

实验室用全自动滴液机

LABORATORY DOSING SYSTEM

ROBOT DOSER



无管路

Tube-free type

无电磁阀

Solenoid valve free



Rapid

廈門瑞比精密機械有限公司

XIAMEN RAPID PRECISION MACHINERY CO., LTD

Robot Doser

瑞比无管路滴液机

Meet demand of the age!

实验室升级改造不可或缺!

传统化验室是以量筒, 吸管等人工方式来吸取打样时所需的染液, 因操作人员的经验, 技术熟练度, 手法差异等等因素, 容易造成配方液量的误差, 瑞比无管式自动滴液机 (ROBOT DOSER), 是專為染整化驗室所設計, 用于配方的自动滴液, 设计上以电子天平的精确称重, 高科技的注射器取液, 机械手臂的自动输送, 配合电脑全自动控制, 可确保准确的液量, 改善化验室再现性, 并提高工作效率。

系统采用重量法计量, 每瓶一个不锈钢注射器, 并有针头残液吹干系统, 完全解决了染料的残留和沾污及清洗问题, 更由于无管路及无电磁阀的设计, 避免了管路和电磁阀的堵塞和清洗, 提高了计量精度。

The ROBOT DOSER is a Tube-free design Laboratory dosing system for the ultimate precision in dye bath preparation and allow textile laboratory to improve reproducibility and efficiency without adding personnel.

The functioning principle is based on gravimetric measuring by means of robot pipette and electronic balance. After input of the recipe, robot pipette moves to the dyestuff solution and sucks the required dyestuff liquid, then inject to the pots of dyeing machine and weighed gravimetrically by electronic balance.

产品特点 Special feature

无管路, 无电磁阀设计 / Tube and solenoid valve free design:

使用X-Y-Z軸三維機械手臂移液方式, 真正无管路, 无电磁阀设计, 没有滴泪污染, 也避免了传统管路和电磁阀的堵塞和清洗, 减少滴液时错误发生, 确保染色更加准确, 再现性更佳。

Using high technology robot pipette and electronic balance weighing system, to ensure the accuracy of liquid dispensing, no more problem of unwanted drip contamination that often occurs in tube design system, now all tubes, solenoid valve troubles, such as sedimentation of dyes, are history in our ROBOT DOSER.



每瓶獨立的注射器设计 / Independent injector design:

獨立的不锈钢注射器配合每個溶液瓶, 可避免不同染液之间的交叉污染, 同时每次滴液后无需再清洗注射器, 操作速度更快, 效率更高。

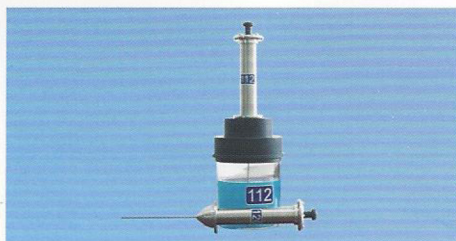
Thanks to the independent injector design, each bottles equipped with own injector, no accidental contamination risks of the various solutions in between, furthermore, traditional intermediate washing, drying cycles of injector is not required, thus increasing the working efficiency in comparison with single injector system, no any lost of time for cleaning the injector.



采用不锈钢注射器 / Stainless steel injector:

使用不锈钢注射器, 有最佳的精度和较长的使用寿命, 绝非一般使用塑胶或玻璃注射器可相比。适用于各种浓度的染料, 助剂。

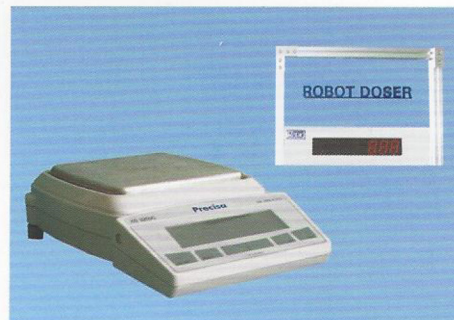
Stainless steel made injector to replace traditional glass or plastic material injector.



重量式滴液, 状态及时显示 / Gravimetric weighing status :

系统采用瑞士制高精度天平称重, 真正重量式滴液, 连接外部大荧幕LED数字显示屏, 易于观察滴液状态, 滴液重量即时显示, 不同于一般传统体积式滴液, 本系统没有滴液精度的怀疑。

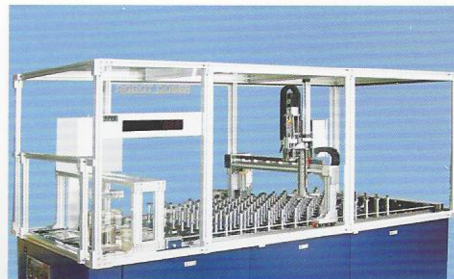
Gravimetric measuring system by means of Swiss made electronic scale, not traditional volumetric machine, the weight of each solution dispensed can be controlled in real time, the degree of accuracy achieved is without any doubt. An external monitor connected to electronic scale for easy observation of on-line weighing status.



