

# TTOP series

## 标准版 Standard Version



### 外型尺寸图 Dimensions

单位/Unit : mm



型号 Model	W	D1	D2	H
TTOP-2010	302	775	1025	642
TTOP-2020	322	840	1102	707
TTOP-202024	324	856	1098	858
TTOP-2030	322	840	1102	707
TTOP-203024	324	856	1098	858
TTOP-2010D	591	775	1025	663
TTOP-2020D	594	853	1098	728

注1：选配清模功能尺寸会变化，非标机型尺寸另行通知。  
Note 1: The size of the optional mold clearing function will change, and the size of non-standard models will be notified.

### 传热媒体（油） 最高使用温度200℃

Heat transfer media (Oil)  
Maximum use temperature 200℃

### 更高精度

Higher Precision

- 温度表示单位0.1℃，带PID自调节功能。
- The temperature is in 0.1℃, with PID self-adjustment function.

### 更智能

More Intelligent

- 7寸触摸屏，显示直观，操作简便；
- 设备运行状态日志与报警日志；
- 支持提前一周预约开关机；
- RS485通讯接口，支持MODBUS RTU通讯协议。
- 7" touch screen with intuitive display and easy operation;
- Equipment operation status log and alarm log;
- Support for appointment switching of one week in advance;
- RS485 communication interface, supporting MODBUS RTU communication protocol.

### 更安全可靠的性能

More Safe And Reliable Performance

- 系统回路超温脱扣保护，控制回路短路过热保护；
- 油箱液位检测和缺油报警保护；
- 泵浦逆相、欠相、过载、超温检测；
- 双回路温度检测，能有效监测模具是否堵塞。
- System circuit over-temperature decoupling protection and control circuit short-circuit fuse protection;
- Oil tank level detection and oil shortage alarm protection;
- Pump anti-phase, under-phase, overload and over-temperature detection;
- Double-loop temperature detection, which can effectively monitor whether the mold is blocked.

### 更合理的结构

More Rational Structural Design

- 结构精巧设计，提升空间利用率；
- 巧妙的散热通道设计，有效保护电气元件；
- 模块化结构设计。
- Delicate design of structure to enhance space utilization;
- Ingenious design of heat dissipation channels to effectively protect electrical components;
- Modular design .

### 拓星链应用平台

Top Star Chain Application Platform

- 实时远程监控，设备运行数据统计、分析及寿命管理。
- Real-time remote monitoring, centralized equipment management: data statistics, analysis and machine life management are available.



