



# **TEMPERATURE CONTROL UNITS**

WATER AND PRESSURIZED WATER THERMOREGULATION UNITS



Industrial Frigo was founded in 1970 in Italy, near Lake Garda, thanks to an idea that came from an engineer with a passion for cooling systems. Strong principles and the goal of offering only high-quality products have allowed the company to establish itself as a leader in the creation, design and construction of advanced refrigeration systems.

Thanks to the support of an exceptionally talented team, Industrial Frigo has experienced exponential growth in recent years, conquering ever-wider world markets worldwide and different production to be able to respond to the specifics that the increasing market requires.

Industrial Frigo continues to be a family-run company but today it includes four foreign branches and a sales and service network in over 120 countries. Continuous research and technological development of environmentally friendly solutions are leading the company towards a new era of ecologically sustainable growth and innovation.





EC 303/2008 for the installation, maintenance CEPAS and repair of equipment containing F-gas.





WTA WTP 140 WTP 160 SPECIAL UNITS

## **APPLICATION AREAS**



PLASTIC

PHARMACEUTICAL

AUTOMOTIVE

RUBBER





## WATER THERMOREGULATION UNITS

The **WTA** units are special units developed to allow water thermoregulation with maximum control.

They have been designed to condition moulds and cylinders through the different industrial processes, especially in the plastic sector. They are suitable for operations at a maximum temperature of +95 °C, with one or more zones. The thermal exchange can be direct (standard) or indirect (optional).

#### Available, if required, the light version.

### **TW SERIE**

- Alphanumeric display
- Compacted frame
- Low pressure pump
- Optional indirect exchange

## **TECHNICAL FEATURES**

## **1** OUTLET TEMPERATURE CONTROL

The precision of the outlet temperature from the control unit is ensured by the presence of a high precision regulating solenoid valve.

## 2 HIGH EFFICIENCY PUMP

Centrifugal pump with wide operating range, ensures maximum-efficiency of the cold water flow rates for utilities.

## **3** ARMORED HEATING ELEMENT

The heating effect is obtained thanks to an heating element with an armored resistance and low load density.

## 4 STATIC RELAY

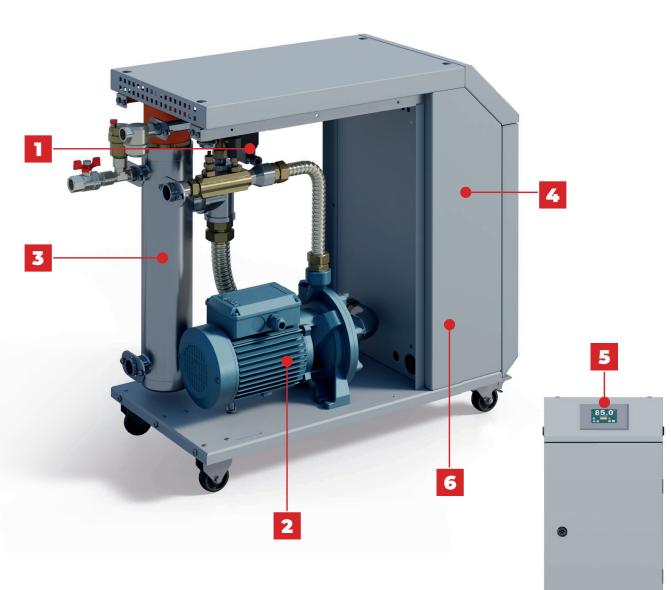
The solid static relay enable high precisions in the heating temperature through a higher number of switching, maintaining total reliability over time.

## 5 USER FRIENDLY PLC CONTROLLER

Touch Screen PLC for temperature control and automatic zone management, predisposed for serial connections. Featuring an extremely clear and intuitive user interface which allows the user to display the description of functions and alarms.

## 6 FRAME PAINTED RAL 7001

The unit is supplied in a steel frame painted with thermosetting powder paint based on resins in the color RAL7001. Formulated with pigments and additives specifically chosen for their high resistance to UV rays and atmospheric agents.



