

LABORATORY INFRA-RED TYPE DYEING MACHINE

High speed, Precision & No air pollution Apparatus





IR-DYER IS A POLLUTION FREE AND NEWEST TECHNOLOGICAL APPARATUS

The IR DYER is a compact laboratory IR type dyeing machine, providing a versatile and most importantly, environmentally clean method of sample dyeing, the dyepots are heated from the top by infrared radiators, the inclination angle of the dyepots to the rotary disc is designed to get a good liquor circulation by the rotation of the disc. Excellent dyeing repeatability and color leveling are assured.

- For easier access of the dyepots to the rotary disc, a inching button can be pressed which causes the rotary disc to move at a inch speed.
- Each dyepot is numbered in order to avoid errors.
- 12(or 24) dyepots of equal size for dyeing are fitted to rotary disc, one of dyepot has temperature probe for direct dyebath control.
- Fully intergrated safety system, such as Rotary disc and heating are automatically switched off on opening the door.
- Even in low liquid (i.e. 1:6), won't have crease mark, colored spots or uneven dyeing results.

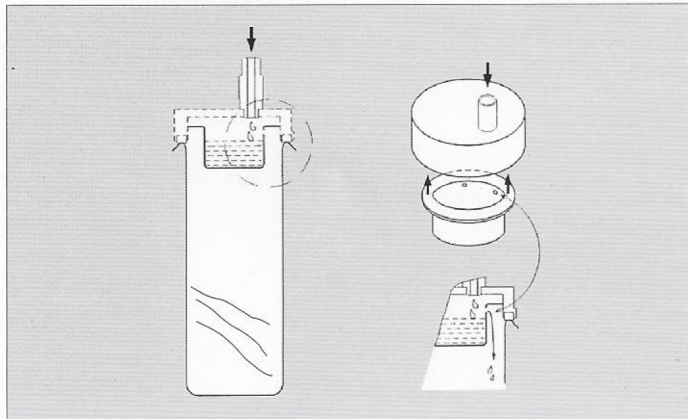
Special Features

- Dyepots can easily be set and released from the rotary disc.
- Different sizes of dyepots are available for various types of samples, for examples:
1) 500ml Dyepots for large pieces of about 40 gr., also for Dry-Cleaning, wash-fastness tests and two-part dyeing tests.
2) 150 ml Dyepots for lower liquor ratio dyeing tests & etc.
- Besides dyeing tests, the machine can perform wash-fastness tests and dry-cleaning tests, etc.
- Dye liquor capacity from 50 ml to 400 ml or more, liquor ratio from 1:5 to 1:100 variable.
- Weight of samples from 3 gr. to 40 gr..
- Dyepots are produced by pressing, no welding spots or cracks exist such that perfect dyeing of test samples are guaranteed.

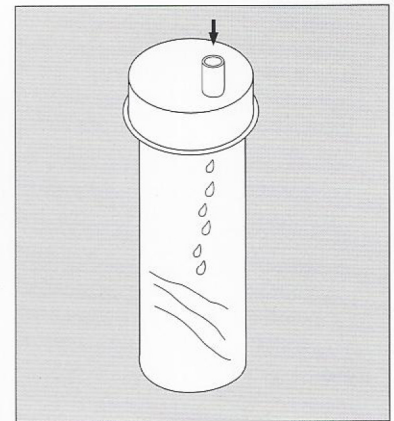
Chemical Injection device (Option)

Adding of Chemical is possible during the dyeing process, particular to reactive dyes and acid dyes, chemical additions is always applied. If order this device, would be included pot lid with injection adapter, reserve cup, and hand injector. Inserting the hand injector into the pot lid, the required dosing quantity of chemical is then fed into the dyepots.

Inside of pot lid, RAPID has special designed reserve cup which is made of 316 stainless steel materials, no any stain in dyeing process and release the chemical slowly as similar as production line to avoid direct contact with the substrate, so the leveling shade is assured.