# 规格 Specification

型号 Model		TTOP-2010	TTOP-2020	TTOP-202024	TTOP-2030	TTOP-203024	TTOP-2010D	TTOP-2020D
传热媒体 Heat transfer media				导热油 ( 320°C以上 ) Heat conducting oil (above 320°C)				
使用温度 Operating temperature(°C)				冷却水温度+20°C ~ 200°C Cooling water temperature +20°C ~ 200°C				
控制方式 Control method				7寸触摸屏/PID控制 7 "touch screen /PID control				
冷却能力 Cooling capacity(kW)(Note 2)				7.4		7.4+7.4		
加热器 Heater	加热功率 Heating power(kW)	8	12	12×2	12	12×2	8+8	12+12
媒体泵 Media Pumps	驱动方式 Drive method			SSR控制 SSR control				
	泵浦功率 Pump power(kW)	0.75	1.5	2.8	0.75+0.75	1.5+1.5		
	泵浦形式 Pump form	立式机械轴封泵 Vertical mechanical shaft seal pump	卧式机械轴封泵 Horizontal mechanical shaft seal pump		立式机械轴封泵 Vertical mechanical shaft seal pump	卧式机械轴封泵 Horizontal mechanical shaft seal pump		
	最大流量 Maximum flow rate (L/min)	58	85	107	58	85		
	最大压力 Max. pressure (Mpa)	0.44	0.69	0.79	0.44	0.69		
	流量 Flow rate(L/min)	45 30 19	65 42 20	80 53 25	45 27 13	65 42 20		
	全扬程 Full head (m)	10 22 30	17 35 52	21 40 61	10 23 37	17 35 52		
循环系统 Circulation System	出回煤管径 Outlet and return pipe diameter			DN25				
冷却系统 Cooling System	分流器配置 Diverter configuration	4进4出 3/8" 力古 4 in 4 out 3/8 "Rigo		6进6出 3/8" 力古 6 in 6 out 3/8 "Rigo		4进4出+4进4出 3/8" 力古 4 in 4 out +4 in 4 out 3/8 "Rigo		
	冷却进出水管径 Cooling inlet and outlet pipe diameter			Φ 12宝塔水咀 Φ 12 pagoda water Tsui				
	冷却方式 Cooling mode			间接冷却 Indirect cooling				
	冷却进出水压差 Cooling inlet and outlet pressure difference ( Mpa )			≥0.05				
	冷却压力 Cooling pressure (Mpa)			0.1~0.5 ( 进水压力大于出水压力 ) 0.1~0.5 ( inlet pressure greater than outlet pressure )				
电 Electricity	用电规格 Electricity specification			AC380V 3P/PE 50Hz				
	主断路器容量 Main circuit breaker capacity (A)	32		63	32	63		
	总电气容量 Total electrical capacity (kW)	8.9	13.7	25.7	15	27	17.9	27.4
	电源线 Power cord (5m long)	4×4.0mm <sup>2</sup>	4×6.0mm <sup>2</sup>	4×10.0mm <sup>2</sup>	4×6.0mm <sup>2</sup>	4×10.0mm <sup>2</sup>	4×6.0mm <sup>2</sup>	4×10.0mm <sup>2</sup>
保护功能 Protection function			电源逆相/电源缺相/油泵过电流/油泵线圈超温/加热器超温/媒体温度异常/温度探头断线/ 整机负荷保护/控制回路保护/低液位警报		Reverse phase of power supply/lack of phase of power supply/over-current of oil pump/over-temperature of oil pump coil/over-temperature of heater/ abnormal media temperature/disconnection of temperature probe/load protection of whole machine/protection of control loop/low level alarm			
	机箱颜色 Case color			SPCC白色烤漆 ( RAL7047 ) 、SPCC蓝色烤漆 ( RAL5012 ) 、SUS SPCC white baking paint ( RAL7047 ), SPCC blue baking paint ( RAL5012 ), SUS				
产品净重 Product net weight (kg)	64	81	100	88	107	111	152	

注2：冷却能力：冷却进水大于出水0.1Mpa，冷却水温10°C，△t=60°C Note 2: Cooling capacity: cooling inlet greater than outlet 0.1Mpa, cooling temperature 10°C, △t=60°C

## 配置表 Configuration Table

型号 Model	TTOP-2010	TTOP-2020	TTOP-202024	TTOP-2030	TTOP-203024	TTOP-2010D	TTOP-2020D
3P 380V 50HZ	●	●	●	●	●	●	●
3P 415V 50HZ	○	○	○	○	○	○	○
3P 440V 60HZ	○	○	○	○	○	○	○
3P 480V 60HZ	○	○	○	○	○	○	○
清模功能 Mold cleaning function	○	○	○	○	○	○	○
漏电保护 Leakage protection	○	○	○	○	○	○	○
分流器1进1出 Diverter 1 in and 1 out	○	○	○	○	○	○	○
分流器4进4出 Diverter 4 in and 4 out	●	●	●	-	-	●	●
分流器6进6出 Diverter 6 in and 6 out	○	○	○	●	●	○	○
分流器8进8出 Diverter 8 in and 8 out	-	○	○	○	○	-	○

# TTWP series

## 标准版 Standard Version



TTWP-1210

TTWP-1210D

### 外型尺寸图 Dimensions

单位/Unit : mm



型号 Model	W	D1	D2	H
TTWP-1210	185	632	767	540
TTWP-1220	320	718	859	669
TTWP-122024	324	853	1008	724
TTWP-1230	320	718	859	669
TTWP-123024	324	853	1008	724
TTWP-1250	324	853	1008	724
TTWP-125036	322	913	1060	823
TTWP-1210D	390	637	772	562
TTWP-1220D	594	718	865	689

注1：选配清模功能尺寸会变化，非标机型尺寸另行通知。

Note 1: The size of the optional mold clearing function will change, and the size of non-standard models will be notified.

