Manufacturing Forward



MECOCHILL-P SERIES
PROCESS WATER CHILLERS

mikropor

www.mikropor.com

Manufacturing Forward



mikropor

Mikropor began its journey in 1987 with a passion to create "Tomorrow's Technology" and has become one of the leading manufacturers of atmospheric air filtration solutions and compressed air treatment systems for a variety of industries.

By closely following the latest developments in technology, Mikropor's "Best in Class" products and solutions are appreciated by customers in more than 100 countries.

The company's sustainable growth has been provided by its passion for innovation and commitment to quality, as well as its dedication to technology. Mikropor is an environmentally conscious company that values people, while developing products that extend the needs and expectations of customers.

With this mission, Mikropor continues to become one of the most recognized brands in the world by expanding its global penetration in the field of technological filtration and contributes to a healthier planet.

www.mikropor.com

MECOCHILL-P SERIES
PROCESS WATER CHILLERS

Mikropor Process Water Chillers are designed to meet the needs of many applications that require stable working conditions with maximum quality and cleanliness of the cold process fluid.

Mikropor's brand-new compact, robust, portable and reliable water chiller called "MECOCHILL-P" is designed to be a portable solution for small and medium scale industrial applications that has different needs for different processes. MECOCHILL-P ensures an accurate control of water temperature.

Compact & Portable Design



Refrigeration Circuit

- Hermetic Compressor (Rotary & Scroll)
- R513a & R454b Refrigerant
- Microchannel Aluminium Condenser
- Stainless Steel Brazed Plate Heat Exchanger
- Thermostatic Expansion Valve
- Sight Glass
- "Digi-Pro" Digital Controller
- High Pressure Switch
- High & Low-Pressure Manometers (Starting with MECOCHILL-P-7)

Process Water Circuit

- High-Performance Stainless-Steel Water Pump
- Plastic Water Tank
- Water Level Indicator
- Heat Exchanger Differential Pressure Switch
- Water Pressure Manometer

Application Fields

- Food & Beverage Industries, Wineries, Dairies, Breweries, Bottling, Storage, Distilleries
- Plastic Industries-Injection, Extrusion, Blow Molding, Thermoforming
- Laser Industry-Cutting, Welding, Profiling, Optics, Medical
- Chemical & Pharmaceutical Industry-Natural Gas, Jacketed Vessels, Polyurethane, Laboratories
- Healthcare, Petrochemical, Temperature Control
- Engineering Industry-Machine Tools, Welding Machine, Cutting, Profiling, Polishing, Rolling, Presses
- Hydraulic Control-Oil Cooling, Heat Treatment






MECOCHILL-P SERIES ADVANTAGES & WORKING PRINCIPLE



Easy Installation & Portability & Operation

Easy installation and portable design ensure easy and fast setup and move for different processes on field. One machine can be at many locations due to process needs.

Digital controller provides various alarms to keep the process safe and at desired point, also helps energy savings. Differential pressure switch is equipped to chiller for no or lower water flow cases. User friendly operator interface and installation makes operation easier.

Best Components

All components of MECOCHILL-P (compressors, condensers, evaporators, tank, pump etc.) are "Best in Class" and specially designed with the right equipment to consume the lowest energy.

Energy Saving

Unlike typical water chillers for processes that have been used for many years, the MECOCHILL-P unit is designed to meet the user's need in the simplest way with minimum operating costs and best performance.

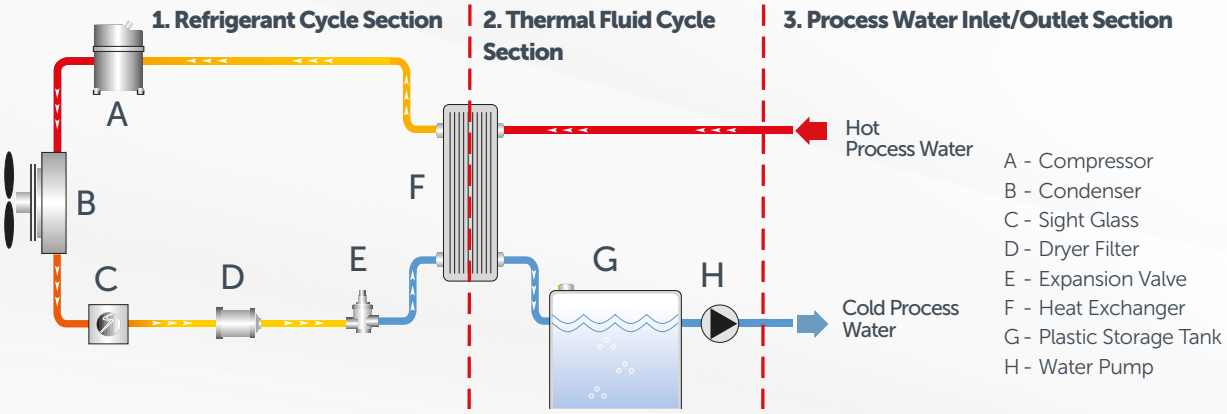
Choosing the right machine is possible with wide product range. Digital controller, reliable capacity, best performance, portable design, easy installation, reduced maintenance, and downtime save energy, time and operation costs.