# **WTP 140**



## WATER THERMOREGULATION UNITS

**WTP 140** units are special units developed to allow water thermoregulation with maximum control.

They have been designed to condition moulds and cylinders through the different industrial processes, especially in the plastic sector. They are suitable for operations at a maximum temperature of +140  $^{\circ}$ C, with one or more zones.

### Available, if required, the light version.

### **TWP SERIE**

- Alphanumeric display
- Compacted frame
- Low pressure pump

## **TECHNICAL FEATURES**

## **1** OUTLET TEMPERATURE CONTROL

The precision of the outlet temperature from the control unit is ensured by the presence of a high precision regulating solenoid valve.

## 2 HIGH EFFICIENCY PUMP

Centrifugal pump with wide operating range, ensures maximum-efficiency of the cold water flow rates for utilities.

### **3** ARMORED HEATING ELEMENT

The heating effect is obtained thanks to an heating element with an armored resistance and low load density.

## 4 STATIC RELAY

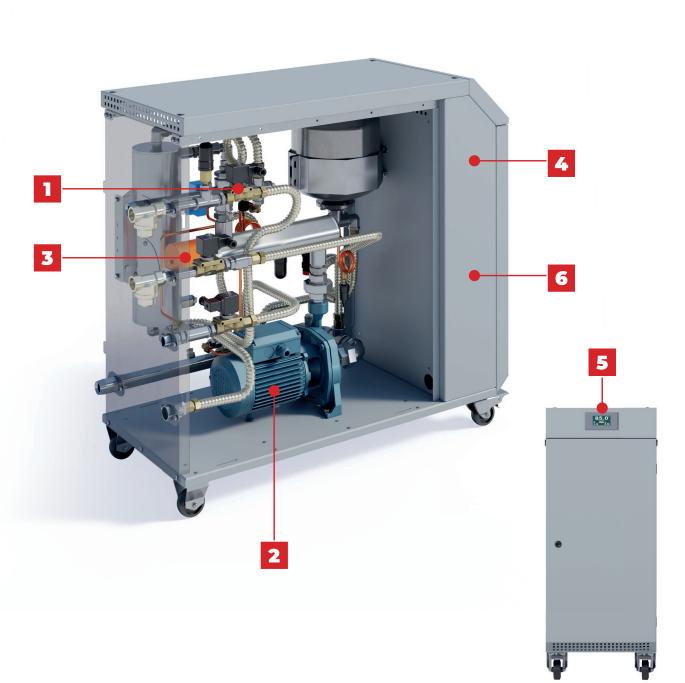
The solid static relay enable high precisions in the heating temperature through a higher number of switching, maintaining total reliability over time.

## 5 USER FRIENDLY PLC CONTROLLER

Touch Screen PLC for temperature control and automatic zone management, predisposed for serial connections. Featuring an extremely clear and intuitive user interface which allows the user to display the description of functions and alarms.

## 6 FRAME PAINTED RAL 7001

The unit is supplied in a steel frame painted with thermosetting powder paint based on resins in the color RAL7001. Formulated with pigments and additives specifically chosen for their high resistance to UV rays and atmospheric agents.



# WTP 160



## WATER THERMOREGULATION UNITS

**WTP 160** units are special units developed to allow water thermoregulation with maximum control.

They have been designed to condition moulds and cylinders through the different industrial processes, especially in the plastic sector. They are suitable for operations at a maximum temperature of +160  $^{\circ}$ C, with one or more zones.

## **TECHNICAL FEATURES**

## **1** OUTLET TEMPERATURE CONTROL

The precision of the outlet temperature from the control unit is ensured by the presence of a high precision regulating solenoid valve.

## 2 HIGH EFFICIENCY PUMP

Centrifugal pump with wide operating range, ensures maximum-efficiency of the cold water flow rates for utilities.

## **3** ARMORED HEATING ELEMENT

The heating effect is obtained thanks to an heating element with an armored resistance and low load density.