### 传热媒体（水） 最高使用温度120℃

Heat transfer media (water)  
Maximum use temperature 120℃

### 更高精度

Higher Precision

- 温度表示单位0.1℃，带PID自调节功能。
- The temperature is in 0.1℃, with PID self-adjustment function.

### 更智能

More Intelligent

- 7寸触摸屏，显示直观，操作简便；
- 设备运行状态日志与报警日志；
- 支持提前一周预约开关机；
- RS485通讯接口，支持MODBUS RTU通讯协议。
- 7" touch screen with intuitive display and easy operation;
- Equipment operation status log and alarm log;
- Support for appointment switching of one week in advance;
- RS485 communication interface, supporting MODBUS RTU communication protocol.

### 更安全可靠的性能

More Safe And Reliable Performance

- 系统回路超温脱扣保护，控制回路短路过热保护；
- 泵浦逆相、欠相、过载、超温检测；
- 双回路温度检测，能有效监测模具是否堵塞。
- Over-temperature decoupling protection of the system circuit and short-circuit fuse protection of the control circuit;
- Pump anti-phase, under-phase, overload and over-temperature detection;
- Double-loop temperature detection, which can effectively monitor whether the mold is clogged.

### 更合理的结构

More Rational Structural Design

- 结构精巧设计，提升空间利用率；
- 巧妙的散热通道设计，有效保护电气元件；
- 模块化结构设计和抗腐蚀材质。
- Delicate design of structure to enhance space utilization;
- Ingenious design of heat dissipation channels to effectively protect electrical components;
- Modular design and corrosion-resistant material for the whole machine.

### 拓星链应用平台

Top Star Chain Application Platform

- 实时远程监控，设备运行数据统计、分析及寿命管理。
- Real-time remote monitoring, centralized equipment management: data statistics, analysis and machine life management are available.