MECOCHILL-P SERIES PROCESS WATER CHILLERS

How It Works



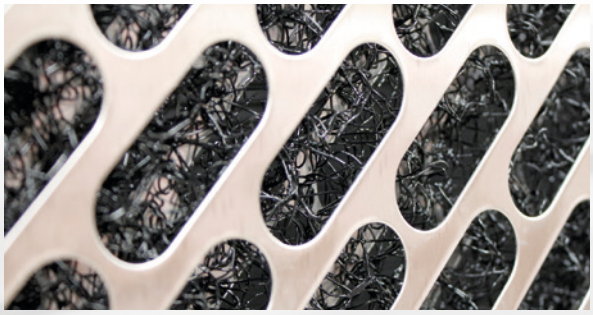
MECOCHILL-P Series Process Chiller composed of 3 sections which are Refrigeration, Thermal Liquid and Process.

The water that comes out from process needs to be cooled. The process water comes to water inlet of MECOCHILL-P and travels through the heat exchanger. Meanwhile, refrigerant side cools the exchanger to cooler levels so that travelling process water gets cold there. The cooled water then moves to storage tank. This tank also ensures more stable water outlet temperature. When the water is needed in process, water pump delivers cooled water to the process again and this circulation goes on. Storage tank provides constant outlet temperature for sudden consumptions.

MECOCHILL-P SERIES STANDARD FEATURES

Main Components

Cleanable Condenser Pre-Filters



To protect the condensers all MECOCHILL-P chillers include progressive composite fiber mesh filters which can be easily removed for service and cleaning. Filter could be removed from its own housing outside the canopy to be washed with water or cleaning fluids.

Rotary or Scroll Compressors

Models up to MECOCHILL-P-10 have rotary compressor that works with single phase 230V power and rests have scroll compressor that works with 3 phase 400V power. These high-performance compressors make efficient cooling possible.



MECOCHILL-P SERIES PROCESS WATER CHILLERS

R513a & R454b Refrigerant

MECOCHILL-P series have environment friendly R513a & R454b refrigerant for its high thermodynamic properties. Other refrigerants are optional. Please feel free to contact with the regional Sales Responsible of Mikropor for alternative refrigerants.

Aluminium Microchannel Condenser



This new condenser technology allows better performance with reduced space requirements. Required refrigerant amount also decreases with this. Surface coating protects against corrosive environments.

Evaporator



Stainless-Steel brazed heat exchanger has high heat transfer area with its compact size.

Expansion Valve



Stable and high cooling performance thermostatic expansion valve is included in MECOCHILL-P series.

AC Fan



High performance fan produces air flow on microchannel to achieve efficient cooling.

Refrigerant Gas Pressure Gauge



MECOCHILL-P-7 and larger models have a standard refrigerant gas high and low-pressure gauges.

Plastic Storage Tank

Atmospheric water tank stores water for sudden consumptions. This tank also makes water outlet temperature stable. Water inside the tank can keep cool for long time thanks to its insulated cover.

MECOCHILL-P SERIES PROCESS WATER CHILLERS

Stainless Steel Water Pump



Long lasting high efficiency centrifugal pump is maintenance free. Pump has stainless steel body and impeller.

Wheels



Portability comes with compact design and industrial wheel. These high-quality wheels make the machine movable around the field for using in different processes.

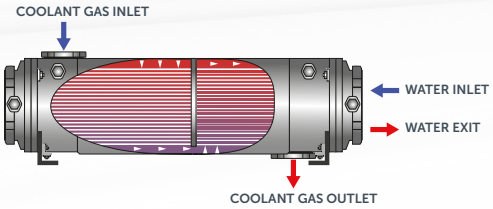
Digi-Pro



Digi-Pro series digital controller provides all the best features to control a process chiller, user friendly interface, efficient control algorithm, precise control, and reliable operation. This controller is a standard for all MECOCHILL-P models.

