



PERFECT SOLUTIONS FOR **INDUSTRIAL PROCESS WATER SYSTEMS**





The TempMaster is developed for optimal heating and recooling of industrial process water. This tempering machine consists of a stainless steel water tank and pump and contains components from the standard range of leading brands. Careful selection and set-up of the components is achieved by using computer programms that DTE especially designed for this purpose.

In this way DTE houses a maximum of heating capacity in a minimum of space but still keep the components easy to access or to exchange.

Only durable materials are used in the TempMaster. DTE leaves nothing to chance and consciously chooses for a stainless steel housing fitted with rubber legs. These legs are easily removable to enable direct mounting onto customers steelwork or frame. Pipelines are made of copper or other high-quality material.

The stainless steel water tank in the TempMaster is sealed tight and operates under pressure. The hot water temperature in the standard TempMaster will be regulated on an accuracy of ~0,5K.

These important DTE constructional features guarantee a long life of our TempMaster and indicates our quality and reliability. To prove our quality, all DTE products are developed and constructed in accordance with ISO9001 and fully meet all European safety and quality standards, such as 2006/42/EG, 2014/30/EU, 2014/35/EU, NEN-EN-IEC 60204-1:2006/C11:2010, NEN-EN-ISO 12100:2010, NEN-EN 378-2:2016 and 2014/68/EU PED directive.

The TempMaster includes the following components:

- Heating element of durable quality
- Heat exchanger (for tempering) made of stainless steel with corrugated plates
- Digital temperature controller with adjustable limitation and display to read measured values with PID-algorithm
- Solid state relais for long lifetime and undisturbed operation
- · Hermetically sealed stainless steel water tank, provided with insulation
- Industrial multi-stage centrifugal pump with impellers, shaft and other key components of stainless steel
- · Automatic de-aerator
- Safety thermostat
- Automatic refilling (minimal inlet pressure 2,5 bar)
- Protection at the maximum system pressure
- Switch box provided with all necessary protections
- Connection for external start/stop (volts-free contact)
- Air separator in the return to prevent air entering the water tank (for a longer lifetime of heating element)



Besides the TempMaster standard programme, DTE also offers customized tempering machines which are calculated and built according to your wishes and specifications. DTE has almost all components for extra features available on stock.

Some of these available options are:

- Full compliance with country dependent standards and regulations
- · Adaptation to all voltages and frequencies
- · Housing fitted with wheels instead of rubber legs
- Different legs or floor construction on customers specification
- · Adaptation to extreme environmental conditions
- Temperature adjustments and/or readable by remote control
- Heating till 140° C
- · Heat exchanger (for tempering) of a different capacity
- Waterpiping in stainless steel
- By-pass for water pump protection
- · IP54 protection covers for washdown areas

In terms of communication with your devices in fact everything is possible, from BUS to 4-20mA, feel free to discuss the opportunities.

So if you want a perfect solution for your tempering and heating needs, contact us and we will give you the best options!

DTE HeatMaster

What applies for the TempMaster also applies for the HeatMaster, however with one big difference, the HeatMaster is not equipped with re-cooling capability. The heating capacities in the standard range run from 9kW to 24kW. Naturally, larger capacities up to 80kW are available on request.

DTE can deliver 2 types of heating units, a sealed range from 90°C, 120°C and 140°C (pressure system) and an open range to 90°C (atmospheric system)

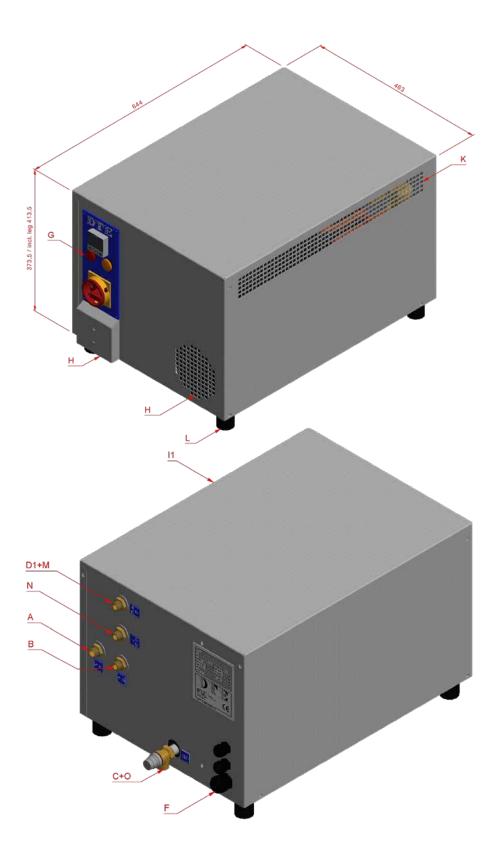
We can consult with you in order to determine the most suitable version, depending on your needs.











