thanks the reduced height of only 115 cm are suitable for installations in residential areas or historic sites where the external units should be easily hidden. RCVD condensers are especially designed for big capacity application.

80 – 2190 kW

Main features:

Fluid refrigerants HFC's and NH3 on request 176 different models Fan diameter 800 – 910 mm Fin spacing 2,1 – 2,3 – 2,5 – 3,0 – 4,0 mm Noise level from 30 dB(A) at 10 m

CONDENSERS

This innovative line of condensers with microchannel provides many advantages if compared to traditional tubes and fins configuration. The main strengths of this product are: 25% lower power consumption, 30% smaller dimension, 70% lower refrigerant charge, more competitive and up to 3 dB(A) lower noise level.

22 – 118 kW

Main features:

Fluid refrigerants HFC's and NH3 on request 16 different models Fan diameter 500 – 630 mm Noise level from 28 dB(A) at 10 m

This combination of condenser and box is a smart solution for chillers and condensing units assembling. In the box can be easily installed: compressors, evaporator, main electrical panel, economizer, etc. while below the air cooled condenser can be installed the liquid receiver.

52 - 608 kW

Main features:

Fluid refrigerants HFC's and NH3 on request 64 different models Fan diameter 500 – 630 – 800 – 910 mm Fin spacing 2,1 – 2,3 – 2,5 – 3,0 – 4,0 mm Noise level from 28 dB(A) at 10 m







Condenser RCH



Refbox RCBS / RCBD



Dry cooler RDS / RDL

Dry cooler **RDVS**



DRY COOLERS

New line of dry coolers suitable for refrigeration, air conditioning and process cooling installations. Thanks wide range of models with different noise level and dimensions this range of liquid coolers fulfill every customer needs. These dry coolers are available for horizontal or vertical installation. On request these units can be supplied with special fans for high temperature application.

9 – 640 kW

Main features:

16 different models Fan diameter 500 – 630 – 800 – 910 mm Fin spacing 2,1 – 2,3 – 2,5 – 3,0 – 4,0 mm Design temperature -40 / +120°C Noise level from 28 dB(A) at 10 m

This new line of V type compact liquid coolers is suitable for refrigeration, air conditioning and process cooling installations.

Thanks the reduced height of only 115 cm, this range of dry coolers is suitable for installations in residential areas or historic sites where the external units should be easily hidden. This range of liquid coolers is equipped with heat exchanger that provides very efficient heat transfer even for very low fan speed rotation.

56 - 760 kW

Main features: 70 different models Fan diameter 800 – 910 mm Number fans 1 - 8 Fin spacing 2,1 – 2,3 – 2,5 – 3,0 – 4,0 mm Noise level from 28 dB(A) at 10 m DRY COOLERS

The RDSD and RDLD line of liquid coolers are especially suitable for big refrigeration, air conditioning, process cooling and cogeneration installations. Thanks wide range of models with different noise level and dimensions this range of dry coolers fulfill every customer needs. These dry coolers are available for horizontal or vertical installation and on customer request with special fan motors for high temperature applications.

62 – 1270 kW

Main features:

420 different models Fan diameter 500 – 630 – 800 – 910 mm Fin spacing 2,1 – 2,3 – 2,5 – 3,0 – 4,0 mm Design temperature -40 / +120°C Noise level from 30 dB(A) at 10 m

The RDVD line is especially designed for huge installations in refrigeration, air conditioning and process cooling installations.

Thanks the V type configuration, the RDVD dry coolers can reach big capacities with reduced plan dimensions.

The combination of the V shape and high efficiency fan motors, the RDVD dry coolers perform the best energy class A++ with Standard capacity / Fans consumption bigger than 240. This line of dry coolers is very often combined with adiabatic cooling system accessory, reducing the energy consumption with limited water consumption.