## 4 STATIC RELAY

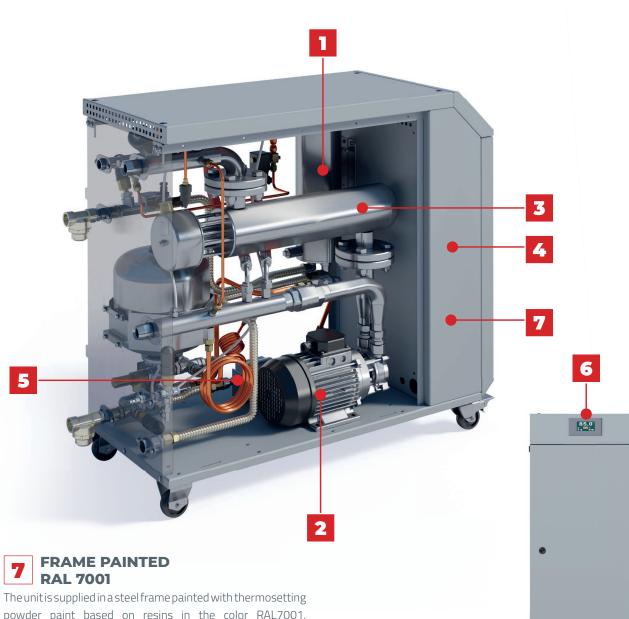
The solid static relay enable high precisions in the heating temperature through a higher number of switching, maintaining total reliability over time.

## 5 PRESSURIZING WATER PUMP

The static pressure level, necessary to keep water in liquid form, is guaranteed by a specific pump.

## **6** USER FRIENDLY PLC CONTROLLER

Touch Screen PLC for temperature control and automatic zone management, predisposed for serial connections. Featuring an extremely clear and intuitive user interface which allows the user to display the description of functions and alarms.



powder paint based on resins in the color RAL7001. Formulated with pigments and additives specifically chosen for their high resistance to UV rays and atmospheric agents.

# **SPECIAL UNITS**



### MULTIZONE



HEATING UP TO 300 KW



MATERIALS AND OTHER PERFORMANCES



COMPACTED WATER OR OIL UNITS

## **MAIN OPTIONALS**

#### AUTOMATIC MOLD DRAIN

An integrated system of valves makes it possible to drain the unit circuit, in order to facilitate the mold-change operation and recover the fluid contained inside. **Available for: WTA • WTP140 • WTP160** 

#### **MAGNETIC DRIVE PUMP**

Pumps in which the transmission takes place through magnetic joints without any mechanical seal, guaranteeing maximum insulation between the impeller and the motor. This reduces the risk of fluid leakage and improves reliability. **Available for: WTP160** 

#### **HEAT EXCHANGERS**

AISI 316 stainless steel plate heat exchangers, braze welded, to allow the separation of fluids contaminated by the cooling circuit water. **Available for: WTA** 

### HIGH ACCURACY OF THE DELIVERY TEMPERATURE

The delivery temperature accuracy is ensured by a high precision proportional control valve. Available for: WTA - WTP140

#### **INDEPENDENT ZONES**

It is possible to have two or more unit circuits (up to 8) with independent set point temperatures. Available for: WTA - WTP140 - WTP160

#### **SPECIAL VOLTAGE OPTIONS**

It is possible to choose the most suitable type of unit power supply (voltage and frequency) from a wide range of possibilities.

Available for: WTA/TW • WTP140/TWP140 • WTP160

## ACCESSORIES

SHUT- OFF VALVES Available for: WTA/TW • WTP140/TWP140 • WTP160

#### COLLECTORS

Collectors with or without shut-off valves. Available for: WTA/TW • WTP140/TWP140 • WTP160

#### CONNECTING PIPES

INOX connecting pipes with or without fiberglass insulation + silicon rubber. Available for: WTA/TW • WTP140/TWP140 • WTP160





## 4 SALES AND AFTER-SALE SERVICES 120 LOCAL SUPPORT POINTS

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