

Save Energy
Live Future Technology



ARTENSO

Industrial Cooling Solutions



Welcome to the cooling solutions

We've solve your industrial cooling processes
with high energy efficiency products.

We've introduced some improvements
to make things even easier for you.



Easily and Smart Solution Optimal user-friendly products.

Our units in spite of their own
suitable costs are produced
in order to respond to the user
requirements at the maximum.



Extended and Exclusive Product Range

The products which we currently
produce have the higher quality
as well as having the advanced
developed technology hardwares.

High Technology

Our Products go beyond the bounds
to be able to meet today's requirements
in the best way together with its
implemented options according
to the climate and operating conditions
and the software that can be upgraded,
inverter and speed control systems.



We've brought the cold closer

You don't have to
trek far for all your
refrigeration and air
conditioning products

- ✓ Intelligent solutions
that protect your energy.
- ✓ Reliable TrustWorthy and
Long Life Cycle
- ✓ Industry-leading technical support



Content

Single Scroll Chillers	5
Multi Scroll Chillers	6
Screw Series Chillers	7
Hybrid Series Chillers	8
Water Cooled Chillers	9
Cooling Towers	10
Pump Systems	11
Plate Heat Exchangers	12
Oil Shell & Tube	13
Mold Conditioner	14

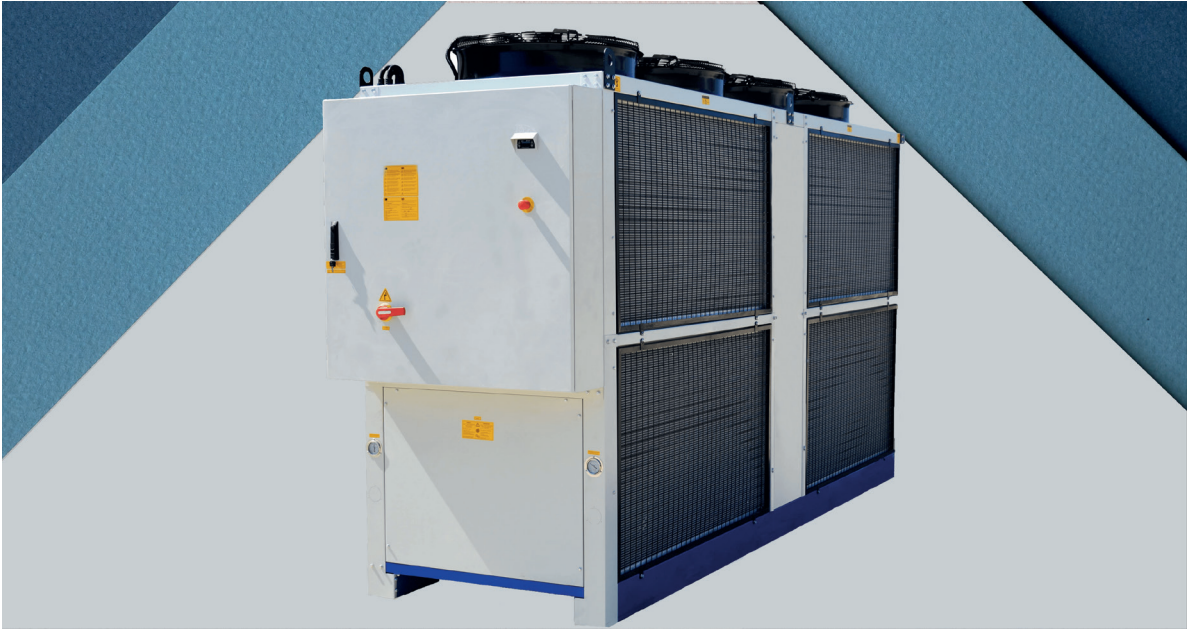
Single Scroll Series Chillers



Serial air-cooled chiller devices produced with A1 safety grade R410A gas from ASHRAE with zero ozone thinning potential; features suitable for the latest technological innovations. These chiller cooler units, which perform better than the same compressor power, have hydraulic module and microprocessor control integrated into the body as standard. Thanks to the presence of the hydraulic module in the chiller, easy and fast installation is ensured in the process. It is designed to give the best and most economical results in small and medium capacity industrial processes.