290 – 2270 kW

Main features:

252 different models Fan diameter 800 – 910 mm Number fans 4 – 16 Fin spacing 2,1 – 2,3 – 2,5 – 3,0 – 4,0 mm Noise level from 30 dB(A) at 10 m





REFTECO

Dry cooler RDSD / RDLD



Dry cooler **RDVD**



Condensers and Dry coolers accessories

Almost Refteco condensers and dry coolers can be optimized with a wide range of accessories and construction variants, to provide better product efficiency, fast installation and easy cleaning and maintenance.



Fan speed controller for AC fans The fan speed controller keeps the condensing pressure of the condensers and the fluid outlet temperature of the dry coolers lower than the setup values.

Electronic fan speed controller

The fan speed controller for EC fans

maintains the condensing pressure of the condensers and the fluid

outlet temperature of the dry coolers

lower than the setup values, reducing

the fan power consumption and the

for EC fans

noise levels.



EC fans

These electronic fans are equipped with electronic commutation speed control. This technology provides high efficiency and controllable fan speed rotation.

Safety switch Fan motor ON/OFF switch for safety

Fan motor ON/OFF switch for safety maintenance.

Stainless steel tubes This execution is required for aggressive environments.



Air outlet diffuser

This accessory reduces the noise level and the fan power consumption. It increases also the capacity of air cooled condenser and dry cooler at same noise level and same footprint.



Coil coating (epoxy painted fins, cataphoresis treatment, Blygold treatment, Heresite treatment) This execution is required for aggressive environments.



Adiabatic cooling system The dry and spraying system provides important energy savings compared to traditional evaporative condensers and cooling towers: lower water consumption, no risk of Legionella, lower energy consumption and no vapor plumes.

Stainless steel casing This casing and frame execution is reguired for aggressive environments.

Available on request special painting

about RAL colour and corrosion

protection according to every ISO 12944 classification.

Special casing painting

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Vibration dampers supports Bell-shaped anti-vibration absorbers provide product vibration isolation.

ATEX fans

Special explosion prof fan motors designed to avoid the risk of explosion, according to ATEX 94/9/EC directive.

SPECIAL PRODUCTS

This microchannel condenser line thanks the V module configuration is a clever and fast solution for chillers, condensing units and big remote air cooled condensers production.

Thanks the microchannel heat exchanger this product reaches big condensing capacity, compact design, low power consumption and small refrigerant charge.

88 – 910 kW

Main features:

Fluid refrigerants HFC's, NH3 and Propane 24 different models Fan diameter 800 mm Number fans 2 – 16 Noise level from 30 dB(A) at 10 m Fans AC or EC

These tailor made heat exchangers are especially designed for fruit hydro cooling or installation inside ice banks. They are suitable for new installations and for revamping of existing systems.

45 – 290 kW

Main features:

Fluid refrigerants HFC's, NH3 and Glycol Stainless steel or hot deep galvanized steel Tubes diameter 1/2", 3/4", 1" Length up to 6000 mm Width up to 2400 mm Height up to 2300 mm



16



V module microchannel



Heat exchanger for hydro cooling and ice bank



SPECIAL PRODUCTS

Special air heat exchangers



Refteco can design and supply special tailor made finned heat exchangers for food industry, heavy industry, process cooling, oil & gas industry and power plants. For freezing tunnels Refteco can design the complete system cooling system equipped by finned heat exchangers, special fans for low temperature application that provide big air volume and high static pressure, frames and panels.

Main features:

Fluid refrigerants HFC's, NH3, Glycol, CO2, Propane Tubes materials: Cooper, AISI 304, AISI 316L, Hot deep galvanized steel, Cu-Ni Fins materials: Aluminum, Aluminum epoxy painted, Cooper, AI-Mg, AISI 304, AISI 316L, Carbon steel

Coil coating: Cataforesis, Blygold and Heresite Cleanable heat exchangers with removable headers. On request.

Ice bank

The ice bank is especially designed for dairy industry, meat processing and fish industry. Thanks the latent heat of ice fusion, this system provides big cooling capacity available during the pick of cooling demand from the installation.

45 – 290 kW

Main features:

Stainless steel tank Thermal insulation Stainless steel heat exchangers System can be supplied with or without water pumps Electrical panel with controller Water agitator system







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