安全先进的防风设计 / Safety and pleasant working environment :

组合式铝合金门框设计, 可封闭滴液区域, 免受外界风量影响, 确保天平稳定度, 并保障人员操作安全, 更由于先进的外观设计, 提供现代化及良好的操作环境。

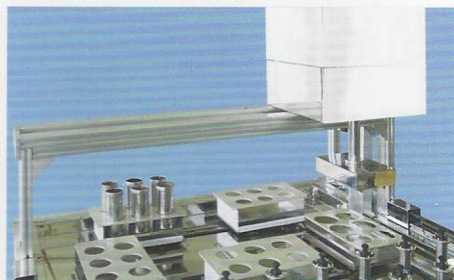
Modular structure made of aluminium and coated steel, windshield design a protection panel completely isolates the working area from the outside, ensuring perfect environmental conditions and safety.



可连续式滴液 / Continuous weighing capability :

自动化程度高, 独特的染杯转盘设计, 可连续式滴液到多杯位转盘的天平位置。

ROBOT DOSER offers a higher level of automation, the robotized arm inject the solutions into dye pot where 1 unique conveyor system holding up to 30 dye pots with continuous weighing capability.



主要规格 Main specification

- ◆ 120 個溶液瓶 (或 80 个)
- ◆ 120 個 (或 80 个) 獨立的不锈钢注射器配合每個溶液瓶
- ◆ 3 個伺服馬達完美結合的 X-Y-Z 軸三維機械手臂
- ◆ 精密的電子天平讀數精度可達 0.01g
- ◆ 提供 5 個染杯盤, 配合自动化输送转盘, 最多可放置 30 個染杯
- ◆ 溶液瓶自動化攪拌, 可控制攪拌速度。
- ◆ 中文化的视窗操作界面, 容易操作
- ◆ 机台尺寸 (长 x 宽 x 高):
319 x 146 x 198 cm (Model RD-120)
260 x 146 x 198 cm (Model RD-80)

- ◆ Models available in 120 bottle is (or 80 bottles), each bottle is equipped with independent injector
- ◆ Robotic X-Y-Z axis mechanism, complete with 3 servo motors
- ◆ Precise electronic balance with 0.01 g readability
- ◆ 5 dyepot trays for dispensing recipes (with unique conveyor system holding up to 30 dyepots)
- ◆ Dispense accuracy of 0.02 grams
- ◆ Automatic solution bottle agitation, with speed control
- ◆ Complete suite of Dispensing and management software
- ◆ Dimension (L x W x H) :
319 x 146 x 198 cm (Model RD-120)
260 x 146 x 198 cm (Model RD-80)

型号指定方式 MODEL DESIGNATION

RD-120

NO. OF SOLUTION BOTTLES 溶液瓶数量

120 : 120 x 1,000cc bottles 120 : 120 瓶

80 : 80 x 1,000cc bottles 80 : 80 瓶



滴液机结构图

Layout drawing

LABOR[®]
TEKS

配方滴液区 /Dispensing recipe

5个杯盘可放置高达30个染杯

/5 pot trays holding up to 30 dyepots

自动化输送转盘

/Unique conveyor system

重量式滴液

/Gravimetric dispensing

可6杯同时加水

/Dispensing of water up to 6 pot simultaneously

高科技三维机械式手臂

/Robotic X-Y-Z axis mechanism

快速, 高效, 准确的全自动操作

/Fast, reliable, precise operation



外框结构 /Frame

铝合金框架 + 钢板防锈烤漆, 稳定可靠

/Aluminum frame + cover the steel board

母液瓶区 /Glass bottle area

无管式设计 /Tube free design

母液瓶容量 /Capacity 1000cc

不锈钢注射器 /Stainless steel injector

搅拌区 /Drawer type for stirrer

抽屉式设计, 易于保养维修

/Easy maintenance



Laborteks Analitik ve Kalite Kontrol Test Cihazları San.Tic.Ltd.şti

İstoç 31.Ada No: 48/50 P.K : 34217Bağcılar / ISTANBUL

Tel : +90 212 623 00 00

Fax : +90 212 623 05 17

Gsm : +90 532 257 15 04

Web : www.trrapid.com

e-mail: apetek@laborteks.com.tr