- Hermetic Scroll compressor
- Kyoto and Montreal protocols with next generation R-410A refrigerant
- Microprocessors processor control with maximum energy
- Corrosive surface coated capacitor Low and high pressure press against environments
- Internal AISI 304 SS stainless water tank
- High capacity and durable stainless centrifugal type pump
- High efficiency AISI 316 SS plate or shell&tube; type i evaporator (out of tank)
- Condenser with large surface area and axial fan phase protection relay with high air flow
- Pressure sensors for fan regulation
- Thermostatic expansion valve
- Flow control against water flow irregularities (flow switch)
- Main switch with electrical panel cover safety lock
- Emergency stop button and magnetic thermal protection
- Powder polyester dye against UV rays over galvanized hair with high surface hardness, wear and tear strength.
- CE-standard control panel

Multi Scroll Series Chillers



The R410A is designed for medium and large capacity processes with series of air-cooled chiller devices with gas rechargeable. Scroll compressors, high capacity control and dual and four-circuit structure. Energy consumption is low as it has 2-4-8-12 step operating logic. Up to a certain capacity, the hydraulic module can be produced integrated into the body, while in larger units the device can be positioned externally.

- Tandem QuadRuple Hermetic
- Scroll compressor Kyoto and montreal protocols with next generation R-410A refrigerant microbusters processor control with maximum energy design
- Air side special Airtech capacitor design to minimize pressure losses
- Surface coated capacient against corrosive environments
- Low (manual) and high (automatic) pressure pressotate
- 7" Touch LCD display (Protection Class IP65)
- Check valve for each compressor on the push line
- Built-in AISI 304 SS stainless water tank (At certain capacities)
- High capacity and durable centrifugal type pump (At certain capacities)
- High efficiency shell&tube; type evaporator (out of tank)
- Condenser with large surface area and axial fan with high air flow)
- Phase protection relay
- Pressure sensors for fan regulation
- Thermostatic expansion valve
- Flow switch against water flow irregularities
- Main switch with electrical panel cover safety lock, emergency stop button and magnetic thermal protection
- Powder polyester dye against UV rays over galvanized hair with high surface hardness, wear and tear strength.
- CE-standard control panel

Screw Series Chillers



All components used in production are selected from the best and most discoverable products in the field. Thus, in any moment of need, there is no shortage of spare parts wherever they are in the world. Screw series chiller devices with ozone layer friendly R134A refrigerant are produced in a capacity range of 112 – 863 kW and are successfully used in all areas of HVAC systems and industrial cooling. All parameters of the device can be easily accessed with the 7" color touch LCD screen control panel, which is offered as standard in all units.

- Single or Dual Semi-Hermetic screw compressor
- Kyoto and next generation HFC-134A refrigerant in accordance with Montreal protocols
- Special Airtech condenser design to minimize air side pressure losses
- Surface coated capacent against corrosive environments
- Low (manual) and high (automatic) pressure pressotate
- 7" color touch LCD display control panel (protection class IP65)
- Built-in AISI 316 SS stainless water tank
- High capacity and durable centrifugal type pump
- High efficiency shell&tube; type evaporator (out of tank)
- Field condenser and axial fan with high air flow
- Phase protection relay
- Pressure sensors for fan regulation
- Electronic expansion valve
- Flow switch against water flow irregularities
- Main switch with electrical panel cover safety lock, emergency stop button and magnetic thermal protection
- Powder polyester dye against UV rays over galvanized hair with high surface hardness, wear and tear strength.
- CE-standard control panel

Hybrid Series Chillers



The units belonging to this series were created by the operation of air-cooled chiller and dry-cooler units in a compact structure with a single unit and a common control system. According to the process requirement;

- Chiller and dry-cooler at the same time (different process lines)
- Only chiller
- Only dry-cooler

working methods such as. Especially in cases where low air temperature and high process water temperature are desired, free cooling is ensured for long periods of time and a high level of electricity is saved. All required working methods are managed sensitively through the "freecooling kit" in the device and do not leave any need for intervention to the user. Apart from the specified capacities, chiller and dry-cooler configurations for the need can be easily created and applied.

