佛山市华高自动化设备有限公司
FOSHAN HUAGAO AUTOMATION EQUIPMENT CO.,LTD

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佛山市华高自动化设备有限公司

HUA GAO

华高印染自动化
HUAGAO PRINTING AND DYEING AUTOMATIC CONTROL

佛山市华高自动化设备有限公司
FOSHAN HUAGAO AUTOMATION EQUIPMENT CO.,LTD

公司简介 COMPANY PROFILE

佛山市华高自动化设备有限公司是染整业自动化解决方案供应商，专业从事染色机控制电脑和染色机监控管理系统，成立于2002年4月，总部位于广东省佛山天安数码城科技产业园区。

佛山华高是广东省高新技术企业，集研发设计、生产销售、安装培训和售后服务为一体，立志成为中国染色电脑的专业品牌。公司有优秀的研发团队、经验丰富的技术服务人员，致力于不断的技术创新，为客户提供生产监控管理和技术整合优势。产品具有操作简便、控制精准，降能效果明显等特点。主要经营：印染控制设备、染色机电脑、定型机红外线布边追踪装置、染料助剂自动配料输送系统、定型机助剂自动配送系统、计算机辅助称料系统、染色助剂自动称量系统等产品；经销国内外知名品牌PLC控制器、变频器等；维修各类国产和进口染色机电脑、定型机红外线布边追踪系统，以及各种控制器，并承接染缸改装和加装，以及染色机中央监控系统等工程项目业务。近20年来，华高公司形成了以华南地区为中心，在江苏、浙江、山东、福建等地区建立了分支机构及客户服务中心，构建成高效便捷的销售渠道和服务网络。公司始终坚持以“创新科技、优质产品、诚信求实、良好服务”为经营理念，为国内外客户提供“高效、精准、稳定、节能”的高品质自动化产品而不懈努力。

峥嵘岁月、见证历史，美好未来、共图盛景：

2007年，公司获佛山市科技局专项发展扶持基金；成立佛山市禅城区染整设备控制电脑工程技术研发中心；

2011年，公司获得国际标准产品认可证书，产品质量达到国际先进水平；

2011年，公司“嵌入式高精度低浴比技术”经广东省科技成果鉴定认证；

2013年，公司“嵌入式高精度低浴比技术”获佛山科学技术奖二等奖；

2013年，公司获得广东省高新技术企业证书；

2017年，公司通过国家知识产权管理体系认证……

Foshan HuaGao Automation Equipment Co.,Ltd is a manufacture founded in 2002, which specialize in dyeing machine controller and dyeing machine centralized control management systems. The company is located in Tian’ an CyberPark, Nanhai,Foshan city.

Huagao is a high-tech enterprise integrates R&D, production, sales, installation training and after-sales service. We have an excellent R & D team and experienced technical service personnel. They are focusing on technological innovation and striving to give customers exceptional service. Our products included dyeing control equipment, stenter wed guiding system, dyeing chemical weighing and dispensingsystem have chara cteristics of simple operation and precise control. We also supply domestic and foreign brands PLC , inverters and provideall kinds repair services.In the past 20 years, Huagao has established offices in Jiangsu, Zhejiang, Shandong and Fujian province. For betterservice, we have been striving to work hard.

In 2007, we got subsidies from FoShan Science and Technology Bureau. In the same year, we established Foshan Chancheng dyeingequipment control R&D Center.

In 2011, we got the International standard product approval certificate. In the same year, the embedded high precision low bath ratiotechnology reached an appraisal achievement in GuangDong province.

In 2013, the embedded high precision low bath ratio technology won the second prize of Foshan science and technology competition.In the same year, we got the Certificates of Guangdong Advanced Technology Enterprises.

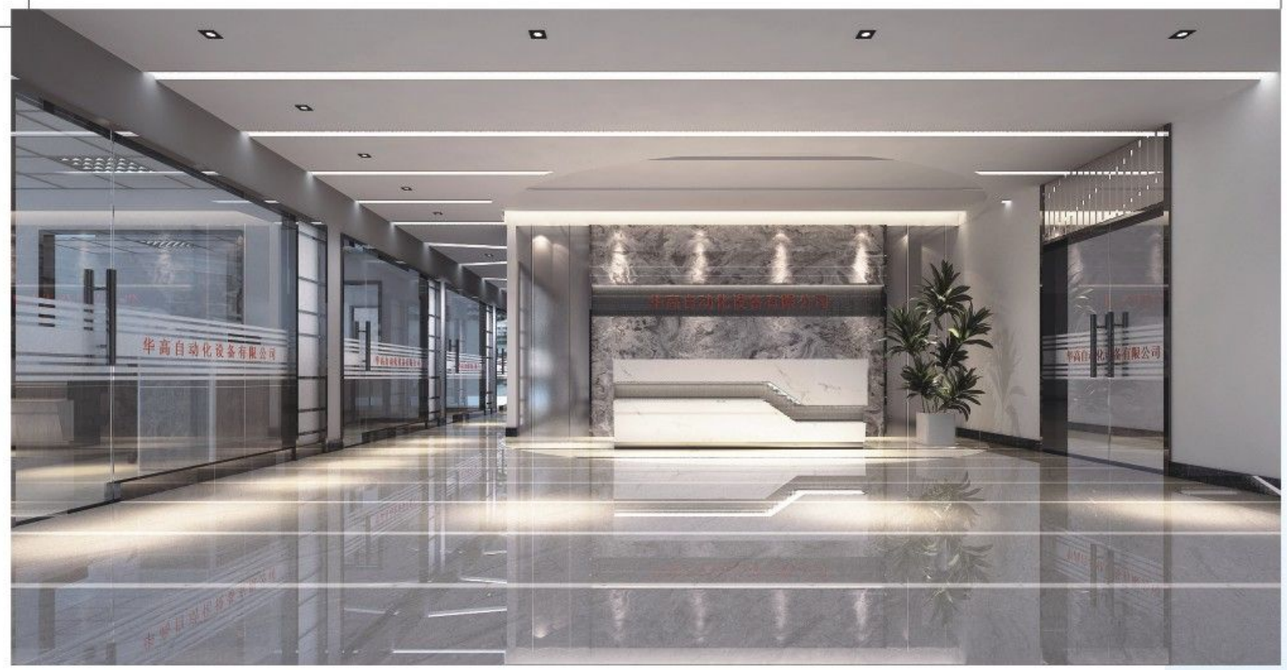
In 2017, we got intellectual property management system certification

With time pass by, we have been persisting in the enterprise principle of “ technical innovation, sincerity and practice”, and is dedicated to developing and making more better hi-tech products for dyeing automation industry.

PRODUCT CATALOG 产品目录

- 染色机中央监控管理系统
- 汇川可编程控制器(PLC)、变频器
- 大屏幕触摸染色机控制电脑、华高专用PLC
- 触摸屏染色机控制电脑
- 中英文彩屏染色机控制电脑
- 染色机控制电脑
- 小样机控制电脑、高温温度验证仪
- 数码显示染色机控制电脑
- 蒸纱机控制电脑
- 转速表、温度表
- 定量加料变送器、压力液位变送器
- 脱水机控制电脑、智能长度测量仪、磁感应液位变送器
- 布头检测器、红外线对边装置
- 液体助剂自动计量输送系统
- 染料自动称量化料输送系统
- 计算机辅助称料管理系统、染料桶位置智能指示灯
- 染色助剂自动称量系统
- 华高定型机自动化控制

* Dyeing Machine Monitoring And Management System
* Plc、frequency Converter
* Lage- Screen Touch Control Computer Dyeing Machine
* Screen Touch Control Computer Dyeing Machine
* Chinese And English Color Screen Dyeing Machine Control Computer
* Dyeing Machine Control Computers
* Laboratory Dyeing Machine Controller, High Temperature Test Instrument
* Digital Display Dyeing Machine Control Computer
* Yarn Steaming Machine Control Computers
* Tachometer、thermometer
* Quantitative Feeding Transmitter, Pressure Transmitter
* Dewatering Machine Controller, Intelligent Length Measuring Instrument, Magnetic Level Transmitte
* Fabric Detector、infrared Edge Control Board
* Auto Auxiliaries Dispensing System
* Auto Dyeing Chemical Weighing & Dispensing System
* Computer-aided Weighing Management System、dyeing Bucket Location Intelligent Indicator Light
* Dyeing Auxiliaries Automatic Weighing System
* Huagao Setting Stenter Automatic Control



公司形象
COMPANY IMAGE

◆ 公司核心价值观 Our core values

诚实守信，是我们企业的根本；双赢合作，是我们发展的选择；品质优良，是我们坚定的目标；客户满意，是我们不懈的追求。

Being honest and trustworthy is fundamental to our career; a win-win cooperation is a choice for our development;Excellent quality is our goal; customer satisfaction is our unremitting pursuit.

◆ 公司宗旨 Our purposes

人本管理，星级服务，塑造品牌企业发展目标，用高科技，高质量，高水平的服务树国内一流企业，创国际知名品牌。

Talent management, star-grade services, building the development goalsof a brand enterprise; erecting a first-class enterprise in China with high-tech, high quality and high competence, creating a world famous brands.

◆ 公司作风 Our styles

科技创新，诚信求实，技术为本，客户至上，严格要求，雷厉风行。

Scientific and technological innovation, the good faith strives for realism,the technology for this, the customer is supreme strict requirements, high efficiency.

◆ 公司服务宗旨 Service tenets

尊重客户，无微不至，竭诚为客户服务，以优质产品，诚实信誉，为客户所想，为客户所需。

To respect customers, be meticulous and dedicated for customer services, strive to offer user quality products, be honest and credit, and take customer needs as our efforts.

■ HG-JK8.0 / HG-JK9.0 / HG-JK10 染色机中央监控管理系统
HG-JK8.0 / HG-JK9.0 / HG-JK10 DYEING MACHINE MONITORING AND MANAGEMENT SYSTEM

华高染色机电脑中央监控管理系统是通过以太网通讯接口或RS485通讯接口连接多台染色机控制电脑，进行中央监控并完全掌握染色过程的控制权。实时记录染色全程的数据，大大减少染色过程中人为因素造成的缸差、色差等质量问题、预防因设备故障引起的质量事故。在此基础上，还能够极大程度的降低水、电、蒸汽的损耗，节约人力资源，提高生产效率。可以为产品质量分析、生产统计报表、客户资料管理、现场作业管理等生产管理提供了极大的方便。

Through connecting dyeing computers by Ethernet and RS485 communication interface, HuaGao dyeing machine central monitoring and management system can fully control the dyeing process, and record the data of the whole dyeing process which greatly reduce the dye chromatism caused by human factors; and it can also prevent the quality accidents caused by the equipment faults. So the water,electricity and steam consumption will greatly reduce while the production efficiency will improve. It offers great convenience to manage products' quality analysing,producing statistics reports,working status and so on.

■ 染色机中央监控管理系统

染色机中央监控管理系统不仅能对染色工艺过程的升(降)、速率控制、保温时间进行监控，还能对影响染色质量的浴比定料量加料进行精确的监控，更能保证染色质量。

The dyeing machine central monitoring and management system can not only monitor the dyeing process, the speed control and the temperature holding time, but also can accurately monitor the liquor ratio that may affect the dyeing quality and assure the dyeing quality.

通过实时监控染色机的状态、工艺过程，可及时发现某些设备或工况的异常，发出报警，提醒工作人员采取有效措施，大大提高了预防染色质量事故的能力。

Real-time monitoring of dyeing machine status and technological process can detect abnormality of some equipment and the working conditions. It will give alarms to remind staffs to take effective measures, greatly improving the ability of preventing the dying quality accidents.

平均能够降低40%用水量水、20%用电量、20%蒸汽的损耗，节约30%人力资源，大大提高一次染色成功率和生产效率。

Energy saving and high efficiency.About average 40% water consumption,20% electricity consumption, 20% steam consumption will reduce, and it save 30% human resources, which greatly improve the success rate of primary dyeing and production efficiency.

只需要采用一台工业控制机，可同时监控管理100台染色机电脑！并进行编程、保存上载、下载工艺数据，实时监视记录染色机的工作状态，工艺过程;查询打印工艺曲线、数据资料和统计报表，为分析染色质量和生产管理提供了极大的方便。

One industrial control machine is used to monitor 100 dyeing machine computers. It can achieve programming, save the uploaded and downloaded process data, and monitor and record the status of dyeing machines and the technological process; by checking and printing the process curve, data and statistical forms, it facilitate the analysis of dyeing quality and production management greatly.

可由生产管理系统安排生产单导入、规范化管理染色工艺、提高工艺的保密性，特设排缸卡功能，将每一台缸排产情况显示出来，提高管理效率高，避免不必要的人为事故发生。

Standardized management which means you can set a production order by system.It can not only better manage dyeing process,but also keep process security.What'smore, the production status of each vat can be show which greatly improve management efficiency.

中央监控管理系统的6大特点

6 Features of central monitoring and management system

1 FIRST

中央监控管理系统与ERP管理系统或者一般的生产管理系统相联接，可以由生产管理系统安排生产单导入，不需要重新在中央监控管理系统里再次输入，提高生产管理的效率。

The central monitoring and management system is connected with the ERP management system, or ordinary production management system, and the production orders can be imported by the production management system, which needs not enter in the central monitoring and management system again, increasing the production and management efficiency.

2 SECOND

中央监控管理系统不需要有专人负责看管，由生产现场下位机发出自动请求信号，中控系统将相应的生产工艺传送到下位机。运行工艺直接在下位机操作，可暂停或运行，但是不能复位或运行另一条工艺程序。

The central monitoring and management system can achieve unmanned operation; and the lower computer in the dyeing production site can directly send the automatic request signals, and the central monitoring and management system will transfer the production process to the lower computer. The operation process can be directly operated in the lower computer, or suspended or operated, but it cannot reset or operate in another process procedure.

3 THIRD

每一条生产单都有记录工艺下传时间，准备时间，开机时间，计算工艺用时和结束时间，生产排产更加规范可靠。

Each production order covers the contents such as production process download time,preparation time, starting time, process time computing and the ending time.

4 FOURTH

可以在其他的办公室如总经理室等安装管理系统，与中央监控系统几乎一样的操作界面，可以随时查看染色生产现场的下位机的所有状态，进度和生产记录(视客户需求而定)

A management system can be installed in other offices, which has almost the same operating interface as the central monitoring system, and through the system, we can check all status, progress and production records of the lower computer in the dyeing production site (depending on customers' needs).

5 FIFTH

增长染色机控制电脑和使用寿命，加强电脑的工作稳定性。

Increase the service life of dyeing machine computers and improve the stability of the computer.

6 SIXTH

中央监控管理系统可以与本公司自行开发的排产管理子系统联网连接(视客户需求而定)

The central monitoring and management system can be connected with the production scheduling management subsystem network developed by our company (depend on customers' needs).

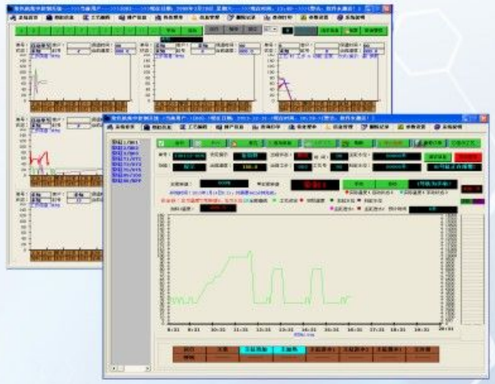
功能简介 Introduction of functions

监控模式 Monitoring mode

可同时监控100台染色机电脑的实时状态，提供曲线组及单机流程图显示模式，可以详细地显示各染缸的各种状态和参数，还可对下位机进行远程操作。

It's able to monitor the real time states of 100 sets of dyeing machine computers concurrently, provide curve group and single-machine process chart display mode, to give full display of states and parameters of the dye vats, also conduct remote operation of the lower computer.

HG-JK10监控界面
HG-JK10 Monitoring interface



HG-JK08/HG-JK09监控界面
HG-JK08/HG-JK09 Monitoring interface

以上为中控主界面：

1.可以清晰看到所有机的状态。
2.可以全面监控到其中一台机的所有状态。
3.切换到另外一台机也是极其方便。只要点击左边的染缸列表便可。
4.可以了一目了然看到当前机台所染的颜色和进度如何。
5.开机时间，运行的工艺和运行的那一步功能也是一目了然。

Above is central control system mian interface:

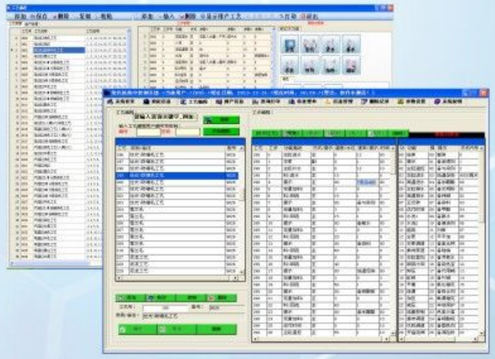
1.The status of any machines can be clearly seen.
2.The States of any one of machines can be fully monitored.
3.You can click dye vat list on left to switch to another one.
4.The current color and progress can be clearly seen.
5.Boot time, operation of the process and running step is clearly seen.

工艺编程 Process programming

可编程工艺条数不限，每条工艺可编步数200步，编工艺方法非常简单。编工艺为可视化，详细的帮助界面，每一步功能只要输入代号即可。工步界面非常清晰可见，还可预算工艺运行的大约所需时间和直观可见每一条工艺加料提示次数。

Numbers of programmable processes are not restricted, and each process may be programmed 200 steps, and processes can be easily programmed and visible; detailed help interface is available, and function of each step can be achieved by inputting the code; the step interfaces are very clear, can also calculate the approximate time for the process running and directly see the process feeding tip numbers.

HG-JK10编程界面
HG-JK10 Programming interface

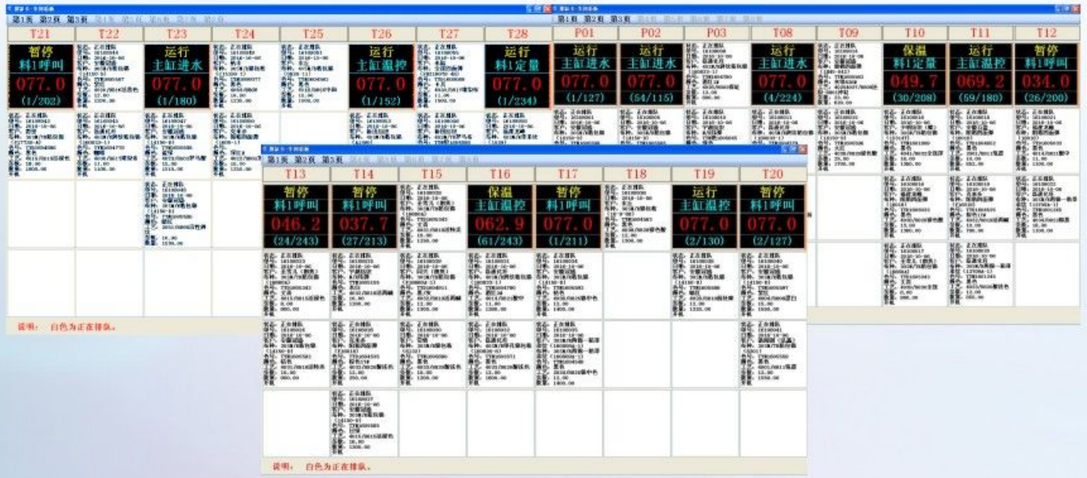


HG-JK08/HG-JK09编程界面
HG-JK08/HG-JK09 Programming interface

排产控制 Scheduling control

可根据填入的染缸号、单号、和布重、浴比和吸水率和工艺号等参数自动生成排产单，可连接ERP系统自动导入排产单。

A scheduling form can be generated automatically based on the given vat number, order number, fabric weight, bath ratio, water absorption rate, process number and other parameters, and can be imported automatically after connected to the ERP system.

