



Infrared dyeing machine for the textile laboratory 纺织印染厂实验室红外线小样机。



Accurate temperature control for repeatable dyeing process 可重复染色过程的精确的温度控制











#### **Infrared Heating**

Color-x utilises three infrared lamps for a total heating power of 3 kW. The infrared technology overcomes the troubles pertaining the traditional heating based on silicone and glycol oil.

### The Cooling System

The temperature control is provided with a water-cooled exchanger system. The thermal insulation of the whole structure prevents the heat from escaping out.

#### **Temperature Sensor**

A new temperature sensor is utilised for monitoring the thermal radiation field. The sensor is fastened at the bottom of beaker n.1. As a consequence the temperature is measured directly in the dye-bath providing the estimation with the highest accuracy.

#### **Dyeing Beakers**

The beakers are made with high-polished and high-grade stainless steel AISI316 with a thickness of 1.4 mm, which ensures long lifetime and safety.

Manual dosing of chemicals (both liquid and powder) can be performed during the dyeing process by utilising a specifically designed dosing lid. The lid can be easily opened and closed with the provided hex driver.

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#### 红外线加热

这款红外线小样机使用三组红外线加热灯,总加热量为3KW。这种 红外线技术克服了传统油浴加热所带来的困扰。

#### 冷却系统

温度控制是通过冷水交换器系统散热。保证了降温速度和精度。

#### 温度传感器

利用新的温度传感器来监控升温范围。传感器被固定在1号染杯 中,可直接对染浴的温度进行高精度的测试。

#### 染杯

染杯采用优质不锈钢AISI316制成,其厚度为1.4mm,保证了染杯 的长期使用和安全。

染色时如需要手工加入染料或助剂(液体和粉状),可以利用一个 特殊的添加装置。这个装置很容易进行加料操作,无需将染杯取 下。

## MACHINE

Number of beakers	12	16	24	8	1	
Beaker capacity (cc)	200/300	200/300	200/300	500	3000/5000	
Heating technology	n.3 x 1 kW infrared lamps					
Cooling technology	Cooled-water heat exchanger					
Exterior case	Made with electro-polished and stainless steel					
Inner case	Made w	Made with electro-polished and stainless steel.				
	Ceramic	blanket ir	nsulation.			
	No shar	p edges o	r protrusic	ons.		
Door	See-through panel					
Temperature control algorithm	PID algo	PID algorithm with PWM modulation				
Temperature range	25.0 °C - 140 °C (77.0 °F - 284 °F)					
Temperature gradient	Programmable rate from 0.5 °C/min to 5.0 °C/min					
Rotation Speed of beaker wheel	User selectable from 10 to 60 rpm					
Reversing duration	User selectable from 1 to 9 min					
Dimension L (mm)	720	720	800	720	720	
Dimension D (mm)	830	830	830	830	830	
Dimension H (mm)	1040	1040	1140	1040	1040	
Weight (Kg)	200	220	240	240	240	
Certification	C.E. complaint					
Power supply	400 VAC Three-Phase,					
	Neutral and Earth-Ground, 50/60 Hz					

# CONTROLLER

Туре	Icon/Text Menu driven MicroComputer OTX200
KeyPad	Keyboard
Display	Color 5.6" 320x240 pixel, 8 color RGB
Programs	300 programs with a maximum of 25 steps
Language	8 different languages including English, Spanish
	and Italian
Power supply	18/24 VAC 50/60 Hz
Memory capacity	512 KB FLASH
	512 KB RAM
	2048 Byte Serial EEPROM
Interface connection	n.1 RS232 for firmware upgrading
	n.1 RS484 (optional) for network connection to
	external supervisor PC



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