- Automatic control with 3-way valves
- Integrated free cooling system
- Special Airtech condenser design to minimize air side pressure losses
- Low (automatic) and high (manual) pressure presotate
- 7" color touch LCD display control panel (protection class IP65)
- High capacity and durable centrifugal type pump
- High efficiency shell&tube; type evaporator (out of tank)
- Field condenser and axial fan with high air flow
- Pressure sensors for fan regulation
- Electronic expansion valve
- Flow switch against water flow irregularities
- Powder polyester dye against UV rays over galvanized hair with high surface hardness, wear and tear strength
- CE-standard control panel

Water Cooled Series Chillers



All components used in production are selected from the best and most discoverable products in the field. Thus, in any moment of need, there is no shortage of spare parts wherever they are in the world. Screw series chiller devices with ozone layer friendly R134A refrigerant are produced in a capacity range of 112 – 863 kW and are successfully used in all areas of HVAC systems and industrial cooling. All parameters of the device can be easily accessed with the 7" color touch LCD screen control panel, which is offered as standard in all units.

- Single or Dual Semi-Hermetic screw compressor
- Kyoto and next generation HFC-134A refrigerant in accordance with Montreal protocols
- Special Airtech condenser design to minimize air side pressure losses
- Surface coated capacitor against corrosive environments
- Low and high pressure pressure switch
- 7" color touch LCD display control panel (protection class IP65)
- Check valve for each compressor on the push line
- Built-in AISI 304 SS stainless water tank (At certain capacities)
- High capacity and durable centrifugal type pump (At certain capacities)
- High efficiency shell&tube; type evaporator (out of tank)
- Field condenser and axial fan with high air flow
- Phase protection relay
- Pressure sensors for fan regulation
- Thermostatic expansion valve
- Flow switch against water flow irregularities
- Main switch with electrical panel cover safety lock, emergency stop button and magnetic thermal protection
- Powder polyester dye against UV rays over galvanized steel with high surface hardness, wear and tear strength.
- CE-standard control panel

Air Cooled
Chillers

Water Cooled
Chiller

Cooling Towers

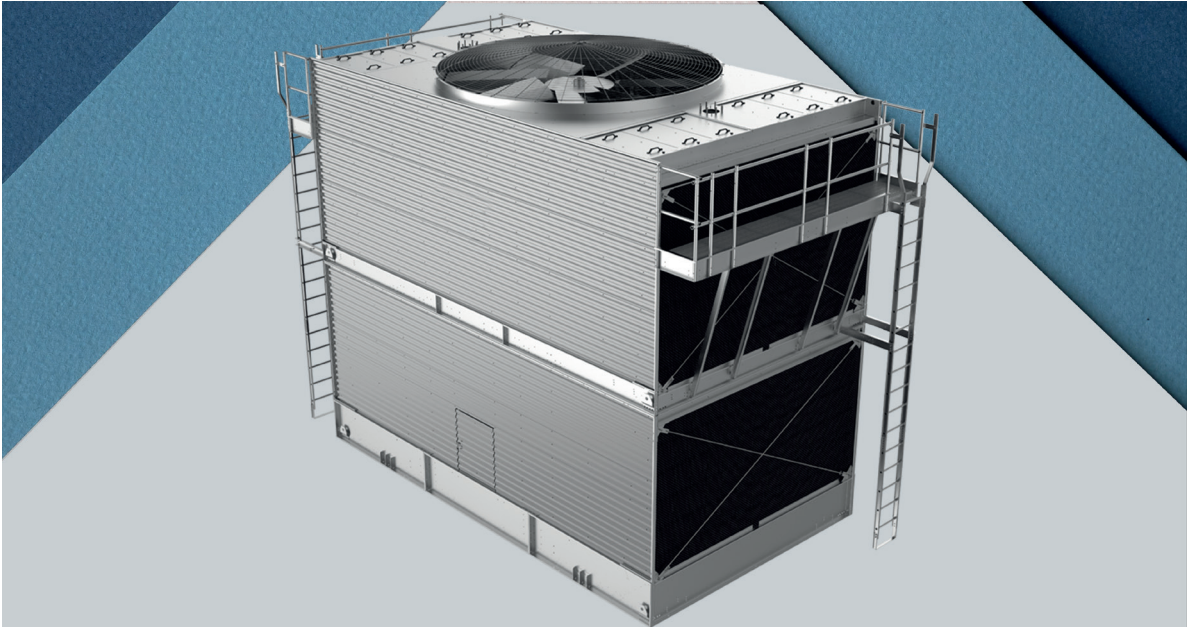
Pump Systems

Plate Heat
Exchanger

Oil
Shell & Tube

HVAC

Cooling Towers



Hot Water Distribution Systems

Minimum pumping pressure and long operating life are provided by the hot galvanized or epoxy painted steel construction, natural flow, covered, overflow water distribution system. Natural flow water distribution is made with specially designed polypropylene jets.