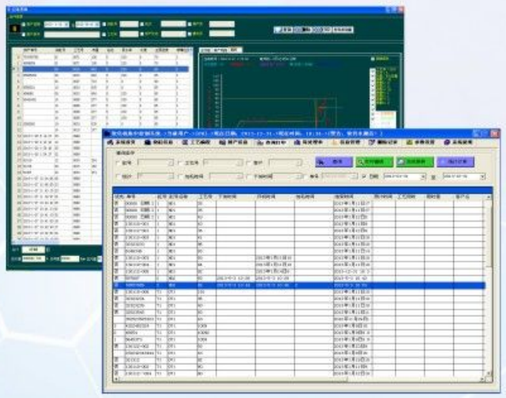


染色记录 Dyeing record

可根据染缸号、单号和时间等参数随时查询已完成的工艺操作过程，可查询工艺下传时间、准备时间、开机时间、结束时间、工艺用时，还可查询工艺运行时的每一步的具体时间和主缸水位曲线、料缸水位曲线等信息。

The completed process operations can be queried from time to time according to the vat number, order number, time and other parameters; the time for process download, preparation, startup, completion and process duration can be queried;
and the process step running time, water level curves of master vat and feeding
vat and other information can also be queried.

HG-JK10记录界面
HG-JK10 Record interface



HG-JK08/HG-JK09记录界面
HG-JK08/HG-JK09 Record interface

汇川变频器

汇川变频器采用开环矢量和V/F控制方式，以高性能的电流矢量控制技术可实现异步电机控制，功率范围覆盖0.4kW~18.5kW。自带485 通讯口。内置PID可方便实现闭环过程控制系统，最多可实现16段速运行。具有摆频及定长控制，可用于纺织、造纸、拉丝、包装、食品及各种自动化生产设备的驱动

汇川可编程控制器（PLC）40点、60点、64点、80点、128点可供选择使用

H2U-3624MR-XP	60点	36路输入24路输出
H2U-4040MR-XP	80点	40路输入40路输出
H2U-6464MR-XP	128点	64路输入64路输出
HG3U-DR3232MR	64点	32路输入32路输出
HG3U-DR4040MR	80点	40路输入40路输出
HG3U-DR6464MR	128点	64路输入64路输出

HG-32MR\HG-AN10-64MR、HG-64MR专用PLC

控制特点	采用主PLC控制，具有温度输入、模拟量输入、开关量输入（脉冲输入）、模拟量输出、开关量输出。各路输入输出可自定义设置，使用灵活。还具有通讯功能。	
	HG-64MR HG-32MR	可作主PLC用，也可作从PLC用。
输入信号	HG-AN10-64MR	4路温度输入，7路模拟量输入，32路开关量输入（其中4路脉冲输入）。
	HG-64MR	32路开关量输入
	HG-32MR	16路开关量输入
输出信号	HG-AN10-64MR	8路模拟量输出，32路开关量输出。
	HG-64MR	32路开关量输出
	HG-32MR	16路开关量输出
通讯技术	2路RS-485通讯，1路CAN通讯，1路RS-232通讯（PLC编程和监视）。	

H2U-3624MR

H2U-4040MR

H2U-6464MR

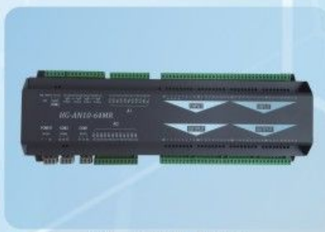
HG3U-DR3232MR

HG3U-DR4040MR

HG3U-DR6464MR

HG-32MR

HG-64MR



HG-AN10-64MR

HG9968/HG9938 染色机控制电脑

主要技术性能	
控制技术	采用高性能处理器，功耗低，性能稳定。采用Windows操作系统和进口触摸屏，显示和操作可在触摸屏上进行，减少外围按键，使操作简单易懂。
显示方式	HG-9968：采用1024×768像素15寸高品质进口液晶显示屏。屏幕宽大，清楚明了。配有各类染缸的结构示意图形，各类阀门开关等直观显示，使用方便。
	HG-9938：采用1024×768像素12寸高品质进口液晶显示屏。屏幕宽大，清楚明了。配有各类染缸的结构示意图形，各类阀门开关等直观显示，使用方便。
存储空间	具有大容量的存储空间，可同时储存几百条工艺曲线，每条工艺可达几百步。
数据保护	支持多级管理员密码保护和U盘备份工艺、参数，利用U盘，机与机之间的传送也十分方便，确保工艺的完整可靠。
通讯技术	1路RS485/CAN通讯接口，1路RS422/485通讯接口，2路10/100M自适应以太网接口，可连接集中控制系统或企业ERP，也可通过以太网进行远程服务，节省时间及成本。
测温范围	000℃～153℃
控温范围	30℃～145℃
控温速率	0.1℃～9.9℃
控温精度	保温静态±0.5℃
温度控制	开关式、比例式可供选择，可实现开关式升降温，比例式升降温，混合式升降温，最大偏差≤1℃，显示精度为0.1℃。
布速控制	最小布速10m/min，最大布速150m/min，控制误差5%。
输入信号	15路4-20mA模拟量输入(主缸、副缸、料缸等水位、喷嘴压力、PH值电流信号接入)。32路开关量输入。
	不带IO，可与PLC连接实现4路PT100铂热电阻(用于主缸，副缸等温度检测)。
	4路脉冲信号(用于流量计、水表接入、控制染色浴比)
输出信号	不带IO，可与PLC连接实现16路4-20mA模拟量输出，用于电流输出控制主泵变频、比例升降温阀、比例加料阀。32路开关量输出。
资讯查询	可记录几百条完整的生产过程曲线，几百个报警事件，1天连续24小时的生产过程曲线。
参数设置	通过参数来实现不同控制要求，包括进水、排水、温控、布速等多项参数的选择。
定义功能	所有开关量或模拟量输入、输出端口均可自定义。
功能特性	精确的温度控制、布速控制，提高染机的染色质量和稳定性。可以计量用电量、水量、蒸汽等。
供电范围	AC100~250V，50Hz功耗≤60W，环境温度≤50℃。
外形尺寸	HG-9968：400（宽）×330（高）×100（深）mm³
	HG-9938：352（宽）×263（高）×92（深）mm³
开孔尺寸	HG-9968：370（宽）×300（高）mm²
	HG-9938：324（宽）×236（高）mm²
安装方式	盘面嵌入式

HG-AN10-64MR、HG-64MR专用PLC

主要技术性能		
产品特色	华高公司顺应染色机电脑的发展需要，专门开发了染色机电脑配套模块，将染色机电脑与控制模块分开，又能组合在一起使用，减少了接线和干扰，提高染色机电脑的稳定性。模块与模块之间可以通讯连接，灵活配置。使用本公司开发的专用编程软件进行PLC编程。	
控制特点	采用主PLC控制，具有温度输入、模拟量输入、开关量输入（脉冲输入）、模拟量输出、开关量输出，各路输入输出可自定义设置，使用灵活。还具有通讯功能。	
输入信号	HG-AN10-64MR	4路温度输入，7路模拟量输入，32路开关量输入（其中4路脉冲输入）。
	HG-64MR	32路开关量输入
输出信号	HG-AN10-64MR	8路模拟量输出，32路开关量输出。
	HG-64MR	32路开关量输出
通讯技术	2路RS-485通讯，1路CAN通讯，1路RS-232通讯（PLC编程和监视）。	
供电范围	DC24V电源。	

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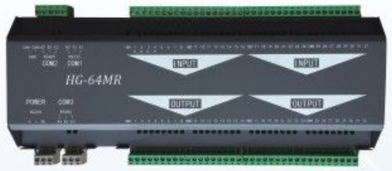
大屏幕触摸染色机控制电脑、华高专用PLC
LARGE-SCREEN TOUCH CONTROL COMPUTER DYEING MACHINE



HG9968/HG9938 染色机控制电脑

主要技术性能	
Control technology	It adopts high performance processor, Windows operating system and imported touch screen.
Display	HG-9968:1024×768 pixels 15 inch high quality imported LCD screen. It contains all kinds of vats and valve switches diagram display.
	HG-9938:1024×768 pixels 12 inch high quality imported LCD screen. It contains all kinds of vats and valve switches diagram display.
Storage	It has a large storage space, which can store hundreds of processes, each process contains hundreds of programmable steps.
Data protection	Multi-level administrator password protection and USB backup.
Communication	1-channel RS485/CAN communication interface, 1-channel RS422/485 communication interface, 2-channel 10/100M adaptive Ethernet interface. With the communication interface, you can connect to enterprise ERP and conduct remote services.
Temp. Measuring range	000℃～153℃
Temp. Control range	30℃～145℃
Temp. Control rate range	0.1℃～9.9℃
Temp. Control accuracy	Thermal static ± 0.5℃
Temperature control mode	Switch type or proportional type which controls heating or cooling is optional, with maximum deviation≤1℃, display accuracy 0.1℃
Fabric speed control	Minimum fabric speed: 10m/min, maximum fabric speed:150m/min, error control:5%
Input signal	15-channel 4-20mA analog input (connect signal with water level of master vat, sub vat and dyestuff vat; nozzle pressure control and PH current). 32-channel switches input
	There is no IO. It can connect with PLC. 4-channel PT100 platinum resistance (for detecting temperature of master vat and sub-vat)
	4-channel pulse signal (for connecting with flow meter, water meter and controlling bath ratio)
Output signal	There is no IO. It can connect with PLC. 16-channel 4-20mA analog output (for controlling main pump frequency conversion, proportional temperature rise/drop valve, proportional dyestuff feeding valve). 32-channel switches input.
Information query	It's able to record hundreds of complete production process curves, hundreds of alarm events as well as 24 hours of continuous production process curves within a day.
Parameter setting	Parameter settings for controlling water inlet, drainage, temperature control, fabric speed and other functions.
Function definition	All of inputs and outputs of switches and analogs can be customized.
Function	Accurate temperature control and fabric speed control improve the dyeing quality and stability of the dyeing machine. Consumptions of electric power, water and steam etc. can be measured.
Power supply	AC100~250V, 50Hz power consumption≤60W, working temperature≤50℃
Dimension	HG-9968: 400（W）×330（H）×100（D）mm³
	HG-9938: 352（W）×263（H）×92（D）mm³
Size of hole	HG-9968: 370（W）×300（H）mm²
	HG-9938: 324（W）×236（H）mm²
Installation	Embedded

HG-AN10-64MR、HG-64MR专用PLC

主要技术性能		
产品特色	In order to meet the needs for dyeing computer development, we develop this kind of module. It can use separate from dyeing computer or use with it together which reduce troubles of wiring and interfering, improve the stability of computer. Modules can connect with each other. You can also program by using our programming software.	
控制特点	Host PLC control with temperature input, analog input, switch input(pulse input), analog output, switch output, all of outputs and inputs can be customized.	
	HG- 64MR	Host PLC or slave PLC is optional.
Input signal	HG-AN10-64MR	4-channel temperature input,7-channel analog input,32-channel switch input(4-channel pulse input)
	HG- 64MR	32-channel switch inpu,
Output signal	HG-AN10-64MR	8-channel analog output,32-channel switch output
	HG- 64MR	32-channel switch output
Communication	2-channel RS-485 communication, 1-channel CAN communication,1-channel RS-232 communication(PLC programming and monitoring)	
Power supply	DC24V power supply	

■ HG9928B/HG9918B 染色机控制电脑

主要技术性能	
控制技术	采用高性能A8处理器，功耗低，性能稳定。采用Windows操作系统和进口触摸屏，显示和操作可在触摸屏上进行，减少外围按键，使操作简单易懂。
显示方式	采用640×480像素10.4寸高品质进口液晶显示屏。屏幕宽大，清楚明了。配有各类染缸的结构示意图形，各类阀门开关等直观显示，使用方便。
存储空间	具有大容量的存储空间，可同时储存几百条工艺曲线，每条工艺可达几百步。
数据保护	支持多级管理员密码保护和U盘备份工艺、参数，利用U盘，机与机之间的传送也十分方便，确保工艺的完整可靠。
通讯技术	1路RS485/CAN通讯接口，1路RS422/485通讯接口，1路10/100M自适应以太网接口，可联接企业ERP，也可以通过以太网进行远程服务，节省时间及成本。
测温范围	000℃～153℃
控温范围	30℃～145℃
控温速率	0.1℃～9.9℃
控温精度	保温静态±0.5℃
温度控制	开关式、比例式可供选择，可实现开关式升降温，比例式升降温，混合式升降温，最大偏差≤1℃，显示精度为0.1℃。
布速控制	最小布速10m/min，最大布速150m/min，控制误差5%。
输入信号	4路PT100铂热电阻（用于主缸、副缸等温度检测）。 4路脉冲信号（用于流量计、水表接入，控制染色浴比）。
HG-9918B	7路4-20mA模拟量输入（主缸、副缸、料缸等水位、喷嘴压力、PH值电流信号接入）。32路开关量输入。
HG-9928B	14路4-20mA模拟量输入（主缸、副缸、料缸等水位、喷嘴压力、PH值电流信号接入）。64路开关量输入。
输出信号	HG-9918B 8路4-20mA模拟量输出，用于电流输出控制主泵变频、比例升降温阀、比例加料阀。32路开关量输入。
HG-9928B	16路4-20mA模拟量输出，用于电流输出控制主泵变频、比例升降温阀、比例加料阀。64路开关量输入。
资讯查询	可记录几百条完整的生产过程曲线，几百个报警事件，1天连续24小时的生产过程曲线。
参数设置	通过参数来实现不同控制要求，包括进水、排水、温控、布速等多项参数的选择。
定义功能	所有开关量或模拟量输入、输出端口均可自定义。
功能特性	精确的温度控制、布速控制，提高染机的染色质量和稳定性。可以计量用电量、水量、蒸汽等。
供电范围	DC24V，整机功耗：≤40W，工作温度：≤50℃
外形尺寸	350（宽）×263（高）×100（深）mm³
开孔尺寸	324（宽）×236（高）mm²
安装方式	盘面嵌入式

大屏幕触摸染色机控制电脑、华高专用PLC
LARGE-SCREEN TOUCH CONTROL COMPUTER DYEING MACHINE 、HUAGAO CUSTOMIZED PLC
HUA GAO

■ HG9928B / HG9918B Dyeing machine control computers

主要技术性能	
Control technology	It adopts A8 processor, Windows operating system and imported touch screen.
Display	640 × 480 pixels 10.4 inch high quality imported LCD screen. It contains all kinds of vats and valve switches diagram display.
Storage	It has a large storage space, which can store hundreds of processes, each process contains hundreds of programmable steps.
Data protection	Multi-level administrator password protection and USB backup.
Communication	1-channle RS485/CAN communication interface, 1-channle RS422/485 communication interface,1-channel 10/100M adaptive Ethernet interface. With the communication interface, you can connect to enterprise ERP and conduct remote services.
Temp. Measuring range	000℃～153℃
Temp. Control range	30℃～145℃
Temp. Control rate range	0.1℃～9.9℃
Temp. Control accuracy	Thermal static ± 0.5℃
Temperature control mode	Switch type or proportional type which controls heating or cooling is optional, with maximum deviation≤1℃, display accuracy 0.1℃
Fabric speed control	Minimum fabric speed: 10m/min, maximum fabric speed:150m/min, error control:5%
Input signal	4-channel PT100 platinum resistance(for detecting temperature of master vat and sub vat) 4-channel pulse signal(for connecting with flow meter,water meter and controlling dye bath ratio)
HG-9918B	7-channel 4-20mA analog input (connect signal with water level of master vat, sub vat and dyestuff vat; nozzle pressure control and PH current)
HG-9928B	14-channel 4-20mA analog input (connect signal with water level of master vat, sub vat and dyestuff vat; nozzle pressure control and PH current)
Output signal	HG-9918B 8-channel 4-20mA analog output (controlling main pump frequency conversion, proportional heating and cooling valve and proportional feeding valve)
HG-9928B	16-channels 4-20mA analog output (controlling main pump frequency conversion, proportional heating and cooling valve and proportional feeding valve)
Information query	It's able to record hundreds of complete production process curves, hundreds of alarm events as well as 24 hours of continuous production process curves within a day.
Parameter setting	Parameter settings for controlling water inlet, drainage, temperature control, fabric speed and other functions.
Function definition	All of inputs and outputs of switches and analogs can be customized.
Function	Accurate temperature control and fabric speed control improve the dyeing quality and stability of the dyeing machine. Consumptions of electric power, water and steam etc. can be measured.
Power supply	DC24V, 50Hz power consumption≤40W, working temperature≤ 50℃
Dimension	350(W) × 263(H) × 100(D)mm³
Size of hole	324(W) × 236(H)mm²
Installation	Embedded

HG-9928/HG-9918 染色机控制电脑

主要技术性能		
控制技术	采用先进32位嵌入式处理系统，采用进口触屏，显示和操作都可以在触摸屏上进行，也可以按键操作，使操作简单易懂。	
显示方式	采用640×480像素10.4寸高品质彩色显示屏幕，中文、英文切换显示。	
存储空间	具有较大存储空间，可同时存储几百条不同的工艺，每条可编程几百步。	
数据保护	支持多级管理员密码保护和U盘备份工艺、参数，利用U盘，机与机之间的传送也十分方便，确保工艺的完整可靠执行。	
通讯技术	1路RS485/CAN通讯接口，1路RS422/485通讯接口，1路10/100M自适应以太网接口，可联接企业ERP，也可以通过以太网进行远程服务，节省时间及成本。	
测温范围	000℃～153℃	
控温范围	30℃～145℃	
控温速率	0.1℃～9.9℃	
控温精度	保温静态±0.5℃	
温度控制	开关式、比例式可供选择，可实现开关式升降温，比例式升降温，混合式升降温，最大偏差≤1℃，显示精度为0. 1℃。	
布速控制	最小布速10m/min，最大布速150m/min，控制误差5%。	
输入信号	4路PT100铂热电阻（用于主缸、副缸等温度检测）。 2路脉冲信号（用于流量计、水表接入，控制染色浴比）。	
	HG-9918	7路4-20mA模拟量输入（主缸、副缸、料缸等水位、喷嘴压力、PH值电流信号接入）。
	HG-9928	15路4-20mA模拟量输入（主缸、副缸、料缸等水位、喷嘴压力、PH值电流信号接入）。
	PLC型	主缸高中低、副缸高中低、料缸高中低水位开关信号，以及主泵故障、堵布等等的开关信号通过通讯接口连接到PLC接入，与PLC连接可具有更多的开关量输入。
输出信号	HG-9918	8路4-20mA模拟量输出，用于电流输出控制主泵变频、比例升降温阀、比例加料阀。
	HG-9928	16路4-20mA模拟量输出，用于电流输出控制主泵变频、比例升降温阀、比例加料阀。
	PLC型	开关量输出通过通讯接口连接到PLC输出，实现多种进水、排水、主泵、升降温、溢流、水洗、报警呼叫等功能，与PLC连接可具有更多的开关量输出。
资讯查询	可记录几百条完整的生产过程曲线，几百个报警事件，1天连续24小时的生产过程曲线。	
参数设置	通过参数来实现不同控制要求，包括进水、排水、温控、布速等多项参数的选择。	
定义功能	所有开关量或模拟量输入、输出端口均可自定义。	
功能特性	精确的温度控制、布速控制，提高染机的染色质量和稳定性。可以计量用电量、水量、蒸汽等。	
供电范围	AC100～250V 50/60HZ，整机功耗：≤40W，工作温度：≤50℃	
外形尺寸	350（宽）×263（高）×100（深）mm³	
开孔尺寸	324（宽）×236（高）mm²	
安装方式	盘面嵌入式	