Principle for chemical Injection



Injection dyepot

Applications

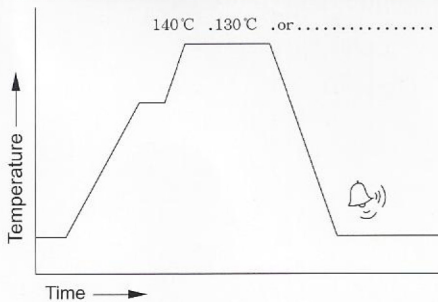
IR DYER is most suitable for the following tests:

- 1)Sample recipe dyeing test
- 2)Step dyeing tests
- 3)Wash fastness tests
- 4)Dry cleaning fastness tests
- 5)High or low liquor ratio exhaustion tests
- 6)Fabric streak and barre analysis
- 7)Concentration tests

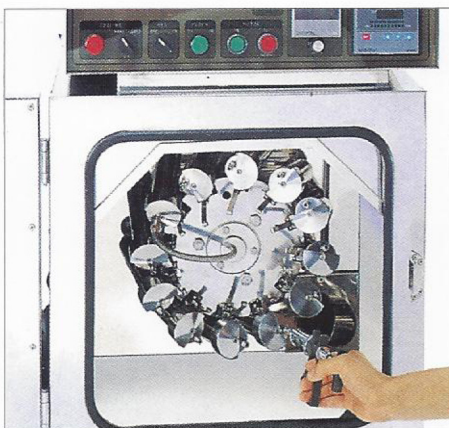
Specification

Temperature Range:20-140°C
 Temperature gradient:0.3-4°C/min.
 Revolution Speed:Vari-Speed 10-50RPM
 Size of Dyepots:500 ml: 141(H) × 75(D) mm
 300 ml: 141(H) × 55(D) mm
 150 ml: 141(H) × 42(D) mm
 **1000 ml **3000 ml **6000 ml
 Heating Capacity:(with a maximum filling 2/3 volume)
 150 ml.5°C/min.
 500 ml.3°C/min.
 Cooling System: Air circulation

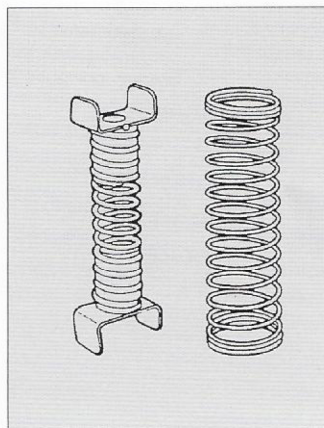
Microprocessor Program Type



- With LABORTEK brand Microprocessor LA-2002A for 36 programs, each with 20 steps
- 7 digits LED display
- Password protection
- Programable rate of temperature rise
- Time duration-proportional temperature control
- Support Auto/Manual cooling selection
- ※ LCD display Microprocessor temperature controller for 50 programs, each 50 steps on request.



Chemical Injection



Yarn/Fabric holder (Option)



Seamless Dyepots

Optional Features and / or Accessories

IR- 12 SM - A O

- POT POSITION
12 12 150 ml (*6 500 ml)
24 24 150 ml (*12 500 ml)
- CONTROL PANEL
SM: Microprocessor Type(LA2002-A)
M: Microprocessor Type(Specific Type)
- DYE POT SIZE
A:150 ml B:300 ml C:500 ml
D:1000 ml E:3000 ml F:6000 ml
- ACCESSORIES
O:Without
A:For Yarn
B:For Piece
C:Injection System

Remark:

*The special rotary disk is available for IR-12 to set 8 dyepots of 500ml for instead of 6 pcs and IR-24 to set 16 dyepots of 500ml for replacing 12 pcs