Air Intake Blinds

Air intake louvers made of hot galvanized or epoxy painted sheet metal: are designed to regulate the air flow uniformly and the icing problem is minimized.

Cooling Tower Body

Its design and construction are qualified to provide maximum strength and easy transportation. Cooling tower body consists of pools and upper body. It is made of anti-rust epoxy painted as standard and hot galvanized steel upon special request.

Fan

Specially designed for towers. Silent, statically and dynamically fully balanced, manufactured from corrosion resistant material. It has been designed in such a way that the air enters the fan easily, thus ensuring the efficient operation of the tower. The fan guard with aerodynamic structure with round profile iron to prevent the entry of foreign substances is produced in a removable type.

Water Inlet Outlet Connection

The hot water inlet is installed in the upper pool and the cold water outlet is in the lower pool. Water filter is mounted on the pool suction to ensure that the water that will go to the pumps is cleaned of foreign substances.

Air Cooled
Chillers

Water Cooled
Chiller

Cooling Towers

Pump Systems

Plate Heat
Exchanger

Oil
Shell & Tube

HVAC

Pump Systems



As cooling, package type (water tank and circulation pump integrated into the device) devices, as well as external hydraulic units are created in processes where water volume or circulation pump is needed outside the standard. The circulation pump with the pressure and flow required by the process and the water tank with the desired volume and technical details are mounted on a single chassis. The water tanks in these units, where aesthetic design and ergonomics are referenced, are made of stainless steel material and are covered with insulation material that minimizes special heat transfer. Components such as cover design, inlet and output sleeves and water level indicator are clarified according to the project details according to the need.

In addition, special systems can be installed according to customer request and easily integrated into the desired process with inverter and PLC technology. In this way, fluid processes can be controlled at desired values by optimizing easy-to-install energy costs.

Options

- PLC control 7" touch screen
- Co-aging control system
- Inverter technology with precision flow and pressure control system
- AISI 304 Stainless tank integrated
- ST37 special design pressure tank integrated for closed systems
- Complete stainless package systems