HG-9928 / HG-9918 Dyeing machine control computers

Main technical performance		
Control technology	Up-to-date 32-bit embedded processing system is adopted; imported touch screen provides display and operation convenience; button operation is also available, simple and easy to be understood.	
Display mode	640*480 pixels 10.4-inch high-quality color display screen is used, having Chinese / English converting display.	
Storage space	It provides larger storage space, can store hundreds of different processes, with each process having hundreds of programmable steps.	
Data protection	It supports multi-level administrator password protections and USB disk backup process and parameters; using USB disk, transfer between machines can be easily achieved, ensuring complete and reliable process execution.	
Communication technology	One RS485/CAN communication interface, one RS422/485 communication interface, one 10/100M adaptive Ethernet interface, can be connected to the enterprise ERP, or conduct remote services through Ethernet, saving time and costs.	
Temp. Measuring range	000℃~153℃	
Temp. Control range	30℃~145℃	
Temp. Control rate range	0.1℃~9.9℃	
Temp. Control accuracy	Thermal static ±0.5℃	
Temperature control	Switch type or proportional type is optional, can achieve switch-type or proportional type temperature rise/drop,hybrid litres of cooling; has maximum deviation ≤ 1℃, with display accuracy of 0.1℃.	
Fabric speed control	Minimum fabric speed: 10m/min, maximum fabric speed: 150m/min, error control: 5%.	
Input signal	4-Channel PT100 platinum thermal resistors (for the master vat and sub-vat temperature detection). 2-Channel pulse signals (for flow meter and water meter access and control of dyeing bath ratio).	
	HG-9918	7-Channel 4-20mA analog inputs (access of master vat, sub-vat, feeding vat, water levels of cylinder, etc. Nozzle pressure, pH value current signal).
	HG-9928	15-Channel 4-20mA analog inputs (access of master vat, sub-vat, feeding vat, water levels of cylinder, etc. Nozzle pressure, pH value current signal).
	PLC Type	High, medium and low level switch signals of master vat, sub-vat and feeding vat, switch signals for main pump failure, fabric blockage and so on are connected to the PLC access via communication interfaces, and more switch outputs can be achieved after connected to PLC.
Output signal	HG-9918	8-Channel 4-20mA analog outputs, used for current output to control the main pump frequency conversion, proportional temperature rise/drop valve, and proportional feeding valve.
	HG-9928	16-Channel 4-20mA analog outputs, used for current output to control the main pump frequency conversion, proportional temperature rise/drop valve, and proportional feeding valve.
	PLC Type	Switch output is connected to the PLC output via communication interface, to achieve a variety of water inlet, drainage, main pump, temperature rise/drop, overflow, water washing, alarm and other functions, and more switch outputs can be achieved after connected to PLC.
Information query	It's able to record hundreds of complete production process curves, hundreds of alarm events as well as 24 hours of continuous production process curves within a day.	
Parameter setting	Different control requirements can be achieved using parameters, including water inlet, drainage, temperature control, fabric speed and other parameters. Consumptions of electric power, water and steam etc. can be measured	
Function definition	All digital or analog input / output ports can be customized.	
Function characteristics	Accurate temperature control and fabric speed control improve the dyeing quality and stability of the dyeing machine. Consumptions of electric power, water and steam etc. can be measured	
Power supply	AC100～250V 50/60HZ，Total power consumption：≤40W，Working temperature：≤50℃	
Dimension	350（W）*263（H）*100（D）mm³	
Size of Hole	324（W）*236（H）mm²	
Installation mode	Embedded	

■ HG8928 / HG8918 染色机控制电脑

主要技术性能		
控制技术	采用先进32位嵌入式处理系统，采用进口触屏，显示和操作都可以在触摸屏上进行，也可以按键操作，使操作简单易懂。	
显示方式	采用640×480像素8.4寸高品质彩色显示屏幕，中文、英文切换显示。	
存储空间	具有较大存储空间，可同时存储几百条不同的工艺，每条可编程几百步。	
数据保护	支持多级管理员密码保护和U盘备份工艺、参数，利用U盘，机与机之间的传送也十分方便，确保工艺的完整可靠执行。	
通讯技术	1路RS485/CAN通讯接口，1路RS422/485通讯接口，1路10/100M自适应以太网接口，可联接企业ERP，也可以通过以太网进行远程服务，节省时间及成本。	
测温范围	000℃～153℃	
控温范围	30℃～145℃	
控温速率	0.1℃～9.9℃	
控温精度	保温静态±0.5℃	
温度控制	开关式、比例式可供选择，可实现开关式升降温，比例式升降温，混合式升降温，最大偏差≤1℃，显示精度为0.1℃。	
布速控制	最小布速10m/min，最大布速150m/min，控制误差5%。	
输入信号	4路PT100铂热电阻（用于主缸、副缸等温度检测）。 2路脉冲信号（用于流量计、水表接入，控制染色浴比）。	
	HG8918	7路4-20mA模拟量输入(主缸、副缸、料缸等水位、喷嘴压力、PH值电流信号接入)。
	HG8928	15路4-20mA模拟量输入(主缸、副缸、料缸等水位、喷嘴压力、PH值电流信号接入)。
	PLC型	主缸高中低、副缸高中低、料缸高中低水位开关信号，以及主泵故障、堵布等等的开关信号通过通讯接口连接到PLC接入，与PLC连接可具有更多的开关量输入。
输出信号	HG8918	8路4-20mA模拟量输出，用于电流输出控制主泵变频、比例升降温阀、比例加料阀。
	HG8928	16路4-20mA模拟量输出，用于电流输出控制主泵变频、比例升降温阀、比例加料阀。
	PLC型	开关量输出通过通讯接口连接到PLC输出，实现多种进水、排水、主泵、升降温、溢流、水洗、报警呼叫等功能，与PLC连接可具有更多的开关量输出。
资讯查询	可记录几百条完整的生产过程曲线，几百个报警事件，1天连续24小时的生产过程曲线。	
参数设置	通过参数来实现不同控制要求，包括进水、排水、温控、布速等多项参数的选择。可以计量用电量、水量、蒸汽等	
定义功能	所有开关量或模拟量输入、输出端口均可自定义。	
功能特性	精确的温度控制、布速控制，提高染机的染色质量和稳定性。	
供电范围	AC100～250V 50/60HZ，整机功耗：≤40W，工作温度：≤50℃	
外形尺寸	255（宽）×325（高）×92（深）mm³	
开孔尺寸	214（宽）×284（高）mm²	
安装方式	盘面嵌入式	

■ HG8928 / HG8918 Dyeing machine control computers

Main technical performance		
Control technology	Up-to-date 32-bit embedded processing system is adopted; imported touch screen provides display and operation convenience; button operation is also available, simple and easy to be understood.	
Display mode	640*480 pixels 10.4-inch high-quality color display screen is used, having Chinese / English converting display.	
Storage space	It provides larger storage space, can store hundreds of different processes, with each process having hundreds of programmable steps.	
Data protection	It supports multi-level administrator password protections and USB disk backup process and parameters; using USB disk, transfer between machines can be easily achieved, ensuring complete and reliable process execution.	
Communication technology	One RS485/CAN communication interface, one RS422/485 communication interface, one 10/100M adaptive Ethernet interface, can be connected to the enterprise ERP, or conduct remote services through Ethernet, saving time and costs.	
Temp. Measuring range	000℃~153℃	
Temp. Control range	30℃~145℃	
Temp. Control rate range	0.1℃~9.9℃	
Temp. Control accuracy	Thermal static ±0.5℃	
Temperature control	Switch type or proportional type is optional, can achieve switch-type or proportional type temperature rise/drop,hybrid litres of cooling ; has maximum deviation ≤ 1℃, with display accuracy of 0.1℃.	
Fabric speed control	Minimum fabric speed: 10m/min, maximum fabric speed: 150m/min, error control: 5%.	
Input signal	4-Channel Pt100 platinum thermal resistors (for the master vat and sub-vat temperature detection). 2-Channel pulse signals (for flow meter and water meter access and control of dyeing bath ratio).	
	HG-8918	7-Channel 4-20mA analog inputs (access of master vat, sub-vat, feeding vat, water levels of cylinder, etc. Nozzle pressure, pH value current signal).
	HG-8928	15-Channel 4-20mA analog inputs (access of master vat, sub-vat, feeding vat,water levels of cylinder, etc. nozzle pressure, pH value current signal).
	PLC Type	High, medium and low level switch signals of master vat, sub-vat and feeding vat, switch signals for main pump failure, fabric blockage and so on are connected to the PLC access via communication interfaces, and more switch outputs can be achieved after connected to PLC.
Output signal	HG-8918	8-Channel 4-20mA analog outputs, used for current output to control the main pump frequency conversion, proportional temperature rise/drop valve, and proportional feeding valve.
	HG-8928	16-Channel 4-20mA analog outputs, used for current output to control the main pump frequency conversion, proportional temperature rise/drop valve, and proportional feeding valve.
	PLC Type	Switch output is connected to the PLC output via communication interface, to achieve a variety of water inlet, drainage, main pump, temperature rise/drop, overflow, water washing, alarm and other functions, and more switch outputs can be achieved after connected to PLC.
Information query	It’s able to record hundreds of complete production process curves, hundreds of alarm events as well as 24 hours of continuous production process curves within a day.	
Parameter setting	Different control requirements can be achieved using parameters, including water inlet, drainage, temperature control, fabric speed and other parameters. Consumptions of electric power, water and steam etc. can be measured	
Function definition	All digital or analog input / output ports can be customized.	
Function characteristics	Accurate temperature control and fabric speed control improve the dyeing quality and stability of the dyeing machine. Consumptions of electric power, water and steam etc. can be measured	
Power supply	AC100～250V 50/60HZ，Total power consumption：≤40W，Working temperature：≤50℃	
Dimension	255（W）*325（H）*92（D）mm³	
Size of Hole	214（W）*284（H）mm²	
Installation mode	Embedded	

HG9908/HG9906 染色机控制电脑

主要技术性能		
控制技术	采用高性能A8处理器，功耗低，性能稳定。采用Windows操作系统和进口触摸屏，显示和操作可在触摸屏上进行，减少外围按键，使操作简单易懂。	
显示方式	采用640×480像素10.4寸高品质进口液晶显示屏。配有各类染缸的结构示意图形，各类阀门开关等直观显示，使用方便。	
存储空间	具有较大存储空间，可同时存储几百条不同的工艺，每条可编程几百步。	
数据保护	支持多级管理员密码保护和U盘备份工艺、参数，利用U盘，机与机之间的传送也十分方便，确保工艺的完整可靠执行。	
通讯技术	1路RS485/CAN通讯接口，1路RS422/485通讯接口，1路10/100M自适应以太网接口，可联接企业ERP，也可以通过以太网进行远程服务，节省时间及成本。	
测温范围	000℃～153℃	
控温范围	30℃～145℃	
控温速率	0.1℃～9.9℃	
控温精度	保温静态±0.5℃	
温度控制	温度控制为开关式、比例式可供选择，可实现开关式升降温、比例式升降温、混合式升降温，最大偏差≤1℃，显示精度为0.1℃。	
布速控制	最小布速10m/min，最大布速150m/min，控制误差5%。	
输入信号	4路PT100铂热电阻（用于主缸、副缸等温度检测）。 2路脉冲信号（用于流量计、水表接入，控制染色浴比）。	
	HG9906	7路4-20mA模拟量输入（主缸、副缸、料缸等水位、喷嘴压力、PH值电流信号接入）。
	HG9908	15路4-20mA模拟量输入（主缸、副缸、料缸等水位、喷嘴压力、PH值电流信号接入）。
	PLC型	主缸高中低、副缸高中低、料缸高中低水位开关信号，以及主泵故障、堵布等等的开关信号通过通讯接口连接到PLC接入，与PLC连接可具有更多的开关量输入。
输出信号	HG9906	8路4-20mA模拟量输出，用于电流输出控制主泵变频、比例升降温阀、比例加料阀。
	HG9908	16路4-20mA模拟量输出，用于电流输出控制主泵变频、比例升降温阀、比例加料阀。
	PLC型	开关量输出通过通讯接口连接到PLC输出，实现多种进水、排水、主泵、升降温、溢流、水洗、报警呼叫等功能，与PLC连接可具有更多的开关量输出。
资讯查询	可记录几百条完整的生产过程曲线，几百个报警事件，1天连续24小时的生产过程曲线。	
参数设置	通过参数来实现不同控制要求，包括进水、排水、温控、布速等多项参数的选择。	
定义功能	所有开关量或模拟量输入、输出端口均可自定义。	
功能特性	精确的温度控制、布速控制，提高染机的染色质量和稳定性。可以计量用电量、水量、蒸汽等。	
供电范围	AC100～250V 50/60HZ，整机功耗：≤40W，工作温度：≤50℃	
外形尺寸	320(宽)×235(高)×105(深)mm³	
开孔尺寸	298(宽)×210(高)mm²	
安装方式	盘面嵌入式	

HG9908 / HG9906 Dyeing machine control computers

Main technical performance		
Control technology	It adopts high performance A8 processor, Windows system and imported touch screen.	
Display	640×480 pixels 10.4 inch high quality imported LCD screen. It contains all kinds of vats and valve switches diagram display.	
Storage	It has a large storage space, which can store hundreds of processes, each process contains hundreds of programmable steps.	
Data protection	Multi-level administrator password protection and USB backup.	
Communication	1-channel RS485/CAN communication interface, 1-channel RS422/485 communication interface, 1-channel 10/100M adaptive Ethernet interface. With the communication interface, you can connect to enterprise ERP and conduct remote services.	
Temp. Measuring range	000℃～153℃	
Temp. Control range	30℃～145℃	
Temp. Control rate range	0.1℃～9.9℃	
Temp. Control accuracy	Thermal static ±0.5℃.	
Temperature control mode	Switch type or proportional type which controls heating and cooling is optional, with maximum deviation≤1℃, display accuracy 0.1℃	
Fabric speed control	Minimum fabric speed: 10m/min, maximum fabric speed: 150m/min, error control:5%	
Input signal	4-Channel PT100 platinum thermal resistors (for the master vat and sub-vat temperature detection). 2-Channel pulse signals (for flow meter and water meter access and control of dyeing bath ratio).	
	HG9906	7-Channel 4-20mA analog inputs (access of master vat, sub-vat, feeding vat, water levels of cylinder, etc. Nozzle pressure, pH value current signal).
	HG9908	15-Channel 4-20mA analog inputs (access of master vat, sub-vat, feeding vat, water levels of cylinder, etc. Nozzle pressure, pH value current signal).
	PLC Type	High, medium and low level switch signals of master vat, sub-vat and feeding vat, switch signals for main pump failure, fabric blockage and so on are connected to the PLC access via communication interfaces, and more switch outputs can be achieved after connected to PLC.
Output signal	HG9906	8-Channel 4-20mA analog outputs, used for current output to control the main pump frequency conversion, proportional temperature rise/drop valve, and proportional feeding valve.
	HG9908	16-Channel 4-20mA analog outputs, used for current output to control the main pump frequency conversion, proportional temperature rise/drop valve, and proportional feeding valve.
	PLC Type	Switch output is connected to the PLC output via communication interface, to achieve a variety of water inlet, drainage, main pump, temperature rise/drop, overflow, water washing, alarm and other functions, and more switch outputs can be achieved after connected to PLC.
Information query	It's able to record hundreds of complete production process curves, hundreds of alarm events as well as 24 hours of continuous production process curves within a day.	
Parameter setting	Parameter setting for controlling water inlet, drainage, temperature, fabric speed and other functions.	
Function definition	All of inputs and outputs of switches and analogs can be customized	
Function	Accurate temperature control and fabric speed control improve the dyeing quality and stability of the dyeing machine. Consumptions of electric power, water and steam etc. can be measured.	
Power supply	AC100~250V, 50Hz power consumption≤40W, working temperature≤ 50℃	
Dimension	320(W)×235(H)×105(D)mm³	
Size of hole	298(W)×210(H)mm²	
Installation	Embedded	

■ HG9900 / HG898A 染色机控制电脑

主要技术性能		
控制技术	采用先进32位嵌入式处理系统，采用进口触屏，显示和操作都可以在触摸屏上进行，也可以按键操作，使操作简单易懂。	
显示方式	HG898A	采用640×480像素8.4寸高品质彩色显示屏幕，中文、英文切换显示
	HG9900	采用640×480像素10.4寸高品质彩色显示屏幕，中文、英文切换显示
存储空间	具有较大存储空间，可同时存储几百条不同的工艺，每条可编程几百步。	
数据保护	支持多级管理员密码保护和U盘备份工艺、参数，利用U盘，机与机之间的传送也十分方便，确保工艺的完整可靠执行。	
通讯技术	1路RS485/CAN通讯接口，1路RS422/485通讯接口，1路10/100M自适应以太网接口，可联接企业ERP，也可以通过以太网进行远程服务，节省时间及成本。	
测温范围	000℃～153℃	
控温范围	30℃～145℃	
控温速率	0.1℃～9.9℃	
控温精度	保温静态±0.5℃	
温度控制	开关式、比例式可供选择，可实现开关式升降温，比例式升降温，混合式升降温，最大偏差≤1℃，显示精度为0.1℃。	
布速控制	最小布速10m/min，最大布速150m/min，控制误差5%。	
输入信号	HG9900	4路PT100铂热电阻（用于主缸、副缸等温度检测）。
		2路脉冲信号（用于流量计、水表接入，控制染色浴比）。
		7路4-20mA模拟量输入（主缸、副缸、料缸等水位、喷嘴压力、PH值电流信号接入）。
	PLC型	主缸高中低、副缸高中低、料缸高中低水位开关信号，以及主泵故障、堵布等等的开关信号通过通讯接口连接到PLC接入，与PLC连接可具有更多的开关量输入。
输出信号	HG9900	8路4-20mA模拟量输出，用于电流输出控制主泵变频、比例升降温阀、比例加料阀。
	PLC型	开关量输出通过通讯接口连接到PLC输出，实现多种进水、排水、主泵、升降温、溢流、水洗、报警呼叫等功能，与PLC连接可具有更多的开关量输出。
资讯查询	可记录几百条完整的生产过程曲线，几百个报警事件，1天连续24小时的生产过程曲线。	
参数设置	通过参数来实现不同控制要求，包括进水、排水、温控、布速等多项参数的选择。	
定义功能	所有开关量或模拟量输入、输出端口均可自定义。	
功能特性	精确的温度控制、布速控制，提高染机的染色质量和稳定性。	
供电范围	AC100～250V 50/60HZ，整机功耗：≤40W，工作温度：≤50℃	
外形尺寸	HG898A	272（宽）×215（高）×90（深）mm³
	HG9900	315（宽）×230（高）×70（深）mm³
开孔尺寸	HG898A	236（宽）×183（高）mm²
	HG9900	298（宽）×210（高）mm²
安装方式	盘面嵌入式	