**Available but need to special order.

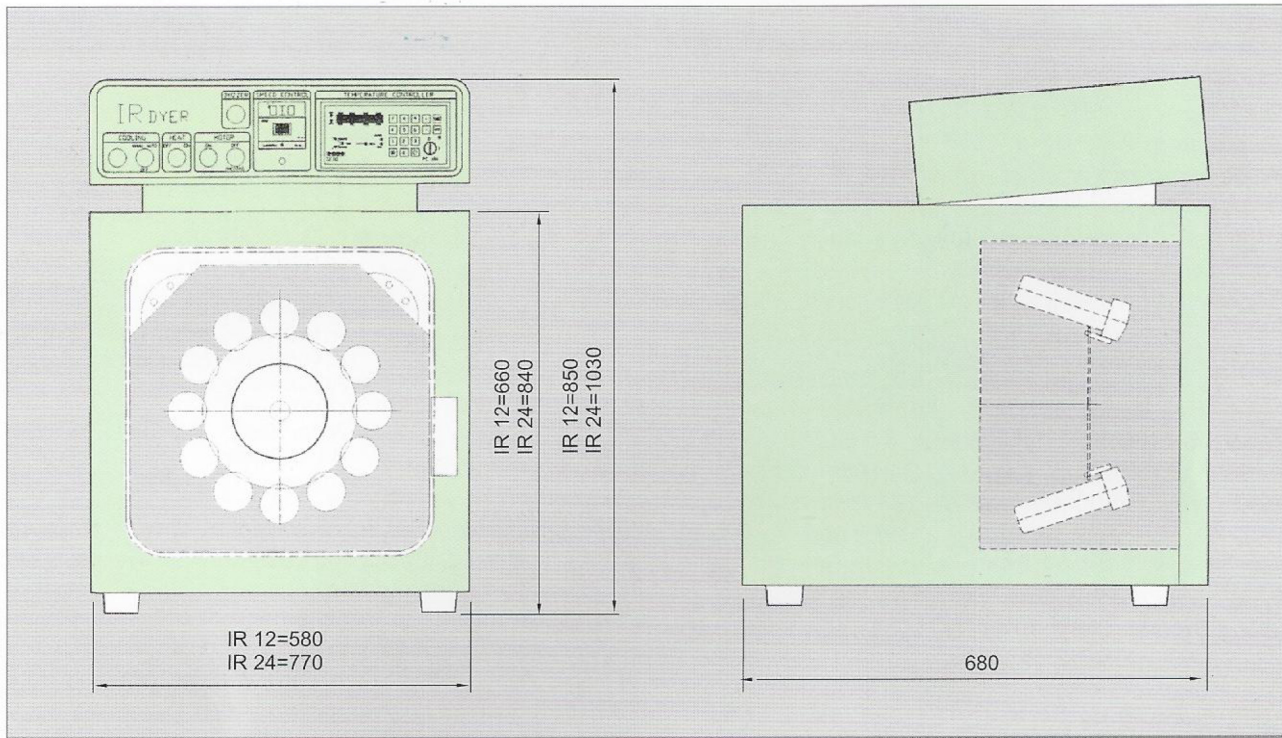
1000 ml Apply on, IR-12, can load 4 dyepots.

Apply on IR-24, can load 8 dyepots.

3000 ml/6000 ml only workable on IR-24

No. of pot for various rotary disc

Type of rotary disc	Standard rotary disc		Special rotary disc of 300 ml pot		Special rotary disc of 500 ml pot		Remark
Model No.of pot	IR-12	IR-24	IR-12	IR-24	IR-12	IR-24	
150 ml	12	24	12	24	8	16	
300 ml	12	23	12	24	8	16	
500 ml	6	12			8	16	
1000 ml	4	8	4	8	4	8	Rotary disc has to be replaced
3000 ml		3		3		3	Rotary disc has to be replaced
6000 ml		2		2		2	Rotary disc has to be replaced



Technical Details

Model No .	IR-12	IR-24
Power Consumption	3KW	5KW
Electric Connection	220V × single phase	
Rotating Speed	10 ~ 50 RPM	
Depth (cm)	68	68
Overall Height (cm)	85	103
Width (cm)	58	77
Approx. Net weight	88kg	195kg

MEMO

CE

Specifications subject to change without notice



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