Air Cooled
Chillers

Water Cooled
Chiller

Cooling Towers

Pump Systems

Plate Heat
Exchanger

Oil
Shell & Tube

HVAC

Plate Heat Exchangers

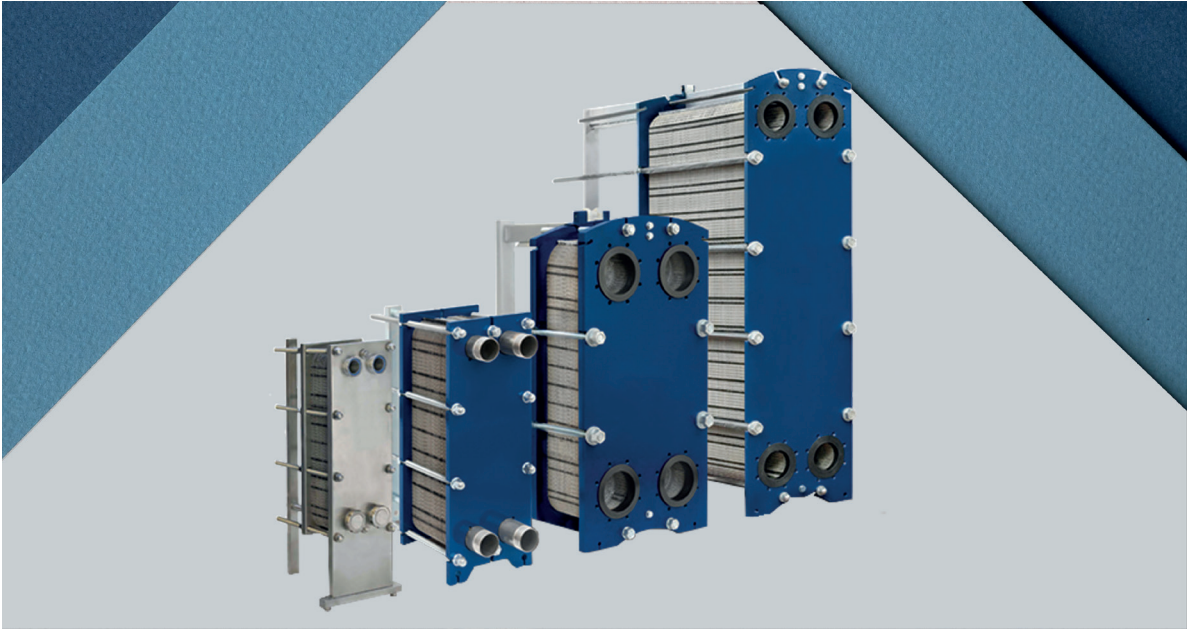


Plate heat exchangers are devices that operate according to the principle of heat transfer between two different fluids with temperature differences between them. It is completely separated from each other by fluid and cooling fluid plates to cool. Standard plate heat exchangers have a total of four input and output ports, two of which are the ins and outs of the refrigerant and the other two are the fluids to cool.

The plates are generally produced from materials ranging from 0.5mm-1mm to AISI 304, AISI 316, SMO, Hastelloy and Titanium, resistant to rusting and corrosive effects of aggressive fluids. Material variability varies according to the usage area of the plate heat exchanger. Usually there are four holes on each plate, which allows fluids to transfer heat between the plates through these holes. After entering the fluid plate, it moves towards the heat transfer area through the distribution zone and thanks to this region, the fluid uses the entire heat transfer area. The heat transfer area on the plates is the place between the lower and upper distribution zones, and heat transfer takes place in this region.

- It transfers heat with very high yields
- Thanks to its compact structures, it takes up very little space
- It has a wide variety of plates and gaskets.
- It can be completely disassembled and cleaned.
- Minimum antifiriz use in chiller processes
- Used to maintain water quality in cooling tower processes
- AISI 316, Titanium, Hastelloy plate options

Oil Shell & Tube

Air Cooled
Chillers

Water Cooled
Chiller

Cooling Towers

Pump Systems

Plate Heat
Exchanger

Oil
Shell & Tube

HVAC



Oil cooling heat exchangers are suitable for heat transfer liquids, lubricating oils and coolants. These high-quality products are produced by a combination of the best material (raw material) and the latest production techniques. In standard production, different models and designs are available, including fresh water cooling and seawater cooling. It is possible to classify products with high efficiency, easy cleaning, durability and economic.

Cooling oil exchangers, which are often preferred in industrial use, provide significant advantages to enterprises in the systems in which they are used. The advantages of cooling oil exchangers include better temperature control, lower maintenance and operating costs, long-lasting use of the system, being more reliable due to their use at low pressures, and higher efficiency.

There are many different areas where cooling oil exchangers are used in industrial areas. Body tubular heat exchangers are generally special purpose heat exchangers used to achieve high efficiency in areas such as

- Petrochemical and refinery sector
- Yarn dyeing
- Oil cooler
- Turbo charger
- Fabric dyeing
- Ship sector
- Compressor as air coolers

According to process requirements, the following materials are used in the manufacture of tubular exchangers

- ST37
- AISI304
- AISI316 v
- Copper
- Titanium
- Bafon



Mold Conditioner

Stable temperature is of great importance in plastic molding systems that need high precision, especially those that operate at high temperatures. Water-cooled mold conditioners are used to meet the precise temperature requirement. In products where not enough sensitivity is provided during production; adverse results such as surface roughness and air bubbles can be observed.

Plastic; during the injection, the mold should be hot enough to fill the mold, and after the injection it should be cold enough to solidify and come out of the mold. Mold conditioners control the heating and cooling assembly thanks to the automatic valve groups on them at these stages and automatically realize the capacity required by the user.

- Automatic control with 3-way valves
- Integrated free cooling system
- Special Airtech condenser design to minimize air side pressure losses
- Low (automatic) and high (manual) pressure pressotate
- 7" color touch LCD display control panel (protection class IP65)
- High capacity and durable centrifugal type pump
- High efficiency shell&tube; type evaporator (out of tank)
- Field condenser and axial fan with high air flow

Air Cooled
Chillers

Water Cooled
Chiller

Cooling
Towers

Pump
Systems

Plate Heat
Exchanger

Oil
Shell & Tube

HVAC