■ HG9900 / HG898A Dyeing machine control computers

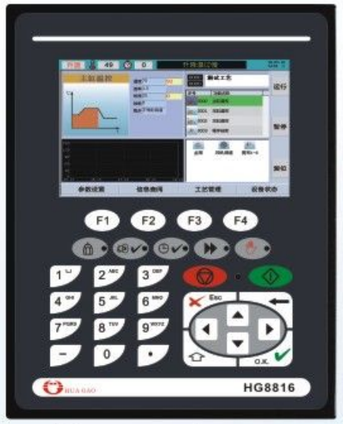
Main technical performance		
Control technology	Up-to-date 32-bit embedded processing system is adopted; imported touch screen provides display and operation convenience; button operation is also available, simple and easy to be understood.	
Display mode	HG898A	640*480 pixels 8.4-inch high-quality color display screen is used, having Chinese / English converting display.
	HG9900	640*480 pixels 10.4-inch high-quality color display screen is used, having Chinese / English converting display.
Storage space	It provides larger storage space, can store hundreds of different processes, with each process having hundreds of programmable steps.	
Data protection	It supports multi-level administrator password protections and USB disk backup process and parameters; using USB disk, transfer between machines can be easily achieved, ensuring complete and reliable process execution.	
Communication technology	One RS485/CAN communication interface, one RS422/485 communication interface, one 10/100M adaptive Ethernet interface, can be connected to the enterprise ERP, or conduct remote services through Ethernet, saving time and costs.	
Temp. Measuring range	000℃~153℃。	
Temp. Control range	30℃~145℃。	
Temp. Control rate range	0.1℃~9.9℃。	
Temp. Control accuracy	Thermal static ±0.5℃.	
Temperature control	Switch type or proportional type is optional, can achieve switch-type or proportional type temperature rise/drop,hybrid litres of cooling ; has maximum deviation ≤ 1℃, with display accuracy of 0.1℃.	
Fabric speed control	Minimum fabric speed: 10m/min, maximum fabric speed: 150m/min, error control: 5%.	
Input signal	HG9900	4-Channel Pt100 platinum thermal resistors (for the master vat and sub-vat temperature detection).
		2-Channel pulse signals (for flow meter and water meter access and control of dyeing bath ratio).
		7-Channel 4-20mA analog inputs (access of master vat, sub-vat, feeding vat, water levels of cylinder, etc. Nozzle pressure, pH value current signal).
	PLC Type	High, medium and low level switch signals of master vat, sub-vat and feeding vat, switch signals for main pump failure, fabric blockage and so on are connected to the PLC access via communication interfaces, and more switch outputs can be achieved after connected to PLC.
Output signal	HG9900	8-Channel 4-20mA analog outputs, used for current output to control the main pump frequency conversion, proportional temperature rise/drop valve, and proportional feeding valve.
	PLC Type	Switch output is connected to the PLC output via communication interface, to achieve a variety of water inlet, drainage, main pump, temperature rise/drop, overflow, water washing, alarm and other functions, and more switch outputs can be achieved after connected to PLC.
Information query	It's able to record hundreds of complete production process curves, hundreds of alarm events as well as 24 hours of continuous production process curves within a day.	
Parameter setting	Different control requirements can be achieved using parameters, including water inlet, drainage, temperature control, fabric speed and other parameters.	
Function definition	All digital or analog input / output ports can be customized.	
Function characteristics	Accurate temperature control and fabric speed control improve the dyeing quality and stability of the dyeing machine. Consumptions of electric power, water and steam etc. can be measured	
Power supply	AC100～250V 50/60HZ，Total power consumption：≤40W，Working temperature：≤50℃	
Dimension	HG898A	272（W）*215（H）*90（D）mm³
	HG9900	315（W）*230（H）*70（D）mm³
Size of Hole	HG898A	236（W）*183（H）mm²
	HG9900	298（W）*210（H）mm²
Installation mode	Embedded	

■ HG868A / HG8816 染色机控制电脑

主要技术性能	
控制技术	868A：采用高性能A8处理器，功耗低，性能稳定。采用Windows操作系统和进口触摸屏，显示和操作可在触摸屏上进行，也可以用按键操作，使操作简单易懂。
	8816：采用先进32位嵌入式处理系统。采用进口触摸屏，显示和操作可在触摸屏上进行，也可以按键操作，使操作简单易懂。
显示方式	868A：采用640×480像素5.7寸高品质彩色显示屏幕，中文、英文切换显示
	8816：采用800×480像素7寸高品质彩色显示屏幕，中英文切换显示
存储空间	具有较大存储空间，可同时存储几百条不同的工艺，每条可编程几百步。
数据保护	支持多级管理员密码保护和U盘备份工艺、参数，利用U盘，机与机之间的传送也十分方便，确保工艺的完整可靠执行。
通讯技术	868A：1路RS485/CA通讯接口，1路10/100M自适应以太网接口，可联接企业ERP，也可以通过以太网进行远程服务，节省时间及成本。
	8816：1路10/100M自适应以太网接口，可联接企业ERP，也可以通过以太网进行远程服务，节省时间及成本。
测温范围	000℃～153℃
控温范围	30℃～145℃
控温速率	0.1℃～9.9℃
控温精度	保温静态±0.5℃
温度控制	开关式、比例式可供选择，可实现开关式升降温，比例式升降温，混合式升降温，最大偏差≤1℃，显示精度为0.1℃。
输入信号	868A：4路PT100铂热电阻(用于主缸，副缸等温度检测)。
	4路脉冲信号(用于流量计、水表接入、控制染色浴比)
	7路4～20mA模拟量输入(主缸、副缸、料缸等水位、喷嘴压力、PH值电流信号接入)。32路开关量输入。
输出信号	868A：8路4～20mA模拟量输出，用于电流输出控制主泵变频、比例升降温阀、比例加料阀。32路开关量输出。
布速控制	最小布速10m/min，最大布速150m/min，控制误差5%。
资讯查询	可记录几百条完整的生产过程曲线，几百个报警事件，1天连续24小时的生产过程曲线。
参数设置	通过参数来实现不同控制要求，包括进水、排水、温控、布速等多项参数的选择。
定义功能	所有开头量或模拟量输入、输出端口均可自定义。
功能特性	精确的温度控制、布速控制，提高染机的染色质量和稳定性。
供电范围	AC100～250V 50/60HZ，整机功耗：≤40W，工作温度：≤50℃
外形尺寸	215（宽）×272（高）×90（深）mm³
开孔尺寸	183（宽）×236（高）mm²
安装方式	盘面嵌入式

■ HG-AN08 模块

主要技术性能			
模拟量输入	7路4-20mA、4路Pt100	安装方式	导轨式
模拟量输出	8路4-20mA	使用电源	AC100～250V 50/60HZ，1路24DC/500mA
高脉冲输入	2路（最高20KHz）	使用环境	温度：-10～55℃、湿度：0～90%RH
通讯接口	1路RS485、1路RS422	外形尺寸	150（长）×90（宽）×85（高）mm³
通讯协议	用户自行定义		



■ HG868A / HG8816 Dyeing machine control computers

Main technical performance	
Control technology	868A:It adopts A8 processor,Windows operating system and imported touch screen.
	8816:It adopts 32 bit embedded processing system, Windows operating system and imported touch screen.
Display mode	868A:640*480 pixels 5.7-inch high-quality color display screen is used, having Chinese / English converting display.
	8816:Display： 800×480 pixels 7 inch high quality LCD screen.Support Chinese and English language.
Storage space	It provides larger storage space, can store hundreds of different processes, with each process having hundreds of programmable steps.
Data protection	It supports multi-level administrator password protections and USB disk backup process and parameters; using USB disk, transfer between machines can be easily achieved, ensuring complete and reliable process execution.
Communication technology	868A:One RS485/CAN communication interface, one 10/100M adaptive Ethernet interface, can be connected to the enterprise ERP, or conduct remote services through Ethernet, saving time and costs.
	8816:Communication：1-channel 10/100M adaptive Ethernet interface. With the communication interface, you can connect to enterprise ERP and conduct remote services.
Temp. Measuring range	000℃~153℃
Temp. Control range	30℃~145℃
Temp. Control rate range	0.1℃~9.9℃
Temp. Control accuracy	Thermal static ±0.5℃
Temperature control	Switch type or proportional type is optional, can achieve switch-type or proportional type temperature rise/drop,hybrid litres of cooling ; has maximum deviation ≤1℃, with display accuracy of 0.1℃.
Input signal	868A:4-channel PT100 platinum resistance (for master and sub vat temperature detecting).
	4-channel pulse signal (for connecting with flow meter, water meter, controling dyeing bath ratio)
	7-channel 4-20mA analog input (connect signal with water level of master vat, sub vat and dyestuff vat; nozzle pressure control and PH current).It contains 32-channel switches input.
Output signal	868A： 8-channel 4-20mA analog output (for controlling main pump frequency conversion, proportional temperature rise/drop valve, proportional dyestuff feeding valve). It contains 32-channel switches input.
Fabric speed control	Minimum fabric speed: 10m/min, maximum fabric speed: 150m/min, error control: 5%.
Information query	It’s able to record hundreds of complete production process curves, hundreds of alarm events as well as 24 hours of continuous production process curves within a day.
Parameter setting	Different control requirements can be achieved using parameters, including water inlet, drainage, temperature control, fabric speed and other parameters.
Function definition	All digital or analog input / output ports can be customized.
Function characteristics	Accurate temperature control and fabric speed control improve the dyeing quality and stability of the dyeing machine. Consumptions of electric power, water and steam etc. can be measured
Power supply	AC100～250V 50/60HZ，Total power consumption：≤40W，Working temperature：≤50℃
Dimension	215（W）*272（H）*90（D）mm³
Size of Hole	183（W）*236（H）mm²
Installation mode	Embedded

■ HG-AN08 Modular

Main technical performance			
Analog input	7-Channel 4-20mA、4 Pt100	Embedded type	Rail type
Analog output	8-Channel 4-20mA	Power supply	AC100～250V 50/60HZ，1-Channel 24DC/500mA
High pulse input	2-Channel（Max. 20KHz）	Use environment	Temperature：-10～55℃、Humidity：0～90%RH
Communication interface	1-Channel RS485、1-Channel RS422	Dimension	150（D）*90（W）*85（H）mm³
Communication protocol	User defined		

■ HG-9028 / HG-9026 染色机控制电脑

主要技术性能		
控制技术	采用先进32位ARM Cortex-M3V7M架构处理器，运算速度快，性能稳定，抗干扰能力强	
显示方式	HG-9026	采用320×240像素单色显示屏幕，中文、英文切换显示。
	HG-9028	采用320×240像素彩色显示屏幕，中文、英文切换显示。
存储空间	具有较大存储空间，可同时存储200条不同的工艺，每条可编程200步。	
数据保护	支持多级管理员密码保护和U盘备份工艺、参数，利用U盘，机与机之间的传送也十分方便，确保工艺的完整可靠执行。	
通讯技术	具有2路通讯接口，采用RS485通讯接口连接多种PLC，又可以连接监控系统。	
测温范围	000℃～153℃	
控温范围	30℃～145℃	
控温速率	0.1℃～9.9℃	
控温精度	保温静态±0.5℃	
温度控制	开关式、比例式可供选择，可实现开关式升降温，比例式升降温，混合式升降温，最大偏差≤1℃，显示精度为0.1℃。	
加料模式	开关式、比例式可供选择，具有定量加料（内置9条加料曲线）、循环加料、加盐（溢流式）功能。	
输入信号	4路PT100铂热电阻（用于主缸、副缸等温度检测）。	
	2路脉冲信号（用于流量计、水表接入，控制染色浴比）。	
	6路4-20mA模拟量输入（主缸、副缸、料缸等水位、喷嘴压力、PH值电流信号接入）。	
	PLC型	主缸高中低、副缸高中低、料缸高中低水位开关信号，以及主泵故障、堵布等等的开关信号通过通讯接口连接到PLC接入，与PLC连接可具有64路开关量输入。
	继电器型	16路开关量输入，包括主缸高中低、副缸高中低、料缸高中低水位开关信号以及主泵故障、堵布等等的开关信号接入。
输出信号	5路4-20mA模拟量输出，用于电流输出控制主泵变频、比例升降温阀、比例加料阀。	
	PLC型	开关量输出通过通讯接口连接到PLC输出，实现多种进水、排水、主泵、升降温、溢流、水洗、报警呼叫等功能，与PLC连接可具有64路开关量输出
	继电器型	24路继电器输出（触点容量：240VAC 3A阻性负载），实现多种进水、排水、主泵、升降温、溢流、水洗、报警呼叫等功能。
资讯查询	可记录100条完整的生产过程曲线，200个报警事件，1天连续24小时的生产过程曲线。	
参数设置	通过参数来实现不同控制要求，包括进水、排水、温控等多项参数的选择。	
定义功能	所有开关量或模拟量输入、输出端口均可自定义。	
供电范围	AC180～250V 50/60HZ，整机功耗：≤30W，工作温度：≤50℃	
外形尺寸	206（宽）×262（高）×80（深）mm³	
开孔尺寸	182（宽）×233（高）mm²	
安装方式	盘面嵌入式	

■ HG-9028 / HG-9026 Dyeing machine control computers

Main technical performance		
Control technology	Advanced 32-bit ARM Cortex-M3 V7M processor with fast operation speed, stable performance, strong anti-jamming ability.	
Display mode	HG-9026	320 * 240 pixels monochrome display screen is used, providing Chinese / English converting display.
	HG-9028	320 * 240 pixels Color display screen is used, providing Chinese / English converting display.
Storage space	It provides larger storage space, can store 200 different processes, with each process having 200 programmable steps.	
Data protection	It supports multi-level administrator password protections and USB disk backup process and parameters; using USB disk, transfer between machines can be easily achieved, ensuring complete and reliable process execution.	
Communication technology	It provides 2 communication interfaces, uses RS485 communication interface to connect a variety of PLCs as well as the monitoring system.	
Temp. Measuring range	000℃~153℃	
Temp. Control range	30℃~145℃	
Temp. Control rate range	0.1℃~9.9℃	
Temp. Control accuracy	Thermal static ±0.5℃	
Temperature control	Switch type or proportional type is optional, can achieve switch-type or proportional type temperature rise/drop,hybrid litres of cooling ; has maximum deviation ≤1℃, with display accuracy of 0.1℃.	
Charging mode	Switch type, scale type can be selected, with quantitative feeding (built in 9 feeding curve), cyclic feeding, salt (overflow) function	
Input signal	4-Channel Pt100 platinum thermal resistors (for the master vat and sub-vat temperature detection).	
	2-Channel pulse signals (for flow meter and water meter access and control of dyeing bath ratio).	
	6-Channel 4-20mA analog inputs (access of master vat, sub-vat, feeding vat, water levels of cylinder, etc. Nozzle pressure, pH value current signal).	
	PLC type	High, medium and low level switch signals of master vat, sub-vat and feeding vat, switch signals for main pump failure, fabric blockage and so on are connected to the PLC access via communication interfaces, and more switch outputs can be achieved after connected to PLC.
	Relay type	16-Channel switch inputs, including high, medium and low level switch signals of master vat, sub-vat and feeding vat, switch signals for main pump failure, fabric blockage and so on.
Output signal	5-Channel 4-20mA analog outputs, used for current output to control the main pump frequency conversion, proportional temperature rise/drop valve, and proportional feeding valve.	
	PLC Type	Switch output is connected to the PLC output via communication interface, to achieve a variety of water inlet, drainage, main pump, temperature rise/drop, overflow, water washing, alarm and other functions, and more switch outputs can be achieved after connected to PLC.
	Relay type	24 relay outputs (contact capacity: 240VAC 3A resistive load), to achieve a variety of water inlet, drainage, main pump, temperature rise/drop, overflow, water washing, alarm and other functions.
Information query	It's able to record 100 complete production process curves, 200 alarm events as well as 24 hours of continuous production process curves within a day.	
Parameter setting	Different control requirements can be achieved using parameters, including water inlet, drainage, temperature control, fabric speed and other parameters.	
Function definition	All digital or analog input / output ports can be customized.	
Power supply	AC100～250V 50/60HZ, Total power consumption: ≤40W, Working temperature: ≤50℃	
Dimension	206（W）*262（H）*80（D）mm³	
Size of Hole	182（W）*233（H）mm²	
Installation mode	Embedded	

HG-9023 / HG-6023 / HG-9022 / HG-6022 染色机控制电脑

主要技术性能		
控制技术	采用先进32位处理系统，运算速度快，性能更稳定。	
显示方式	HG-9022 / HG-6022	采用320×240像素单色显示屏幕，中文、英文切换显示。
	HG-9023 / HG-6023	采用320×240像素彩色显示屏幕，中文、英文切换显示。
存储空间	具有较大存储空间，可同时存储200条不同的工艺，每条可编程200步。	
数据保护	支持多级管理员密码保护和U盘备份工艺、参数，利用U盘，机与机之间的传送也十分方便，确保工艺的完整可靠执行。	
通讯技术	具有2路通讯接口，采用RS485通讯接口连接多种PLC，又可以连接监控系统。	
测温范围	000℃～153℃	
控温范围	30℃～145℃	
控温速率	0.1℃～9.9℃	
控温精度	保温静态±0.5℃	
温度控制	开关式、比例式可供选择，可实现开关式升降温，比例式升降温，混合式升降温，最大偏差≤1℃，显示精度为0.1℃。	
加料模式	开关式、比例式可供选择，具有定量加料（内置9条加料曲线）、循环加料、加盐（溢流式）功能。	
输入信号	4路PT100铂热电阻（用于主缸、副缸等温度检测）。	
	2路脉冲信号（用于流量计、水表接入，控制染色浴比）。	
	6路4-20mA模拟量输入（主缸、副缸、料缸等水位、喷嘴压力、PH值电流信号接入）。	
	PLC型	主缸高中低、副缸高中低、料缸高中低水位开关信号，以及主泵故障、堵布等等的开关信号通过通讯接口连接到PLC接入，与PLC连接可具有64路开关量输入。
	继电器型	16路开头量输入，主缸高中低、副缸高中低、料缸高中低水位开关信号以及主泵故障、堵布等等的开关信号接入。
输出信号	5路4-20mA模拟量输出，用于电流输出控制主泵变频、比例升降温阀、比例加料阀。	
	PLC型	开关量输出通过通讯接口连接到PLC输出，实现多种进水、排水、主泵、升降温、溢流、水洗、报警呼叫等功能，与PLC连接可具有64路开关量输出。
	继电器型	24路继电器输出（触点容量：240VAC 3A阻性负载），实现多种进水、排水、主泵、升降温、溢流、水洗、报警呼叫等功能。
资讯查询	可记录100条完整的生产过程曲线，200个报警事件，1天连续24小时的生产过程曲线。	
参数设置	通过参数来实现不同控制要求，包括进水、排水、温控等多项参数的选择。	
定义功能	所有开关量或模拟量输入、输出端口均可自定义。	
供电范围	AC180～250V 50/60HZ，整机功耗：≤30W，工作温度：≤50℃	
外形尺寸	HG-9022 / HG-9023	306（宽）×180（高）×90（深）mm³
	HG-6022 / HG-6023	268（宽）×156（高）×110（深）mm³
开孔尺寸	HG-9022 / HG-9023	282（宽）×160（高）mm²
	HG-6022 / HG-6023	244（宽）×132（高）mm²
安装方式	盘面嵌入式	