A= Warm water inlet circuit 1

B= Warm Water outlet circuit 1

N= Cooling water outlet (tempering)

C+O = Drain water tank + Overflow water tank

D1 + M + Filling water inlet + Cooling water inlet (tempering)

F= Electrical connection

G= Control Panel

H= Air inlet

I1 = Detachable cover

K = Outgoing air

L = Rubber support legs

Type Number	Heating capacity (electrical)	Voltage/ Frequency	* Circulation warm water	Rated power input	Rated current	Needed cooling water ∆p 2,5 bar	T'
Range T1224	Watt	V/Hz	l/h	kW	Атр.	l/h	~ Kg
Г-009.0	9.000	230-400/50	150-1.900	9,48	15,50	500	53
Γ-012.0	12.000	230-400/50	150-1.900	12,48	19,80	500	55
Γ-018.0	18.000	230-400/50	150-1.900	18,69	27,49	500	62
Γ-024.0	24.000	230-400/50	150-1.900	24,69	36,18	500	65
or head pressure	water pump, se	e pump curve. C	onversion values:	1W = 1J/s = 0,86	kcal/h. Ted	chnical spec. subject	to change.
			Cooling Capacit				
35,00			— CM3-3 (~1	90000)			
30,00							
25,00							
20,00					+		
20,000 L5,000 L5							
10,00							
10,00							
5,00							
0,00	10	20	30	40	50	60	70
			OLING WATER INLET -				
H [bar]					Pu Flu	M3-3 50Hz mped fluid = water iid temperature = 60' nsity = 983.2 kg/m3	eta [%]
2,5							100
2,0							80
1,5							60
1,0							40
0,5-							20
0	1,0		2,0	3,0		4,0 Q [m3 /	0 u]
H [bar] 2.8					P F	M3-2 60Hz lumped fluid = water luid temperature = 60 lensity = 983.2 kg/m3	
2.0							
0							90
							80 70
4.0							60
1.0							50 40
							30 20
0.2							10
0	1,0	2,0	3,	0	4,0	5,0 Q [n	0 n3/u]
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DTE solutions for all your industrial temperature processes

Except our standard tempering units which are available with several options, DTE produces also all different kind of machines suitable for cooling, heating or tempering of your product. We have a very qualified team of engineers and technicians who convert every customer specification into a perfect solution for your process.

If you need an installation for cooling or heating or which can do both, a tempering installation or an installation which has to meet special regulations like ATEX Zone 1 & 2, UL/CSA or others, DTE is your partner for this job.

With over 30 years of experience in all sorts of sales markets, we have the know-how on all the different industrial processes and the challenges this can bring. Our engineers will think along with you to change a difficulty into a solution. Good cooperation between our engineers and technicians ensures that theory and practice are tuned and lead to perfect working assets for your industrial process.

From cooling for the production of candy or other foodproducts, oil-cooling or heating for telecommunicationsystems, controlsystems for industrial processes until cooling and heating for offshore, DTE can design and produce the installation that meets all your requirements. So if you need a perfect solution for your cooling, heating or tempering process, contact us!



... always Dominating

DTE is always at your service

The standard tempering machines mentioned in this brochure only represent a part of what DTE can do for you.

Our mission is to be enthusiastic and committed and always ready to support our clients. We are a proactive partner who wants to find the best solution regarding your cooling, tempering and heating needs.

Our commitment does not stop at the delivery and installation of our product. We ensure a systematic follow-up allowing continues monitoring for proper operation of the installations. In our experience, this has led to satisfied clients and contented staff.

Our company philosophy is to enthuse everyone into being innovative and thinking about continuous improvement. When developing installations we work with a clear notion on sustainability and energy savings. This also has a positive effect on being more economical for the end user and also making a positive contribution to our environment.

With DTE as your partner for all your cooling, heating and tempering solutions, you can rely on the following:

- · We know your challenges, designs, problems and installations
- DTE always provides realistic, tailor made solutions
- · We offer short delivery times on our machines
- · An extremely flexible organisation and staff
- Installation at your location
- Worldwide 24/7 service
- · Training for your staff
- Superior quality and reliability
- Excellent price/quality ratio
- Try us....and you will find a Partner for life!



Through Excellence!