## 规格 Specification

型号 Model	TTWP-1210	TTWP-1220	TTWP-122024	TTWP-1230	TTWP-123024	TTWP-1250	TTWP-125036	TTWP-1210D	TTWP-1220D				
传热媒体 Heat transfer media	清水 执行标准: GB1576 (工业锅炉水质) Clear water Implementation standard: GB1576 (industrial boiler water quality)												
使用温度 Operating temperature(°C)	冷却水温度+20°C ~ 120°C Cooling water temperature +20°C ~ 120°C												
控制方式 Control method	7寸触摸屏/PID控制 7 "touch screen /PID control												
冷却能力 Cooling capacity(kW)(Note 2)	15.3	18.2	18	22.3	22.3	24.5	24.5	15.3+15.3	18.2+18.2				
加热器 Heater	加热功率 Heating power(kW)	8	12	12×2	12	12×2	12×2	8+8	12+12				
媒体泵 Media Pumps	驱动方式 Drive method	SSR控制 SSR control											
	泵浦功率 Pump power(kW)	0.75	1.5		2.8		4	0.75+0.75	1.5+1.5				
	泵浦形式 Pump form	立式机械轴封泵 Vertical mechanical shaft seal pump	卧式机械轴封泵 Horizontal mechanical shaft seal pump						立式机械轴封泵 Vertical mechanical shaft seal pump				
	最大流量 Maximum flow rate (L/min)	58	85		107		120	58	85				
	最大压力 Max. pressure (Mpa)	0.44	0.69		0.79		0.79	0.44	0.69				
循环系统 Circulation System	流量 Flow rate(L/min)	45 30 19	65	42	20	80	53	25	105 60 20 45 30 19 65 42 20				
	全扬程 Full head (m)	10 22 30	17	35	52	21	40	61	10 40 66 10 22 30 17 35 52				
	出回媒管径 Outlet and return pipe diameter	DN25											
冷却系统 Cooling System	分流器配置 Diverter configuration	4进4出 3/8" 力古 4 in 4 out 3/8 "Rigo				6进6出 3/8" 力古 6 in 6 out 3/8 "Rigo		1进1出 1" 力古 1 in 1 out 1 "Rigo					
	冷却进出水管径 Cooling inlet and outlet pipe diameter	Φ12宝塔水咀 Φ12 pagoda water Tsui											
	冷却方式 Cooling mode	直接冷却 Direct cooling											
	冷却进出水压差 Cooling inlet and outlet pressure difference (Mpa)	≥0.05											
电 Electricity	冷却压力 Cooling pressure (Mpa)	使用小于100°C时, 确保进水压力在0.05~0.5; 使用大于100°C时, 确保进水压力在0.2~0.5 When using less than 100°C, ensure that the inlet pressure is between 0.05 and 0.5; When the temperature is greater than 100°C, ensure that the inlet water pressure is between 0.2 and 0.5											
	用电规格 Electricity specification	AC380V 3P/PE 50Hz											
	主断路器容量 Main circuit breaker capacity (A)	32		63	32	63	63	100	63				
	总电气容量 Total electrical capacity (kW)	8.9	13.7	25.7	15	27	28.2	40.2	17.9				
	电源线 Power cord (5m long)	4×4.0mm <sup>2</sup>	4×6.0mm <sup>2</sup>	4×10.0mm <sup>2</sup>	4×6.0mm <sup>2</sup>	4×10.0mm <sup>2</sup>	4×10.0mm <sup>2</sup>	4×6.0mm <sup>2</sup>	4×10.0mm <sup>2</sup>				
	保护功能 Protection function	电源逆相/电源缺相/水泵过电流/水泵线圈超温/加热器超温/媒体温度异常/温度探头断线/整机负荷保护/控制回路保护/进水压力低 Power reverse phase/Power lack phase/water pump overcurrent/water pump coil overtemperature/heater overtemperature/media temperature/temperature probe disconnected/machine load protection/control loop protection/low water inlet pressure											
产品净重 Product net weight (kg)	机箱颜色 Case color	SPCC白色烤漆 (RAL7047)、SPCC蓝色烤漆 (RAL5012)、SUS SPCC white baking paint (RAL7047), SPCC blue baking paint (RAL5012), SUS											
	46	68	89	75	96	105	125	87	125				

注2: 冷却能力: 冷却进水大于出水0.1Mpa, 冷却水温10°C, Δt=60°C Note 2: Cooling capacity: cooling inlet greater than outlet 0.1Mpa, cooling temperature 10°C, Δt=60°C

## 配置表 Configuration Table

型号 Model	TTWP-1210	TTWP-1220	TTWP-122024	TTWP-1230	TTWP-123024	TTWP-1250	TTWP-125036	TTWP-1210D	TTWP-1220D
3P 380V 50HZ	●	●	●	●	●	●	●	●	●
3P 415V 50HZ	○	○	○	○	○	○	○	○	○
3P 440V 60HZ	○	○	○	○	○	○	○	○	○
3P 480V 60HZ	○	○	○	○	○	○	○	○	○
清模功能 Mold cleaning function	○	○	○	○	○	○	○	○	○
漏电保护 Leakage protection	○	○	○	○	○	○	○	○	○
精密水质过滤器 Precision water filter	○	○	○	○	○	○	○	○	○
铜加热器 Copper heater	○	○	○	○	○	○	○	○	○
分流器1进1出 Diverter 1in and 1 out	○	○	○	○	○	●	●	○	○
分流器4进4出 Diverter 4in and 4 out	●	●	●	-	-	-	-	●	●
分流器6进6出 Diverter 6 in and 6 out	○	○	○	●	●	-	-	○	○
分流器8进8出 Diverter 8 in and 8 out	-	○	○	○	○	○	○	-	○

注3: 标配功能 “●”、选配功能 “○” 和 “-” 表示无。 Note 3: Standard function "●", optional function "○" and "-" indicates none.