HG-9023 / HG-6023 / HG-9022 / HG-6022 Dyeing machine control computers

Main technical performance		
Control technology	Advanced 32-bit MPU processing system boasts fast calculation speed and stable performance.	
Display mode	HG-9022 / HG-6022	320 * 240 pixels monochrome display screen is used, providing Chinese / English converting display.
	HG-9023 / HG-6023	320 * 240 pixels Color display screen is used, providing Chinese / English converting display.
Storage space	It provides larger storage space, can store 200 different processes, with each process having 200 programmable steps.	
Data protection	It supports multi-level administrator password protections and USB disk backup process and parameters; using USB disk, transfer between machines can be easily achieved, ensuring complete and reliable process execution.	
Communication technology	It provides 2 communication interfaces, uses RS485 communication interface to connect a variety of PLCs as well as the monitoring system.	
Temp. Measuring range	000℃~153℃	
Temp. Control range	30℃~145℃	
Temp. Control rate range	0.1℃~9.9℃	
Temp. Control accuracy	Thermal static ±0.5℃	
Temperature control	Switch type or proportional type is optional, can achieve switch-type or proportional type temperature rise/drop,hybrid litres of cooling ; has maximum deviation ≤1℃, with display accuracy of 0.1℃.	
Charging mode	Switch type, scale type can be selected, with quantitative feeding (built in 9 feeding curve), cyclic feeding, salt (overflow) function	
Input signal	4-Channel Pt100 platinum thermal resistors (for the master vat and sub-vat temperature detection).	
	2-Channel pulse signals (for flow meter and water meter access and control of dyeing bath ratio).	
	6-Channel 4-20mA analog inputs (access of master vat, sub-vat, feeding vat, water levels of cylinder, etc. Nozzle pressure, pH value current signal).	
	PLC type	High, medium and low level switch signals of master vat, sub-vat and feeding vat, switch signals for main pump failure, fabric blockage and so on are connected to the PLC access via communication interfaces, and more switch outputs can be achieved after connected to PLC.
	Relay type	16 switch inputs, including high, medium and low level switch signals of master vat, sub-vat and feeding vat, switch signals for main pump failure, fabric blockage and so on.
Output signal	5-Channel 4-20mA analog outputs, used for current output to control the main pump frequency conversion, proportional temperature rise/drop valve, and proportional feeding valve.	
	PLC Type	Switch output is connected to the PLC output via communication interface, to achieve a variety of water inlet, drainage, main pump, temperature rise/drop, overflow, water washing, alarm and other functions, and more switch outputs can be achieved after connected to PLC.
	Relay type	24 relay outputs (contact capacity: 240VAC 3A resistive load), to achieve a variety of water inlet, drainage, main pump, temperature rise/drop, overflow, water washing, alarm and other functions.
Information query	It's able to record 100 complete production process curves, 200 alarm events as well as 24 hours of continuous production process curves within a day.	
Parameter setting	Different control requirements can be achieved using parameters, including water inlet, drainage, temperature control, fabric speed and other parameters.	
Function definition	All digital or analog input / output ports can be customized.	
Power supply	AC100～250V 50/60HZ，Total power consumption：≤40W，Working temperature：≤50℃	
Dimension	HG-9022 / HG-6022	306（W）*180（H）*90（D）mm³
	HG-6022 / HG-6023	268（W）*156（H）*110（D）mm³
Size of Hole	HG-9022 / HG-9023	282（W）*160（H）mm²
	HG-6022 / HG-6023	244（W）*132（H）mm²
Installation mode	Embedded	

HG738 / HG728 / HG638/ HG628 染色机控制电脑

主要技术性能		
控制技术	采用先进32位ARM Cortex-M3V7M架构处理器，运算速度快，性能稳定，抗干扰能力强	
显示方式	采用4.3英寸高品质真彩TFT液晶显示屏幕，支持中英文切换显示	
存储空间	具有较大存储空间，可同时存储100条不同的工艺，每条可编程100步。	
数据保护	支持多级管理员密码保护和U盘备份工艺、参数，利用U盘，机与机之间的传送也十分方便，确保工艺的完整可靠执行。	
通讯技术	2路通讯接口，1路采用RS422与Rs485兼容通讯接口，可以连接多种PLC，1路RS485通讯接口可连接集中控制系统。	
测温范围	000℃～153℃	
控温范围	30℃～145℃	
控温速率	0.1℃～9.9℃	
控温精度	保温静态±0.5℃	
控温方式	优化自适应控制。	
加料模式	开关式、比例式可供选择，具有定量加料（内置9条加料曲线）、循环加料、加盐（溢流式）功能。	
输入信号	HG628 / HG728	1路PT100铂热电阻、8路开关量输入，1路4-20mA模拟量输入。
	HG638 / HG738	2路PT100铂热电阻、8路开关量输入，2路4-20mA模拟量输入。
输出信号	HG628 / HG728	8路继电器输出（触点容量:240VAC 3A阻性负载），1路4-20mA模拟量输出，与PLC连接可具有32路开关量输入和32路开关量输出。
	HG638 / HG738	16路继电器输出（触点容量:240VAC 3A阻性负载），3路4-20mA模拟量输出，与PLC连接可具有32路开关量输入和32路开关量输出。
资讯查询	可记录100条完整的生产过程曲线，1天连续24小时的生产过程曲线。	
参数设置	通过参数来实现不同控制要求，包括进水、排水、温控、布速等多项参数的选择。	
定义功能	所有开关量或模拟量输入、输出端口均可自定义。	
供电范围	AC180～250V 50/60HZ，整机功耗：≤30W，工作温度：≤50℃	
外形尺寸	HG628 / HG638	170（宽）×180（高）×88（深）mm^3
	HG728 / HG738	170（宽）×222（高）×120（深）mm^3
开孔尺寸	HG628 / HG638	153（宽）×153（高）mm^2
	HG728 / HG738	133（宽）×187（高）mm^2
安装方式	盘面嵌入式	

HG738 / HG728 / HG638/ HG628 Dyeing machine control computers

Main technical performance		
Control technology	Advanced 32-bit ARM Cortex-M3 V7M processor with fast operation speed, stable performance, strong anti-jamming ability.	
Display	It adopts 4.3 inch high quality color TFT LCD screen display screen.	
Storage	It has a large storage space, which can store 100 different processes, each process contains 100 programmable steps.	
Data protection	Multi-level administrator password protection and USB backup.	
Communication	2-channel communication interfaces. 1-channel RS422/RS485 communication interface, it can connect a variety of PLC. 1-channe l RS485 communication interface, it can connect with centralized control system.	
Temp. Measuring range	000℃~153℃	
Temp. Control range	30℃~145℃	
Temp. Control rate range	0.1℃~9.9℃	
Temp. Control accuracy	Thermal static ±0.5℃	
Dyestuff feeding mode	Switch type and proportional type is optional. There are quantitative feeding (9 feeding curves), cyclic feeding, salt feeding (overflow) functions	
Input signal	HG628 / HG728	1-channel PT100 platinum thermal resistance, 1-channel 4-20mA analog input, 8-channel switch input.
	HG638 / HG738	2-channel PT100 platinum thermal resistance, 2-channel 4-20mA analog input, 8-channel switch input.
Output signal	HG628 / HG728	8-channel relay output (contact capacity: 240AVC 3A resistive load), 1-channel 4-20mA analog output. It contains 32-channel switch output and input which can connect with PLC.
	HG638 / HG738	16-channel relay output (contact capacity: 240AVC 3A resistive load), 2-channel 4-20mA analog output. It contains 32-channel switch output and input which can connect with PLC.
Process query	It can record 100 processing curves and 24 hours running process.	
Parameters setting	Parameters setting for water intake, water draining, temperature and fabric speed control.	
Define	All of inputs and outputs of switches and analogs can be customized	
Power supply	AC 180V-250V, 50/60HZ power consumption≤30W, operating temperature≤50℃	
Dimension	HG628 / HG638	170(W) × 180(H) × 88(D)mm^3
	HG728 / HG738	170(W) × 222(H) × 120(D)mm^3
Size of hole	HG628 / HG638	153(W) × 153(H)mm^2
	HG728 / HG738	133(W) × 187(H)mm^2
Installation method	Embedded	

■ HG716 / HG708 / HG618/ HG608 染色机控制电脑

主要技术性能		
控制技术	采用先进MPU单片机控制技术。	
显示方式	采用中英文显示屏幕（128×64像素）。	
存储空间	具有较大存储空间，可同时存储100条不同的工艺，每条可编程100步。	
数据保护	支持多级管理员密码保护和U盘备份工艺、参数，利用U盘，机与机之间的传送也十分方便，确保工艺的完整可靠执行。	
通讯技术	具有2路通讯接口，采用RS232通讯接口连接多种PLC，又可以连接监控系统。	
测温范围	000℃～153℃	
控温范围	30℃～145℃	
控温速率	0.1℃～9.9℃	
控温精度	保温静态±0.5℃	
控温方式	优化自适应控制。	
加料模式	开关式、比例式可供选择，具有定量加料（内置9条加料曲线）、循环加料、加盐（溢流式）功能。	
输入信号	HG708 / HG608	1路PT100铂热电阻（用于主缸、副缸等温度检测），8路开关量输入，2路4-20mA模拟量输入。
	HG716 / HG618	2路PT100铂热电阻（用于主缸、副缸等温度检测），8路开关量输入，4路4-20mA模拟量输入。
输出信号	HG708 / HG608	8路继电器输出（触点容量:240VAC 3A阻性负载），1路4-20mA模拟量输出，与PLC连接可具有32路开关量输入和32路开关量输出。
	HG716 / HG618	16路继电器输出（触点容量:240VAC 3A阻性负载），3路4-20mA模拟量输出，与PLC连接可具有32路开关量输入和32路开关量输出。
资讯查询	可记录100条完整的生产过程曲线，1天连续24小时的生产过程曲线。	
参数设置	通过参数来实现不同控制要求，包括进水、排水、温控等多项参数的选择。	
定义功能	所有开关量或模拟量输入、输出端口均可自定义。	
供电范围	AC180～250V 50/60HZ，整机功耗：≤30W，工作温度：≤50℃	
外形尺寸	HG708 / HG716	170（宽）×222（高）×120（深）mm³
	HG608 / HG618	170（宽）×180（高）×88（深）mm³
开孔尺寸	HG708 / HG716	133（宽）×187（高）mm²
	HG608 / HG618	153（宽）×153（高）mm²
安装方式	盘面嵌入式	

■ HG716 / HG708 / HG618/ HG608 Dyeing machine control computers

Main technical performance		
Control technology	The use of advanced MPU control technology	
Display mode	In the Chinese/ English display (128 *64 pixels)	
Storage space	It provides larger storage space, can store 100 different processes, with each process having 100 programmable steps.	
Data protection	It supports multi-level administrator password protections and USB disk backup process and parameters; using USB disk, transfer between machines can be easily achieved, ensuring complete and reliable process execution.	
Communication technology	It provides 2 communication interfaces, uses RS485 communication interface to connect a variety of PLCs as well as the monitoring system.	
Temp. Measuring range	000℃~153℃	
Temp. Control range	30℃~145℃	
Temp. Control rate range	0.1℃~9.9℃	
Temp. Control accuracy	Thermal static ±0.5℃	
Temperature control mode	Adaptive control optimization	
Temperature control	Switch type or proportional type is optional, can achieve switch-type or proportional type temperature rise/drop; has maximum deviation ≤1℃, with display accuracy of 0.1℃.	
Charging mode	Switch type, scale type can be selected, with quantitative feeding (built in 9 feeding curve), cyclic feeding, salt (overflow) function	
Input signal	HG708 / HG608	1-Channel PT100 platinum thermal resistance (for the main cylinder, cylinder temperature detection), 8 digital inputs, 2 analog input 4-20mA
	HG716 / HG618	2-Channel PT100 platinum thermal resistance (for the main cylinder, cylinder temperature detection), 8 digital inputs, 4 analog input 4-20mA
PLC type	HG708 / HG608	8-Channel way relay output (contact capacity: 240VAC 3A resistive load), 1 channel 4-20mA analog output, and PLC connection can have 32 digital inputs and 32 digital outputs
	HG716 / HG618	16-Channel way relay output (contact capacity: 240VAC 3A resistive load), 3 channel 4-20mA analog output, and PLC connection can have 32 digital inputs and 32 digital outputs
Information query	It's able to record 100 complete production process curves, 24 hours of continuous production process curves within a day.	
Parameter setting	Different control requirements can be achieved using parameters, including water inlet, drainage, temperature control, fabric speed and other parameters.	
Function definition	All digital or analog input / output ports can be customized.	
Power supply	AC100～250V 50/60HZ, Total power consumption: ≤40W, Working temperature: ≤50℃	
Dimension	HG708 / Hg716	170（W）*222（H）*120（D）mm³
	Hg608 / HG618	170（W）*180（H）*88（D）mm³
Size of Hole	HG708 / Hg716	133（W）*187（H）mm²
	Hg608 / HG618	153（W）*153（H）mm²
Installation mode	Embedded	

■ HG318 / HG2300 染色机控制电脑

主要技术性能		
控制技术	采用先进MPU单片机控制技术。	
显示方式	采用中英文显示128×64像素液晶屏幕（中文8字4行）。	
存储空间	具有较大存储空间，可同时存储100条不同的工艺，每条可编程100步，可记录10条温度曲线。	
通讯技术	采用RS485通讯接口连接监控系统。	
测温范围	000℃～153℃	
控温范围	30℃～145℃	
控温速率	0.1℃～9.9℃	
控温精度	保温静态±0.5℃	
控温方式	优化自适应控制。	
供电范围	AC180～250V 50/60HZ，整机功耗：≤6W，工作温度：≤50℃	
输入信号	1路PT100铂热电阻。	
输出信号	继电器输出9路（触点容量：240VAC 3A阻性负载）：加热、排冷（排冷凝水）、直加、冷却、主泵、卸压、正转、反转、呼叫。	
外形尺寸	HG318	170（宽）×180（高）×88（深）mm^3
	HG2300	
开孔尺寸	HG318	
	HG2300	
安装方式	盘面嵌入式	

■ HG318 / HG2300 Dyeing machine control computers

Main technical performance		
Control technology	The use of advanced MPU control technology	
Display mode	In both Chinese/ English display, 128 * 64 pixels LCD screen (Chinese: 8 words, 4 lines)	
Storage space	It provides larger storage space, can store 100 different processes, with each process having 100 programmable steps. Can record 10 temperature curves	
Communication technology	Using RS485 communication interface monitoring system	
Temp. Measuring range	000℃~153℃	
Temp. Control range	30℃~145℃	
Temp. Control rate range	0.1℃~9.9℃	
Temp. Control accuracy	Thermal static ±0.5℃	
Temperature control mode	Adaptive control optimization	
Power supply	AC180～250V 50/60HZ，Total power consumption：≤6W，Working temperature：≤50℃	
Input signal	1-Channel PT100 platinum thermal resistance.	
Output signal	9-Channel relay outputs (contact capacity: 240VAC 3A resistive load): heating, cold discharging (condensation water discharging), direct load, cooling, main pump, pressure relief, forward/ backward running, call.	
Dimension	HG318	170（W）*180（H）*88（D）mm^3
	HG2300	170（W）*180（H）*88（D）mm^3
Size of Hole	HG318	153（W）*153（H）mm^2
	HG2300	153（W）*153（H）mm^2
Installation mode	Embedded	

■ HG–338 染色机控制电脑

主要技术性能	
控制技术	采用32位嵌入式处理器Cortex-M3。
显示方式	4.3英寸TFT(像素480×272)
存储空间	可同时存储99条不同的工艺，每条可编程99步。
记录容量	66条温度曲线记录每条记录可以连续记录12小时温度曲线
数据保护	支持多级密码保护和U盘备份工艺参数
通讯技术	一路RS485通讯接口用于集中控制
定义功能	开关输入，继电器输出均可以自定义。
测温范围	–10～180℃
控温范围	30℃～145℃
控温速率	0.1℃～9.9℃
控温精度	保温静态±0.5℃
控温方式	开关方式
供电范围	采用开关电源，工作电压AC110V～240V，50HZ~60HZ，功耗≤30W
输入信号	1路PT100铂热电阻；4路开关输入
输出信号	9路继电器输出
工作温度	工作温度：≤50℃
功能特性	精确的温度控制
外形尺寸	170（宽）×180（高）×88（深）mm³
开孔尺寸	153（宽）×153（高）mm³
安装方式	盘面嵌入式

■ HG3300 / HG310 染色机控制电脑

主要技术性能		
控制技术	采用先进MPU单片机控制技术。	
显示方式	采用中英文显示128×64像素液晶屏幕（中文8字4行）。	
存储空间	具有较大存储空间，可同时存储100条不同的工艺，每条可编程100步，可记录10条温度曲线。	
通讯技术	采用RS485通讯接口连接监控系统。	
测温范围	000℃～153℃	
控温范围	30℃～145℃	
控温速率	0.1℃～9.9℃	
控温精度	保温静态±0.5℃	
控温方式	优化自适应控制	
供电范围	AC180～250V 50/60HZ，整机功耗：≤6W，工作温度：≤50℃	
输入信号	1路PT100铂热电阻，1路开关量输入（行程开关）。	
输出信号	继电器输出9路（触点容量：240VAC 3A阻性负载）：加热、排冷（排冷凝水）、直加、冷却、主泵、卸压、正转、反转，呼叫。	
外形尺寸	HG3300	168（宽）×222（高）×120（深）mm³
	HG310	170（宽）×180（高）×88（深）mm³
开孔尺寸	HG3300	135（宽）×188（高）mm³
	HG310	153（宽）×153（高）mm³
安装方式	盘面嵌入式	

■ HG-TC300 / HG-TC300E 染色机控制电脑

主要技术性能		
控制技术	采用先进MPU单片机控制技术。	
显示方式	数码显示。	
存储空间	可同时存储40条不同的工艺，每条可编程40步。	
测温范围	000℃～153℃	
控温范围	30℃～150℃	
控温速率	0.1℃～9.9℃	
控温精度	保温静态±0.1℃	
控温方式	模糊控制。	
供电范围	AC180～250V 50/60HZ，整机功耗：≤30W，工作温度：≤50℃	
输入信号	1路PT100铂热电阻。	
输出信号	HG-TC300	继电器输出4路（触点容量：240VAC 3A阻性负载）：加热、卸压、冷却、呼叫。
	HG-TC300E	继电器输出8路（触点容量：240VAC 3A阻性负载）：加热、排冷、卸压、直加、冷却、正转、反转、呼叫。
外形尺寸	HG-TC300	160（宽）×160（高）×210（深）mm^3
	HG-TC300E	160（宽）×160（高）×160（深）mm^3
开孔尺寸	HG-TC300	152（宽）×152（高）mm^2
	HG-TC300E	152（宽）×152（高）mm^2
安装方式	盘面嵌入式	

■ HG8000 / HG8808 蒸纱机控制电脑

HG8000 / HG8808 Yarn steaming machine control computers

具有控制蒸纱机的入缸、锁门、抽真空、卸压等压力控制、升温、进水等功能，可外接PLC控制或内置继电器输出。

It has the functions of controlling the pressure control in yarn steaming machine feeding, door locking, vacuum pumping, pressure relief, etc., temperature rise, water intake, etc., can be connected to external PLC control or built-in relay output.