MECOCHILL-P SERIES OPTIONAL FEATURES

Water Cooled Condenser



In some cases or applications where air-cooled models cannot be used, MECOCHILL-P offers water-cooled models that includes a Water Cooled Condenser.

Water Pump Option

3 bar water pump is supplied as a standard unit, but in some applications more pressurized cooled water may be required. In these cases, a 5 bar water pump can be offered as an option.

Electric Power

MECOCHILL-P has a phase protection relay at 3 phase models to protect the machine against electrical failures. Different electrical operating power options are also available. Please contact Mikropor sales team for suitable MECOCHILL-P models for your applications.

MECOCHILL-P SERIES
PROCESS WATER CHILLERS

Technical Specifications

Model	15°C / 20°C Cooling Capacity* (kW)	15°C / 20°C Cooling Capacity* (kcal/h)	15°C / 20°C Cooling Capacity* (tons)	Water Flow Rate (m^3/h)	Water Pressure (bar)	Storage Tank Capacity (l)	Power Supply	Refrigerant
MECOCHILL-P 3	3.1	2700	0.9	2.4	3	30	230V / 1Ph / 50Hz	R513a
MECOCHILL-P 5	7.3	6300	2.1	2.4	3	30	230V / 1Ph / 50Hz	R513a
MECOCHILL-P 7	7.9	6800	2.2	2.4	3	30	230V / 1Ph / 50Hz	R513a
MECOCHILL-P 10	8.9	7700	2.5	2.4	3	60	230V / 1Ph / 50Hz	R513a
MECOCHILL-P 16	15.3	13200	4.4	4	3	60	400V / 3Ph / 50Hz	R454b
MECOCHILL-P 21	20.5	17600	5.8	4	3	100	400V / 3Ph / 50Hz	R454b
MECOCHILL-P 25	23.4	20500	6.7	9	3	100	400V / 3Ph / 50Hz	R454b

*Evaporator water inlet/outlet temperature 20/15°C, external air temperature 25°C;

Model	15°C / 20°C Cooling Capacity* (kW)	15°C / 20°C Cooling Capacity* (kcal/h)	15°C / 20°C Cooling Capacity* (tons)	Water Flow Rate (m^3/h)	Water Pressure (bar)	Storage Tank Capacity (l)	Power Supply	Refrigerant
MECOCHILL-P 3	3.0	2600	0.9	2.4	3	30	230V / 1Ph / 50Hz	R410a
MECOCHILL-P 5	4.8	4200	1.4	2.4	3	30	230V / 1Ph / 50Hz	R410a
MECOCHILL-P 7	6.7	5700	1.9	2.4	3	30	230V / 1Ph / 50Hz	R410a
MECOCHILL-P 10	10.1	8750	2.9	2.4	3	60	230V / 1Ph / 50Hz	R410a
MECOCHILL-P 16	16.9	14500	4.8	4.0	3	60	400V / 3Ph / 50Hz	R410a
MECOCHILL-P 21	20.9	18000	5.9	4.0	3	100	400V / 3Ph / 50Hz	R410a
MECOCHILL-P 25	24.2	21000	6.9	9.0	3	100	400V / 3Ph / 50Hz	R410a

*Evaporator water inlet/outlet temperature 20/15°C, external air temperature 25°C;

Model	Length (mm)	Width (mm)	Height (mm)	Water Connection Size	Weight (kg)
MECOCHILL-P 3	843	622	838	G 3/4"	78
MECOCHILL-P 5	945	722	815	G 3/4"	90
MECOCHILL-P 7	1006	653	830	G 1"	95
MECOCHILL-P 10	991	762	1058	G 1"	140
MECOCHILL-P 16	1500	812	1067	G 1"	225
MECOCHILL-P 21	1530	899	1298	G 1"	260
MECOCHILL-P 25	1436	912	1483	G 1"	290

MECOCHILL-P SERIES
PROCESS WATER CHILLERS

mikropor

Ahi Evran OSB Mah. Oğuz Cad. No: 5 Sincan, 06935, Ankara-Türkiye

+90 312 267 0700 mikropor@mikropor.com

mikropor

www.mikropor.com

All rights reserved. © 2026, Mikropor. No part of this publication may be published, changed or reproduced in any form without permission.

280926