主要技术性能		
控制技术	采用先进32位MPU处理系统，运算速度快，性能更稳定。	
显示方式	HG-8000	采用320×240像素单色显示屏幕，中文、英文切换显示。
	HG-8808	采用320×240像素彩色显示屏幕，中文、英文切换显示。
存储空间	具有较大存储空间，可同时存储200条不同的工艺，每条工艺程序可为5循环。	
数据保护	支持多级管理员密码保护和U盘备份工艺、参数，利用U盘，机与机之间的传送也十分方便，确保工艺的完整可靠执行。	
通讯技术	具有2路通讯接口，采用RS485、RS232通讯接口连接多种PLC，又可以连接监控系统。	
测温范围	000℃～153℃	
控温范围	30℃～145℃	
控温速率	0.1℃～9.9℃	
控温精度	保温静态±0.5℃	
控温方式	优化自适应控制。	
输入信号	用于缸内温度检测。	
	用于缸内压力信号输入。	
	PLC型	64路开关输入（各种检测信号的输入）
	继电器型	16路开关量输入。
输出信号	PLC型	64路开关量输出（升温、抽真空、进水等开关输出）。
	继电器型	16继电器输出，5路4-20mA模拟量输出，比例升降温阀。
资讯查询	可记录100条完整的生产过程曲线，200个报警事件，每批蒸纱机的生产过程曲线。	
参数设置	通过参数来实现不同控制要求。	
定义功能	所有开关量或模拟量输入、输出端口均可自定义。	
供电范围	AC180～250V 50/60HZ，整机功耗：≤30W，工作温度：≤50℃	
外形尺寸	215（宽）×272（高）×92（深）mm^3	
开孔尺寸	183（宽）×235（高）mm^2	
安装方式	盘面嵌入式	

■ HG2008A、HG218、HG2008C染色机控制电脑

HG2008A、HG218 Dyeing machine control computer

HG218、2008A、2008C染色机控制电脑选用液晶显示屏幕(中文8字4行)。可先择中文或英文显示方式，采用友好的人机界面，操作简便，让你无需说明书也能根据界面完成大部分操作。屏幕显示简洁完善，一目了然。该电脑控温效果理想，可广泛适用于红外线小样机、常温小样机、高温小样机。

1、储存空间

具有较大容量的存储空间，可同时储存100条工艺曲线，每条工艺可达100步。可记录10条温度曲线

2、测温性能

测温元件：PT100铂热电阻测温输入

测温范围：HG218、2008A：000℃~153℃

2008C：000.0℃～180.0℃

控温范围：30℃~145℃

控温速率：HG218、2008A：0.1~9.9℃。

2008C：0.1～3.0℃

控温精度：保温静态±0.5℃

控温方式：优化自适应控制

3、输出信号

7路继电器输出(触电容量：240VAC3A阻性负载)其中3路控制加热，1路控制冷却，1路控制正转，1路控制反转，1路控制呼叫，1路4–20mA模拟量输出

4、保护功能

当实测温度高于150℃时，电脑禁止加热，电脑采用先进的IC装置断电后编入的工艺流程、参数长期不会消失。

2008C：电脑投入运行以后，若发生掉电，则运行工艺参数及实时工作状态不消失，上电后会出现提示

5、供电范围：HG218、2008A：AC180~250V，50/60Hz，整机功耗≤5W，环境温度≤50℃。

2008C：AC（190～250）V 50HZ/60HZ 整机功耗≤5W

6、外形尺寸：96(宽)×96(高)×72(深)mm3

开孔尺寸：92(宽)×92(高)mm2

7、安装方式：盘面嵌入式

HG2008A、HG218 dyeing machine control computer uses Chinese as language display on the screen (8 Chinese characters in 4 lines).user-friendly human-computer interface, easy to operate, and so you use it simply without the need of instructions. It can also complete most of the operations according to the instructions on the interface. The instructions displayed on the screen are simple and perfect, clear at a glance.This computer has ideal temperature control effect. It can be widely used in infrared small prototypes, normal temperature small prototypes, and high temperature small prototypes.

1.Storage

It has a large storage space, which can store 100 different processes, each process contains 100 programmable steps.

2.Temperature measurement performance

Temperature Measuring Element：PT100 platinum resistance

Temperature measuring range：HG218、2008A：000℃~153℃

2008C：000.0℃～180.0℃

Temperature control range：30℃~145℃

Temperature control rate：HG218、2008A：0.1~9.9℃

2008C：0.1～3.0℃

Temperature control accuracy：Thermal static±0.5℃

Temperature control mode：Adaptive control optimization

3.Output signal

7-channel relay output(contact capacity：240VAC3A resistive load) 3-channel for heating control，1-channel for cooling control，1-channel for positive rotary control,1-channel reverse rotary control,1-channel for alarm control,1-channel for 4-20mA analog output.

4.Function proctection

Computer will stop heating if temperature is beyond 150℃. The computer adopts advance IC device which means paramenters will be saved even power outage.

2008C：In running state, the parameters will be saved even power outage.

5.Power supply：HG218、2008A：AC180~250V，50/60Hz，power consumption≤30W，operating temperature≤50℃ 2008C：AC（190～250）V 50HZ/60HZ power consumption≤5W.

6.Dimension：96(W)×96(H)×72(D)mm3

Size of hole：92(W)×92(H)mm2

7.Installation method：Embedded

■ HG238 染色机控制电脑

HG238 Dyeing machine control computers

主要技术性能	
控制技术	采用先进32位嵌入式处理系统，采用进口触屏，显示和操作都可以在触摸屏上进行，使操作简单易懂。
显示方式	采用3.5英寸高品质彩色显示屏幕，中文、英文切换显示。
存储空间	具有较大存储空间，可同时存储100条不同的工艺，每条可编程100步，可记录10条温度曲线。
测温范围	000℃～153℃
控温范围	30℃～145℃
显示精度	0.1℃～99℃
控温精度	保温静态±0.5℃
控温方式	优化自适应控制。
供电范围	Ac180～250 50/60HZ，整机功耗：≤5W，工作温度：≤50℃
输入信号	1路PT100铂热电阻。
输出信号	继电器输出7路（触点容量:240VAC 3A阻性负载）其中3路控制加热，1路控制冷却，1路控制呼叫。 模拟量输出1路：4~20mA输出。
外形尺寸	100（宽）×100（高）×72（深）mm^3
开孔尺寸	92（宽）×92（高）mm^2
安装方式	盘面嵌入式

■ HG2018 染色机控制电脑

HG2018 Dyeing machine control computers

主要技术性能	
控制技术	采用先进32位嵌入式处理系统
显示方式	采用3.5英寸高品质彩色显示屏幕，中文、英文切换显示。
存储空间	具有较大存储空间，可同时存储100条不同的工艺，每条可编程100步，可记录10条温度曲线。
测温范围	000℃～153℃
控温范围	30℃～145℃
显示精度	0.1℃～99℃
控温精度	保温静态±0.5℃
控温方式	优化自适应控制。
供电范围	Ac180～250 50/60HZ，整机功耗：≤5W，工作温度：≤50℃
输入信号	1路PT100铂热电阻。
输出信号	继电器输出7路（触点容量:240VAC 3A阻性负载）其中3路控制加热，1路控制冷却，1路控制呼叫。 模拟量输出1路：4~20mA输出。
外形尺寸	100（宽）×100（高）×72（深）mm^3
开孔尺寸	92（宽）×92（高）mm^2
安装方式	盘面嵌入式

■ 高温温度验证仪

High temperature measuring instrument

主要特点：

1、耐高温性能优越

2、测量精度高达±0.30℃

3、采用进口3.6V高温锂电池

4、选用不锈钢材料，坚固的外壳设计，经久耐用

5、可用计算机显示和打印记录的温度曲线和报表

6、USB通讯接口，兼容性强，可重复使用，易安装

7、自带F值计算功能，分析验证过程中的热穿透和热分布

8、大容量记录内存（32000组数据），记录可被永久保存

9、防水等级达到IP68，可在有一定压力下的环境中完全防水

■ TC150B/TC150/TC100B /TC200/TC100A/TC100C 染色机控制电脑

主要技术性能		
控制技术	采用先进MPU单片机控制技术。	
显示方式	数码显示。	
存储空间	TC100A TC200	可同时存储9条不同的工艺，0－7号工艺每条可编程10步，8号工艺可编20步。
	TC100B TC100C TC150 TC150B	可同时存储10条不同的工艺，每条可编程10步。
测温范围	000℃～153℃	
控温范围	30℃～145℃	
控温速率	0.1℃～9.9℃	
控温精度	保温静态±0.5℃	
控温方式	优化自适应控制。	
供电范围	AC180～250V 50/60HZ，整机功耗：≤5W，工作温度：≤50℃	
输入信号	1路PT100铂热电阻。	
输出信号	TC100C	继电器输出4路（触点容量：240VAC 3A阻性负载）其中2路控制加热，1路控制冷却，1路控制呼叫。
	TC100A TC100B	继电器输出3路（触点容量：240VAC 3A阻性负载）其中1路控制加热，1路控制冷却，1路控制呼叫。
	TC150 TC200	继电器输出5路（触点容量：240VAC 3A阻性负载）其中3路控制加热，1路控制冷却，1路控制呼叫。
	TC150B	继电器输出5路（触点容量：240VAC 3A阻性负载）其中1路控制加热，1路控制冷却，1路控制正转。1路控制反转，1路控制呼叫。
外形尺寸	TC100C	96（宽）×48（高）×115（深）mm^3
	TC100A TC100B TC150 TC150B TC200	96（宽）×96（高）×120（深）mm^3
开孔尺寸	TC100C	92（宽）×44（高）mm^2
	TC100A TC100B TC150 TC150B TC200	92（宽）×92（高）mm^2
安装方式	盘面嵌入式	

■ TC150B/TC150/TC100B /TC200/TC100A/TC100C Dyeing machine control computers

Main technical performance		
Control technology	The use of advanced MPU control technology	
Display mode	Digital display	
Storage space	TC100A TC200	It’s able to store 9 different processes; each of processes 0 - 7 can be programmed 10 steps, and process 8 includes 20 steps.
	TC100B TC100C TC150 TC150B	It’s able to store 10 different processes, and each can program10 steps
Temp. Measuring range	000℃～153℃	
Temp. Control range	30℃～145℃	
Temp. control rate range	0.1℃～9.9℃	
Temp. Control accuracy	Thermal static ±0.5℃	
Temperature control mode	Adaptive control optimization	
Power supply	AC180～250V 50/60HZ，Total power consumption：≤5W，Working temperature：≤50℃	
Input signal	1-Channel PT100 platinum thermal resistance.	
Output signal	TC100C	4-Channel relay outputs (contact capacity: 240VAC 3A resistive load) of which 2-Channel controls heating, 1-Channel controls cooling, and 1-Channel controls call.
	TC100A TC100B	3-Channel relay outputs (contact capacity: 240VAC 3A resistive load) of which 1-Channel controls heating, 1-Channel controls cooling, and 1-Channel controls call.
	TC150 TC200	5-Channel relay outputs (contact capacity: 240VAC 3A resistive load) of which 3-Channel controls heating, 1-Channel controls cooling, and 1-Channel controls call.
	TC150B	5-Channel relay outputs (contact capacity: 240VAC 3A resistive load) of which 1 controls heating, 1-Channel controls cooling, 1-Channel controls forward running, 1-Channel controls backward running, and 1-Channel controls call.
Dimension	TC100C	96（W）*48（H）*115（D）mm^3
	TC100A TC100B TC150 TC150B TC200	96（W）*96（H）*120（D）mm^3
Size of Hole	TC100C	92（W）*44（H）mm^2
	TC100A TC100B TC150 TC150B TC200	92（W）*92（H）mm^2
Installation mode	Embedded	

■ 转速表、温度表
Tachometer、thetmometer

1098转速表

1198转速表

T600、Z630温度表、转速表

Z530、T500转速表、温度表

Z533转速表

适用于印染行业的染色机、定型机、烘干机、脱水机等设备，也适用于其它行业的设备。
It applys to dyeing machine,setting machine,dryer and dewatering machine of dyeing industry and other industries' machine.

型号 Model	电源电压 Voltage	输入信号 Input signal	输出显示 Output display	显示器 Monitor	外形尺寸 (宽×高×深mm³) Dimension (W*H*D)mm³ 开孔尺寸 (宽×高mm²) Disk embedded (W*H)mm²
Z533	6-9V或24V 6-9V or 24V	0-10V	0-1999rpm	0.8寸 0.8 Inch	96×48×45 92×44
Z530	220V	0-10V	0-1999rpm	0.5寸 0.5 Inch	96×48×115 92×44
Z630	220V	0-10V	0-1999rpm	0.5寸 0.5 Inch	72×35×95 67×33
1198	DC24V	脉冲0~200Hz 或0~20mA	0-200m/min(Hz)	0.5寸 0.5 Inch	96X48X55 92×44
1098	DC24V	0-20mA 或0-10V	0-100%	0.5寸 0.5 Inch	96X48X55 92×44
T600	220V	PT100	0-300℃	0.5寸 0.5 Inch	72×35×95 67×33
T500	220V	PT100	0-300℃	0.5寸 0.5 Inch	96×48×115 92×44

以上转速表可根据客户不同参数的要求订做。起货快捷，质量保证。
Above tachometers are customized according to client's parameters with fast delivery and high quality

HG-Z730多功能转速表

3种可用信号输入方式
测量输入信号：DC0~10V、DC0~5V、4-20mA
最大显示范围：-999~9999
电源电压：220VAC或DC24V
量程设置功能
0.36寸数码管显示
外形尺寸：96X48X95mm³ 开孔尺寸：92X46mm²

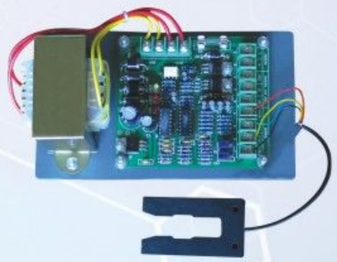
■ HG-L300智能长度测量仪
HG-L300 Intelligent length measurement deice

HG-L300智能长度测量仪主要用于纺织、电线电缆、造纸等生产过程中自动测长及控制,测控性能稳定可靠.

主要功能如下:
1.可逆计长:被测物正向运动时长度增加,反向运动时长度减少,无换向误差.
2.停电记忆:停电时,当前的数据均能保存,恢复供电后,继续原先的数据.
3.定长输出报警输出:当计长到定长值时,仪器输出一触点,可直接控制设备报警和停车.
4.米,码制转换:当以米制运行时,直接显示米数,以码制运行时,直接显示码数,随时可以切换(连续按对应键3秒).
5.速度显示.
6.累计值查询.
7.定长值和修正系数可以灵活设置.
8.蜂鸣提示.

■ HG-830脱水机控制电脑
HG-830 Dewatering Machine Controller

技术性能
显示方式：高亮度LED显示
输入：1路接近开关、变频转速FM反馈
输出：1路正转、1路反转和两路变频输出
电源输入：AC24V、AC12V、AC6.3V、0V
外形尺寸：160（宽）×160（高）×80（深）mm^3。
开孔尺寸：148（宽）×148（高）mm^2。



■ HG-HT10红外线对边装置
Infrared edge control board

1、用于验布机液压自动对边，控制DC24V电磁阀。
2、用于控制220V交流接触器或电机的正反转。

HG-01定量加料变送器

HG-02A定量加料变送器

■ 定量加料变送器

Fix quantify feeding transmitter

该压力传感器采用美国原装的传感芯片，性能好，抗干扰能力强，安装在料缸上加料时料位波动的情况下其控制稳定性高，不容易误测液位，该定量加料变送器有2种，01型不带显示，02型带显示（显示液位量程）。

This pressure sensor applies America sensing chip with high performance and strong anti-interference ability. It features high stability when it is installed in the material tank, we provide two type of products for this fix quantify feeding transmitter, 01 type isn't installed with display,02 is installed with display (display the fluid level range).

主要技术性能

1、使用介质：流动性好的液体，PH值4-10，不可用于浓盐酸，浓硝酸等挥发性大的强酸介质，不适用于粘稠性大的介质，如胶水介质不得与本传感器端口直接接触。
2、工作电压：DC24V　　3、工作温度：≤50℃
4、输出：4-20mA　　5、测压范围：0-0.12Mpa

Main technical performance

1、Medium: liquid with high fluidity, PH value ranges 4-10, it can't be used for dense HCl and nitric acid which has high evaporation and medium with high viscosity such as glue, the medium shall not directly contact with the sensor port.
2、work voltage reaches:DC24V　　3、work temperature:≤50℃
4、 Output: 4-20mA　　5、 Pressure test range: 0-0.12Mpa

■ HG-YB505压力液位变送器

HG-YB505压力变送器

HG-YB505压力液位变送器采用进口扩散硅传感器芯体，不锈钢隔离式小型结构，适用于小量程，高精度测量，过压能力强。该产品可提供多种压力接口，同时具有多种信号输出。可专业应用于印染、化工等领域。

1.综合精度：0.2%FS -0.5%FS
2.测量范围：0~10kpa 20kpa 50kpa
3.输出信号：4-20MA,1-5V等
4.温度漂移：±0.02%FS/℃
5.工作温度：-40~85℃
6.过载压力：10*FSO
7.电气连接：直接引线
8.过程连接：G1/4，NPT1/4等

■ HG-YB502压力液位变送器

HG-YB502压力变送器

HG-YB502压力液位变送器采用进口传感器芯体，小型结构，适用于小量程，高精度测量，过压能力强。该产品可提供多种压力接口，同时具有多种信号输出。可专业应用于印染、化工等领域。

综合精度：0.2%FS -0.5%FS
测量范围：0~10kpa 20kpa 50kpa
输出信号：4-20MA,1-5V等
温度漂移：±0.02%℃
工作温度：-40~85℃
过载压力：3*FSO
电气连接：直接引线
过程连接：R1/4，NPT1/4等

HG-BJ30布头检测器

HG-BJ20布头检测器

■ HG-BJ30 布头检测器

Fabric detector

主要技术性能	
检测功能	寻找布头功能
传感元件	1个磁棒，1个感应探头，有限检测距离25厘米
输出信号	输出1sec脉宽信号
功能特性	外形轻巧，安装方便，动作灵敏，不需要放大器，信号直接输入到PLC或布头检测仪表
适用范围	适用于各种单管或多管染布缸
输出电流	继电器常开触点输出，250VAC/5A,30VDC/5A
测量距离	0-350mm
最适距离	250mm
测量布速	0.1-10m/s
电力功耗	600mW
工作环境	工作温度0-90℃
工作电压	DC24V

■ HG-BJ20 布头检测器

Fabric detector

主要技术性能	
检测功能	寻找布头功能
传感元件	1个磁棒，1个感应探头，有限检测距离25厘米
输出信号	输出1sec脉宽信号
功能特性	外形轻巧，安装方便，动作灵敏，不需要放大器，信号直接输入到PLC或布头检测仪表
适用范围	适用于各种单管或多管染布缸
工作环境	工作温度0-90℃
工作电压	DC24V

HG-SC02

HG-SC02A

■ 磁翻板水尺及磁感应液位变送器：

Water Gauge And Level Transmitter:

浮球磁翻板水尺：长度可根据客户要求定做，可与水位变送器分开使用。
floating ball magnetic gauge.water gauge level can be customized.
it can be separately used with the water level transmitter.

磁感应液位变送器：

Magnetic level transmitter:

电源为DC24V，输出4~20mA，二线制，长度可根据客户要求定做
Power supply DC24V.Output 4~20mA，two-wire system.The length can be customized.

HG-SC02磁感应液位变送器：
采用进口干簧管，灵敏度高，进口电流传感器芯片。
HG-SC02 Magnetic level transmitter adopts imported reed switch with high sensitivity, and imported current sensor chip.

HG-SC02A磁感应液位变送器：
采用霍尔元器件，进口PIC美国工业级芯片，稳定性、抗干扰性高
HG-SC02A Magnetic level transmitter adopts hall components and imported PIC industrial chip,which has high stability and high anti-interference.

磁翻板水尺

■ 液体助剂自动计量输送系统
Auto Auxiliaries Dispensing System

采用一条总管输送，进口不锈钢电动泵提供动力，流量计精确计量。由本公司开发的专用电脑处理和控制，PLC执行选择打开气动三通阀，控制电动泵抽到总管道中，经计量后输送，选择打开现场气动三通阀输送到指定的料缸。

It mainly consists of a mian pipe,imported stainless steel electric pump and a flow meter.The system is controlled by our competer. Pneumatic three-way valve is controlled by PLC.

系统的特点

1、提供准确与再现性良好之精确计量，避免人为计量不稳定、误看、误称等情况。
2、避免操作人员对助剂用量多一点较好的习惯，节省助剂，并提高染色或定型的稳定性。
3、改善工作环境，维护称料员工的健康，提高工作积极性。
4、计量数据输送情况保存，方便查询。
5、计量输送程式化控制，方便灵活。
6、计量以主管道加上气动三通球阀和分支管道输送至料缸的方式设计。
7、计量注料监控采用专用的触摸工业控制电脑和PLC来实现自动控制。
8、与ERP管理系统连接，采用条形码扫描仪，生成生产输送单。
9、应用程序界面友好、直观，采用中文操作界面。
10、清晰显示送料计量监控流程。
11、计量输送和清洗自动作业。
12、各阀门状态情况清晰显示。
13、配方编辑储存。
14、简易查询统计。
15、使用了本套系统后，助剂自助称量系统不用安装了。

Characteristics Of The System

1. Provide accurate measurement which avoid weighing more or less and wrong materials caused by human factors.
2.Saving additives,improve the stability of dyeing or setting.
3.Improve working environment,keep staff health.
4.Data transmission save, convenient to query.
5.Programming convey control.
6.The measurement design is for additives being sent todyestff vat through main pipe,pneumatic three-way valve andbranch pipe.
7.Additives injection monitoring controlled by industrial touch compter and PLC.
8.Connect with ERP management system;bar code scanner.
9.Application interface is friendly and intuitive.
10.Feeding measurement monitoring process is clearly displayed.
11.Convey measurement and automatic washing.
12.Each valve status is clearly displayed.
13.Formula editing saving.
14.Simple query statistics
15.You don't have to use additives self weighing system after use this system.

■ 染料自动称量化料输送系统
Auto Dyeing Chemical Weighing & Dispensing System

华高染料化料及输送系统是一款能简单、准确、完全安全地溶解染料的自动化设备。染料溶液可以分配给任何染色设备，并能严格地控制染色效果，优化车间工作环境。该系统由三个不锈钢溶解槽，并且每个装备配有保护盖，其中染料溶解，严格遵守预先设定的参数，如时间/温度/染料溶解度和液体比例。染料溶液通过高压泵，和一个单一的管道分配系统通过三通阀，直接传送到分发点。

Huagao Auto Dyeing Chemical Weighing & Dispensing System is an automatic equipment which can dissolve dyeing chemical simply, accurately and completely safely. The liquid can be distributed to any dyeing equipments, and the dyeing effect can be strictly controlled. The system consists of three stainless steel dissolving tanks which has a protective cover. Chemical dissolving is strictly controlled by parameter settings, such as time, temperature, solubility and liquid ratio. The chemical liquid is delivered directly to the distribution through a high-pressure pump and a single pipe distribution system.

系统特点

1.全自动染料溶解和输送，在降低人为操作错误的同时大幅提高了工作效率。
2.无污染快速和准确的染料溶解，溶解更完全。
3.可设置、调整染料溶解力的各种参数，作业更简单。
4.所有溶解过程在带有安全盖的钢槽里完成，有效避免车间污染。
5.减少废水污染并净化，节水高达15%以上。
6.直接输送染料溶液到机器，避免了操作员和染料之间直接接触，大幅节省人力成本。
7.系统采用结构式设计，占地面积小，系统自动作业，
8.让车间环间更加卫生整洁，大幅减少车间污染。优良的设计，使设备维修容易。

技术规格

型 号	HG-09
容 量	250L/400L
材 质	2mm厚，SUS304抛光
入 水	冷水、热水、5段液位
搅 拌	搅拌机+Pump循环
分配器	Max.9台染机（1/2" 出口）
控制箱	SUS304,PLC+8" 彩色人机界面
电源	380V AC，3相，10A
尺寸	3210x1120x1656mm

System characteristics:

1. Automatic dyeing chemical dissolution and dispensing which can re duce manual operation errors.
2. Non polluting, fast and accurate dyes dissolved.
3.The parameters of dyeing chemical solubility can be set and adjusted.
4. The dissolution processes are completed in a steel tank with a safety cover.
5. Reduce waste water pollution and purification. More than 15% water is saving.
6. Dyeing chemical is directly dispensing to the machine which avoids people contact.
7. The system adopts structural design and automatic system operation, with less occupation.
8. Make workshop more sanitary and clean.

Technical specifications

Model	HG-09
Capacity	250L/400L
Material	2mm thick，SUS304 polishing
Water inlet	Cold water, hot water, 5 liquid level
Mix	Mixer+Pump circle
Distributor	Max.9 dyeing machine（1/2" outlet）
Control cabinet	SUS304,PLC+8" color man-machine interface
Power	380V AC，3 phase，10A
Dimension	3210x1120x1656mm

■ HG-06计算机辅助称料管理系统简介

HG-06系统针对印染企业中染料仓库人员人工称料容易称错料、放错料、称料误差大、浪费严重、称多称少无法监督等现象而专门设计的。

本系统提供正确的染料存放位置指示，可以避免操作员拿错料、放错料。用计算机和电子秤实时通讯，严格控制称料的精确度；电脑实时记录染料实际用量，为染料仓库提供详细报表，从而为印染企业的染色成本核算、染料消耗等情况提供了准确、详细的数据及报表。

■ HG-06计算机辅助称料管理系统特点及优点

1、采用工业控制电脑，可同时与多台电子秤通讯，根据重量范围的不同，电脑自动选择相应的电子秤，称料员可根据电子秤的量程自定义称料误差范围，准确控制称料精度、防止多称、漏称或误称。
2、为了避免取错放错染料，提高称料速度，在每个染料存放位置处安装一个智能指示灯，当称某种染料时，该染料对应位置的指示灯就会闪亮，可方便称料员快速找到染料，同时避免选错料。
3、有效避免漏称和重复称的现象，监控电脑对于称过的料都会在屏幕上给予标识，使称料员可以一目了然看到哪些染料已称过，哪些还未称，对于重复称或漏称的现象，监控电脑都会给予提示。
4、处理数据更及时，管理更加方便：称料系统通过管理系统联网及时记录染料的消耗，使管理人员可以更加及时地了解染料的库存和生产进度情况，称料员也可通过监控电脑查询染料仓库的库存情况，及时补料。管理人员可查询实际称料情况、称料误差以及称料人员，便于分析问题发生的原因。
5、精确控制染料的消耗，减少偷料现象和降低染料的损耗：在没有使用称料监控系统前，染料消耗是以所开料单的用量进行计算，不管实际称的重量是多少，也不管该染料是否有称；而当使用称料控制系统后，染料消耗已经是用实际所称的重量来计算消耗，使得染料消耗的计算更准确，避免人为偷料现象，控制了染料的损耗。
6、配备条形码扫描器，可以快速读取领料单配方资料，使用方便，避免输入错误。
7、称料配方可以用电脑直接打印和计算，避免了人工抄写的麻烦和人为的计算错误。
8、与染料仓库管理系统联网，可以完整统计染料耗用日报表和月报表。

■ HG06-1染料桶位置智能指示灯

HG06-1 Dyeing Bucket Location Intelligent Indicator Light

避免称错料、取错料	Avoid weighing and taking materials wrongly
智能指示灯提高称料速度	Intelligent indicator light improves weighing speed.
代码、名称染料标示	Sign of code and dyeing material names

Brief Introduction of HG-06 Computer-aided Weighing Management System

HG-06 system is specially designed since workers in dyeing warehouse of dyeing enterprises are very likely to make the errors such as wrong material weighing and putting, and large errors in weighing, serious waste,and little supervision in weighing.

The system provides correct dyeing material storage location indicator, thus avoiding operators to take or put materials wrongly. The computer and electronic scale real-time communication strictly controls the accuracy of material weighing; then computer records dyeing material practical usage in time, provides detailed report form for dyeing warehouse, thus providing exact and in-depth data and report for dyeing enterprises to calculate dyeing cost and dyeing consumption, etc.

Features and advantages of HG-06Computer-aided Weighing Management System

1、Controlled by computer, it can communicate with several electronic scales. The computer automatically selects relevant electronic scales in terms of weighing scale. The operator can define the weighing error ranges according to the electronic scale's range, and precisely controls weighing precision and avoid weighing more, less and wrong materials.
2、An intelligent indicator light is installed at the storage location of every dyeing material so as to avoid taking or putting materials wrongly, thus improving weighing speed. When weighing the material, the relevant indicator light will flash, which is very convenient for operator to find dyeing material quickly and avoid select materialswrongly.
3、It will effectively avoid the mistakes such as no weighing or repeated weighing. The controlling computer will show a sign on the screen for the material which has been weighed, thus the weighing worker can see clearly what dyeing material has been weighed and what has not. The controlling computer will show signals for any repeated or no weighing.
4、The data treatment will be more timely, and the management will be more convenient: the weighing system will record the consumption of dyeing material in time through management ystem network, and the managers will see more clearly the storage and production schedule of dyeing material, and t he weighing worker will check the storage in dyeing warehouse through controlling computer, and replenish materials in time. The managers can find out the problems by checking the practical weighing, weighing errors and weighing workers.
5、It precisely controls the consumption of dyeing material, avoid the dyeing material from being stolen and reduce the consumption of dyeing material: before using the weighing supervision system, the dyeing consumption is calculated by the usage of material list, without considering the actual weighing, and whether the dyeing material is weighed is not clear. After using the weighing controlling system, the dyeing material consumption is calculated by the practical weighing, thus the result will become more accurate, and avoid the material from being stolen, and controls the consumption of dyeing material.
6、The barcode scanner will read the data of weighing material prescription, very convenient, thus avoiding input error.
7、The material prescription can be printed and calculated by computer directly, thus avoiding the trouble of manual coping or handmade calculation errors.
8、It is connected with dyeing material management system, thus it can calculate dyeing material consumption daily report and monthly report completely.

■ HG-08染色助剂自动称量系统简介

Brief Introduction of HG-08 Dyeing Auxiliaries Automatic Weighing System

本系统与PLC、电子称相结合，实现液体助剂的自动称量。本系统可与我公司开发的“HG-10染整企业管理系统”结合使用，也可以独立使用。对工艺配方、领料单及称量过程进行全面的监控管理。本系统还配备自动称量粉体助剂。

The system is combined with PLC and electronic scale, thus achieving automatic weighing of liquid auxiliaries.The system can be used together with “HG-10 dyeing and finishing enterprise management system” developed by our company, or used independently. It carries out complete supervision management on the technique prescription, material weighing list and weighing process. Moreover, the system is equippedwith automatic weighing powder auxiliaries.

HG-08染色助剂自动称量系统的特点

1、称量单元为不锈钢整体结构，耐腐蚀易清洁。
2、配有多个电子称。所有的电子称可以同时称量，提高称量的效率。称量过程全自动，方便快捷又准确。
3、领料单由电脑根据工艺配方计算生成，可打印，每张领料单有由电脑自动生成的不同的条形码。由该系统的条形码阅读器扫描领料单的条形码，在系统中会显示该领料单的内容，并根据其用量进行自动称料。
4、有称料桶的位置检测功能，放错位置则不执行称量操作并报警。
5、具有手动/自动称量功能，方便操作。
6、详细记录每次称料的整个过程，方便查询。按日和月进行统计列表，助剂用量一目了然。

Features of HG-08 Dyeing Auxiliaries Automatic Weighing System

1、The weighing unit is stainless compete structure, erosion-resistant and easy to clean.
2、It is equipped with several electronic scales. All electronic scales can weigh materials at the same time, thus improving weighing efficiency. The weighing process is completely automatic, fast, convenient and exact.
3、The materials requisition list is worked out by computer in terms of technique prescription, which can be printed. Every material requisition list has different barcode automatically produced by computer. The barcode reader will scan the barcode of material requisition list, displays the content of the material requisition list in the system and automatically weighs material according to its weight.
4、It has the function of detecting the location of material weighing bucket. It does not weigh the material and gives alarms in case of wrong placing.
5、It has manual/automatic weighing functions, convenient for operation.
6、The whole process is recorded in detail, convenient for check. It is sorted in terms of day and month. And the usage of auxiliaries is very clear.

■ 液体助剂自动计量输送系统
Auto Auxiliaries Dispensing System

采用一条总管输送，进口不锈钢电动泵提供动力，流量计精确计量。由本公司开发的专用电脑处理和控制，PLC执行选择打开气动三通阀，控制电动泵抽到总管道中，经计量后输送，选择打开现场气动三通阀输送到指定的料缸。

It mainly consists of a mian pipe,imported stainless steel electric pump and a flow meter.The system is controlled by our competer. Pneumatic three-way valve is controlled by PLC.

系统的特点

1、提供准确与再现性良好之精确计量，避免人为计量不稳定、误看、误称等情况。
2、避免操作人员对助剂用量多一点较好的习惯，节省助剂，并提高染色或定型的稳定性。
3、改善工作环境，维护称料员工的健康，提高工作积极性。
4、计量数据输送情况保存，方便查询。
5、计量输送程式化控制，方便灵活。
6、计量以主管道加上气动三通球阀和分支管道输送至料缸的方式设计。
7、计量注料监控采用专用的触摸工业控制电脑和PLC来实现自动控制。
8、与ERP管理系统连接，采用条形码扫描仪，生成生产输送单。
9、应用程序界面友好、直观，采用中文操作界面。
10、清晰显示送料计量监控流程。
11、计量输送和清洗自动作业。
12、各阀门状态情况清晰显示。
13、配方编辑储存。
14、简易查询统计。
15、使用了本套系统后，助剂自助称量系统不用安装了。

Characteristics Of The System

1. Provide accurate measurement which avoid weighing more or less and wrong materials caused by human factors.
2.Saving additives,improve the stability of dyeing or setting.
3.Improve working environment,keep staff health.
4.Data transmission save, convenient to query.
5.Programming convey control.
6.The measurement design is for additives being sent todyestff vat through main pipe,pneumatic three-way valve andbranch pipe.
7.Additives injection monitoring controlled by industrial touch compter and PLC.
8.Connect with ERP management system;bar code scanner.
9.Application interface is friendly and intuitive.
10.Feeding measurement monitoring process is clearly displayed.
11.Convey measurement and automatic washing.
12.Each valve status is clearly displayed.
13.Formula editing saving.
14.Simple query statistics
15.You don't have to use additives self weighing system after use this system.

■ HG-HT503布边追踪电眼

HG-HT503红外线布边追踪电眼是用于定型机的进布系统追踪控制上。使用此电眼可以在不接触布料的情况下，准确平稳地将布料定位在针板上。传感器外壳是金属电镀，能抗干扰及酸碱腐蚀、防水、耐高温，尺寸小巧，集成度高，安装方便。以CCD线性芯片反射方式，可以最佳的精度测出材料边缘，，并可随时切换成接触型机械摆臂来侦测，能准确追踪包括硫化黑在内的所有布种，可手动调节过布灵敏度及输出曲线,可代替进口的同类产品.

HG-HT503 infrared edge feeler is for fabric tracking of setting machine. It can make the cloth on the needle plate accurately by no contact. The sensor housing is metal plating which can resist interference, resist acid and alkali corrosion, waterproof, high temperature resistance. What’s more, it adopts linear chip reflection mode, which can accurately measure the edge of the material. The transmitter and receiver are set in electric eye, which can easily switch to contact type mechanical arm to detect and it can accurately detect all kinds of fabric including sulphur black. Fabric sensitivity and output curve can be adjusted manually.

电源电压 Power supply voltage	24V	可允许周围环境温度 Allowable ambient temperature	0~70℃
电流 Current	About 100mA	保存温度 Storage temperature	0~70℃
功率 Power	About 2.4W	电眼电缆线长度 Sensor Cable length	Max.25m
输出通讯 Output analog voltage	CAN通讯	追踪电眼和布边距离 Distance from the sensor to the fabric edge	36mm
扫描频率 Scanning frequency	100HZ	防护等级 Protection grade	IP65
最小检测距离（布边边幅精确度） Minimum detection range (precision of the fabric breadths)	0.1mm	重量 Weight	0.4KG
		检测距离（布边边幅变化量） Detection range(variation of the fabric breadths)	± 10mm

■ HG-HT502A布边追踪电眼

HG-HT502A红外线布边追踪电眼是用于定型机的进布系统追踪控制上。使用此电眼可以在不接触布料的情况下，准确平稳地将布料定位在针板上。传感器外壳是金属电镀，能抗干扰及酸碱腐蚀、防水、耐高温，尺寸小巧，集成度高，安装方便。使用进口CCD芯片，具有曝光锁定功能，增加稳定性以及自适应性能，能准确追踪包括硫化黑在内的所有布种，可手动调节过布灵敏度及输出曲线。

HG-HT502A infrared edge feeler is for fabric tracking of setting machine. It can make the cloth on the needle plate accurately by no contact.The sensor housing is metal plating which can resist interference, resist acid and alkali corrosion, waterproof, high temperature resistance.What’s more, it adopts imported CCD chip with exposure lock function, stability and adaptive performance, and it can accurately detect all kinds of fabric including sulphur black. Fabric sensitivity and output curve can be adjusted manually.

电源电压 Power supply voltage	24V	可允许周围环境温度 Allowable ambient temperature	0~70℃
电流 Current	About 100mA	保存温度 Storage temperature	0~70℃
功率 Power	About 2.4W	电眼电缆线长度 Sensor Cable length	Max.25m
输出模拟电压\脉冲\通讯 Output analog voltage	-8V~+8V/-10KHZ~+10KHZ/CAN通讯	追踪电眼和布边距离 Distance from the sensor to the fabric edge	36mm
扫描频率 Scanning frequency	100HZ	防护等级 Protection grade	IP65
最小检测距离（布边边幅精确度） Minimum detection range (precision of the fabric breadths)	0.1mm	重量 Weight	0.4KG
		检测距离（布边边幅变化量） Detection range(variation of the fabric breadths)	± 10mm

HG-HT502布边追踪电眼
HG-HT600 stenter web edge infared sensor

HG-HT502红外线布边追踪电眼是用于定型机的进布系统追踪控制上。使用此电眼可以在不接触布料的情况下，准确平稳地将布料定位在针板上。传感器外壳是铝合金，能抗干扰及酸碱腐蚀、防水、耐高温，美观大气。CCD摄像头电眼精确度高，输出连续频率变化的脉冲列信号，调节准确平滑快速，几乎所有的品种的布匹(包括硫化黑绒布) 都能检出。上针精度高，布边感应精度0.1mm。

HG-HT502 infrared edge feeler is for fabric tracking of setting machine. It can make the cloth on the needle plate accurately by no contact. The sensor housing is aluminum alloy which can resist interference, resist acid and alkali corrosion, waterproof, high temperature resistance. It adopts high precision CCD camera probe. What's more, it can accurately detect all kinds of fabric including sulphur black. It has high needle precision and 0.1mm edge sensing accuracy.

电源电压 Power supply voltage	24V	可允许周围环境温度 Allowable ambient temperature	0~70℃
电流 Current	About 100mA	保存温度 Storage temperature	0~70℃
功率 Power	About 2.4W	电眼电缆线长度 Sensor Cable length	Max.25m
输出通讯 Output analog voltage	CAN通讯	追踪电眼和布边距离 Distance from the sensor to the fabric edge	36mm
扫描频率 Scanning frequency	100HZ	防护等级 Protection grade	IP65
最小检测距离 （布边边幅精确度） Minimum detection range (precision of the fabric breadths)	0.1mm	重量 Weight	0.8KG
		检测距离（布边边幅变化量） Detection range(variation of the fabric breadths)	± 10mm

HG-HT500布边追踪电眼
HG-HT500 stenter web edge infared sensor

HG-HT500红外线布边追踪电眼是用于定型机的进布系统追踪控制上。使用此电眼可以在不接触布料的情况下，准确平稳地将布料定位在针板上。传感器外壳是铝合金，能抗干扰及酸碱腐蚀、防水、耐高温，美观大气。调节准确平滑快速，几乎所有的品种的布匹(包括硫化黑绒布) 都能检出。上针精度高，布边感应精度0.1mm。

HG-HT500 infrared edge feeler is for fabric tracking of setting machine. It can make the cloth on the needle plate accurately by no contact. The sensor housing is aluminum alloy which can resist interference, resist acid and alkali corrosion, waterproof, high temperature resistance. What's more, it can accurately detect all kinds of fabric including sulphur black. It has high needle precision and 0.1mm edge sensing accuracy.

电源电压 Power supply voltage	24V	可允许周围环境温度 Allowable ambient temperature	0~70℃
电流 Current	About 100mA	保存温度 Storage temperature	0~70℃
功率 Power	About 2.4W	电眼电缆线长度 Sensor Cable length	Max.25m
输出通讯 Output analog voltage	CAN通讯	追踪电眼和布边距离 Distance from the sensor to the fabric edge	36mm
扫描频率 Scanning frequency	100HZ	防护等级 Protection grade	IP65
最小检测距离 （布边边幅精确度） Minimum detection range (precision of the fabric breadths)	0.1mm	重量 Weight	0.8KG
		检测距离（布边边幅变化量） Detection range(variation of the fabric breadths)	± 10mm

HG-HT301布边追踪电眼
HG-HT301 stenter web edge infared sensor

HG-HT301红外线布边追电眼头是用于定型机的进布系统追踪控制上。使用此电眼可以在不接触布料的情况下，准确平稳地将布料定位在针板上。传感器外壳是铝合金，能抗干扰及酸碱腐蚀、防水、耐高温，美观大气。CCD摄像头电眼精确度高，输出连续模拟电压信号，可手动调节输出方向以及发射强度。调节准确平滑快速，采用新型发射管，增加使用寿命以及检测强度，几乎所有的品种的布匹(包括硫化黑绒布) 都能检出。上针精度高，布边感应精度0.1mm。

HG-HT301 infrared edge feeler is for fabric tracking of setting machine. It can make the cloth on the needle plate accurately by no contact. The sensor housing is aluminum alloy which can resist interference, resist acid and alkali corrosion, waterproof, high temperature resistance. It adopts high precision CCD camera probe and new type transmitting tubes. What's more, it can accurately detect all kinds of fabric including sulphur black. It has high needle precision and 0.1mm edge sensing accuracy.

电源电压 Power supply voltage	+12V、-12V、0V	可允许周围环境温度 Allowable ambient temperature	0~70℃
电流 Current	About 100mA	保存温度 Storage temperature	0~70℃
功率 Power	About 2.4W	电眼电缆线长度 Sensor Cable length	Max.25m
输出模拟电压 Output analog voltage	-8V~+8V	追踪电眼和布边距离 Distance from the sensor to the fabric edge	36mm
扫描频率 Scanning frequency	100HZ	防护等级 Protection grade	IP65
最小检测距离 （布边边幅精确度） Minimum detection range (precision of the fabric breadths)	0.1mm	重量 Weight	0.8KG
		检测距离（布边边幅变化量） Detection range(variation of the fabric breadths)	± 10mm

HG-HT302布边追踪电眼
HG-HT300 stenter web edge infared sensor

HG-HT302红外线布边追踪电眼是用于定型机的进布系统追踪控制上。使用此电眼可以在不接触布料的情况下，准确平稳地将布料定位在针板上。该传感器采用红外线发射跟红外线接收管，检测布边，达到控制模拟量输出变化，从而精确追踪布边。

HG-HT302 infrared edge feeler is for fabric tracking of setting machine. It can make the cloth on the needle plate accurately by no contact. It adopts infrared transmit-receive tube which can detect fabric precisely.

电源电压 Power supply voltage	24V	可允许周围环境温度 Allowable ambient temperature	0~70℃
电流 Current	About 130mA	保存温度 Storage temperature	0~70℃
功率 Power	About 3.1W	电眼电缆线长度 Sensor Cable length	Max.25m
输出模拟电压 Output analog voltage	-8V~+8V	追踪电眼和布边距离 Distance from the sensor to the fabric edge	30mm
扫描频率 Scanning frequency	100HZ	防护等级 Protection grade	IP65
最小检测距离 （布边边幅精确度） Minimum detection range (precision of the fabric breadths)	0.1mm	重量 Weight	1KG
		检测距离（布边边幅变化量） Detection range(variation of the fabric breadths)	± 15mm

HG-HT550定型机红外线布边追踪系统
HG-HT550 Setting Stenter Wed Guiding System

HG-HT550是一款新型的控制伺服电机的定型机布边追踪装置，为了将布边实际位置正确的定位在入布链条上而设计的。该装置的探测传感器(HG-HT502A)采用新型红外线发射管（小电流，大发射强度，精准度更高，寿命更长）以及新型CCD芯片（具有曝光锁定功能，布边抓取更加稳定，尤其是对于高吸收的硫化黑绒布种），可输出持续的模拟信号、脉冲信号以及通讯信号，通用性强。执行设备为日本进口的伺服驱动，反馈迅速精准，能控制电机带动摆臂，精确控制布边纳入。采用显示型控制器，方便随时查看并调试设备运行状态。

HG-HT550 is a new type control servo motor setting machine fabric edge feeler. It designs for fabric edge that better fixed on the chain. The detecting sensor (HG-HT502A) of this device adopts a new type infrared transmitting tube (low current, strong illumination, high precision, longer life) and new type CCD chip (exposure lock function, stable fabric edge detection).The actuator is Japan imported servo drive which has quick and accurate feedback, and it can control motor driven swing arm. What's more, you can check the running state or debug it by display controller.

HG-HT502A红外线传感器
HG-HT502A infrared ray sensor

伺服系统 Servo system	进口X5系列 Import X5 series	配套电眼 Matching electric eye	HG-HT502A
输入电源 Power supply	220V AC ± 10%	电眼输出方式 Electric eye output	-8V~+8V/-10KHZ~+10KHZ/CAN通讯
控制器 Controller	中文液晶显示 Chinese LCD display	电眼电源 Electric eye voltage	24V
电机额定线电流 Rated current of motor	3.8A	额定速度 Rated speed	3000rpm
编码器型式 增量型 Encoder incremental type	2500ppr	额定功率 Rated power	750W
工作环境温度 Working temperature	0~70℃	额定扭矩 Rated torque	2.4Nm
齿轮减速比 Gear reduction ratio	1：50	开关控制 Switch control	光耦 Optocoupler

HG-HT330定型机红外线布边追踪系统
HG-HT330 Setting Stenter Wed Guiding System

HG-HT330是一款新型的控制伺服电机的定型机布边追踪装置，为了将布边实际位置正确的定位在入布链条上而设计的。该装置的探测传感器(HG-HT302)采用进口红外线发射管以及高精度CCD芯片，与控制器通讯，稳定性高，可代替进口同类产品，执行设备为日本进口的伺服驱动，反馈迅速精准，能控制电机带动摆臂，精确控制布边纳入。采用显示型控制器，方便随时查看并调试设备运行状态。

HG-HT330 is a new type control servo motor setting machine fabric edge feeler. It designs for fabric edge that better fixed on the chain. The detecting sensor (HG-HT302) of this device adopts imported infrared transmitting tube and high precision CCD chip which can connect with controller. It can replace imported similar products. The actuator is Japan imported servo drive which has quick and accurate feedback, and it can control motor driven swing arm. What's more, you can check the running state or debug it by display controller.

HG-HT302红外线传感器
HG-HT302 infrared ray sensor

伺服系统 Servo system	进口X5系列 Import X5 series	配套电眼 Matching electric eye	HG-HT302
输入电源 Power supply	220V AC ± 10%	电眼输出方式 Electric eye output	CAN通讯
控制器 Controller	中文液晶显示 Chinese LCD display	电眼电源 Electric eye voltage	24V
电机额定线电流 Rated current of motor	3.8A	额定速度 Rated speed	3000rpm
编码器型式 增量型 Encoder incremental type	2500ppr	额定功率 Rated power	750W
工作环境温度 Working temperature	0~70℃	额定扭矩 Rated torque	2.4Nm
齿轮减速比 Gear reduction ratio	1：50	开关控制 Switch control	光耦 Optocoupler

HG-HT220定型机红外线布边追踪系统

HG-HT220 Setting Stenter Wed Guiding System

HG-HT220是一款新型的控制伺服电机的定型机布边追踪装置，为了将布边实际位置正确的定位在入布链条上而设计的。该装置的探测传感器(HG-HT301)采用改良进口红外线发射管以及高精度CCD芯片，根据布边的位移，输出或大或小，或正或负的连续性模拟型号，调节准确平滑快速，传输速度快且稳定，可代替进口同类产品，执行设备国产的伺服驱动，反馈迅速精准，能控制电机带动摆臂，精确控制布边纳入。采用显示型控制器，方便随时查看并调试设备运行状态。

HG-HT220 is a new type control servo motor setting machine fabric edge feeler. It designs for fabric edge that better fixed on the chain. The detecting sensor (HG-HT301) of this device adopts improved import infrared transmitting tube and high precision CCD chip. It can adjust the fabric speed accurately and smoothly according to the continuous analog signal of fabric move positions. The actuator is domestic servo drive which has quick and accurate feedback, and it can control motor driven swing arm. What's more, you can check the running state or debug it by display controller.

HG-HT301红外线传感器
HG-HT301 infrared ray sensor

伺服系统 Servo system	国产X3系列 Domestic X3 series	配套电眼 Matching electric eye	HG-HT310
输入电源 Power supply	220V AC ± 10%	电眼输出方式 Electric eye output	-8V~+8V
控制器 Controller	中文液晶显示 Chinese LCD display	电眼电源 Electric eye voltage	+12V,-12V,0V
电机额定线电流 Rated current of motor	3.8A	额定速度 Rated speed	3000rpm
编码器型式 增量型 Encoder incremental type	2500ppr	额定功率 Rated power	750W
工作环境温度 Working temperature	0~70℃	额定扭矩 Rated torque	2.4Nm
齿轮减速比 Gear reduction ratio	1：50	开关控制 Switch control	光耦 Optocoupler

HG-HT110定型机红外线布边追踪系统

HG-HT110 Setting Stenter Wed Guiding System

HG-HT110是一款新型的控制伺服电机的定型机布边追踪装置，为了将布边实际位置正确的定位在入布链条上而设计的。该装置的探测传感器(HG-HT301)采用改良进口红外线发射管以及高精度CCD芯片，根据布边的位移，输出或大或小，或正或负的连续性模拟型号，调节准确平滑快速，传输速度快且稳定，可代替进口同类产品，执行设备国产的伺服驱动，反馈迅速精准，能控制电机带动摆臂，精确控制布边纳入。采用无显示型控制板。

HG-HT110 is a new type control servo motor setting machine fabric edge feeler. It designs for fabric edge that better fixed on the chain. The detecting sensor (HG-HT301) of this device adopts improved import infrared transmitting tube and high precision CCD chip. It can adjust the fabric speed accurately and smoothly according to the continuous analog signal of fabric move positions. The actuator is domestic servo drive which has quick and accurate feedback, and it can control motor driven swing arm. What's more,

HG-HT301红外线传感器
HG-HT301 infrared ray sensor

伺服系统 Servo system	国产X3系列 Domestic X3 series	配套电眼 Matching electric eye	HG-HT301
输入电源 Power supply	220V AC ± 10%	电眼输出方式 Electric eye output	-8V~+8V
控制板 Control panel	无显示控制板 No display control panel	电眼电源 Electric eye voltage	+12V,-12V,0V
电机额定线电流 Rated current of motor	3.8A	额定速度 Rated speed	3000rpm
编码器型式 增量型 Encoder incremental type	2500ppr	额定功率 Rated power	750W
工作环境温度 Working temperature	0~70℃	额定扭矩 Rated torque	2.4Nm
齿轮减速比 Gear reduction ratio	1：50	开关控制 Switch control	继电器 Relay

HG-6492B、HG-6492B-2温控器

HG-6492B、HG-6492B-2 temperature controller

主要技术性能

1、专业控制温度，通过精确控制各类电动阀门的开度，从而精确控制温度。
2、可设置多种参数，使用更精确。
3、Pt100测温输入，控温精度±1℃。
4、具有手动/自动操作，输出大小可在面板直观显示。
5、外形尺寸：96（宽）×96（高）×100（深）mm^3
开孔尺寸：92（宽）×92（高）mm^2

Main technical performance

1. Specialized temperature control: temperature can be well controlled through precise control of opening degree of electric valves.
2. Multiple parameters can be set, ensuring precision.
3. PT100 temperature measurement input ,With temperature control precision of ±1℃.
4. Manual/automatic operation is optional, and output data can be shown on the screen.
5. Dimension:96(W)*96(H)*100(D)mm^3
Size of Hole:92(W)*92(H)mm^2

布速表

Cloth speed meter

用于显示织物的运行速度，具有大数码管双面显示功能。主要使用于定形机，印花机及预缩机等印染设备上。单位为米/分钟。
外形尺寸：400（宽）×170（高）×120（深）mm^3。

To display the running speed of fabric with big digital tube double-sided display function. It is mainly used in boarding machine, decorating machine and preshrinking machines etc. Dyeing equipment.The unit is meter/minute.
Dimension:400(W)*170(H)*120(D)mm^3

HG-HT50红外线对中装置

HG-HT50infrared ray centering device

用于定型机或印花机上作布的对中自动控制，达到对中的目的。
It is used for automatically controlling the centering of finalizing machine or printing machine.

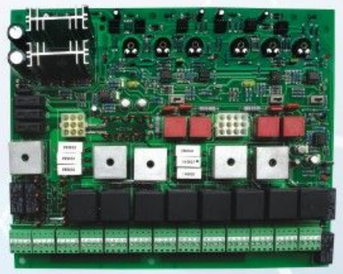
HG-HT50红外光电对中装置是集光机电为一体的新颖产品，该装置可广泛应用于染整行业定型机、烧毛机、上胶机、水洗机、烘燥机、印花机等机械设备上。它能快速纠偏织物在轴线对称位置上的偏差，即具有很强的中心校正功能。

本对中装置主要由电气控制盒和红外传感器部件组成，红外传感器部件由红外发射管和接收管两部分组成，电子元器件均置于铝合金圆管内，圆管外紧套耐酸碱的特殊透明塑料保护管，能做到完全密封防水。

HT300红外线探边主板

HT300 infrared edge detecting board

红外线控制主板是红外线探边器的调节装置，可以直接代换进口定型机主板，控制直流电机。
Infrared ray control main board is the adjustment device for infrared ray edge detector, and can directly substitute imported finalizing machine main board.Control of DC motor.



HG-HT500探边主板

HT500 edge detecting board

与HT500红外线传感器（探头）相配使用，实现模拟量转化。可以直接代换进口主板。
电源：DC24V
输出：-10V~10V

Used in match with HT500 infrared sensor (probe), it achieves analog conversion, can be used todirectly replace imported main board.
Power supply：DC24V
Output：-10V~10V

对中控制器

用于定型机或印花机上作布的对中自动控制，达到对中的目的。
It is used for automatically controlling the centering of finalizing machine or printing machine.