# LABORATORY ECO DYER

- A newest innovation apparatusIndispensable Laboratory dyeing machine
- Pollution free, Energy saving, Low liquor ratio





# ECO DYER NEWEST AND AFFORDABLE LABORATORY DYEING MACHINE

ECO DYER, which is electric heat conducting type laboratory dyeing machine, the advanced heat conduct design offers not only advantages of a Glycerin type dyeing machine, but also provides features of an infrared type dyeing machine, the new design provides improvements on the two conventional designs.

Its specially designed rotary system allows users to achieve even and crease-markfree dyeing results, even at a low liquor ratio.

Users can easily add chemicals either in powder or liquid form during running of dyeing process by the unique "ONE TOUCH" injection device. Moreover, dyeing reproducibility is ensured as the chemical addition process simulates features of the bulk dyeing process.



# **SPECIAL FEATURES**

#### Lowest power consumption

4.5KW required only. Comparing to Glycerin type dyeing machine 9KW, or IR type dyeing machine 6 KW, ECO DYER not only saving electricity cost, but also cut off the expense of glycerin.

#### No more sensor pot is needed

No sensor pot is required in the ECO DYER, so comparing to traditional IR type dyeing machine, no more temperature sensor's problem.

#### Ready to use

No water piping is required. Using dual air cooling system for faster cooling.

#### Friendly design

Not only dye pot, but also pot position is numbered in order to avoid operating errors. Dye pot can easily be loaded and unloaded from the rotary drum. Furthermore, complete with sight glass for easy observation of pot motion.

### Modernize laboratory by installing ECO DYER

ECO DYER with modernized appearance, no fume pollution and Glycerin free, pleasant working environments and attractive laboratory are assured.

#### Simple and easy operation

ECO DYER's operating habit same as Glycerin type dyeing machine, simple and easy to use, for example, During the running process, individual dye pots can be loaded or unloaded without interruption of temperature. Different amount of dye liquor can be performed in one lot of dyeing process—etc,

#### S.S 316L made dye pot

Dyepots are made of stainless steel 316L, and are produced by pressing, no welding spots or cracks exist, chemical resistance and perfect dyeing are guaranteed.

#### Even dyeing

The rotary drum has an infinitely variable drive, also provide rotation 360 degree, allows users to achieve even and crease-mark-free dyeing results, even for high density polyester

#### Unique design for chemical addition system

ECO DYER use "ONE TOUCH" injection system, to replace traditional syringe injection system, All syringe troubles, such as glass easier break, chemical block in the injection nozzle etc., are now history.

# CHEMICAL INJECTION DEVICE (Option on request only)

Using "ONE TOUCH" injection system, adding of Chemical during running of dyeing process can be done in a very simple way, particular to reactive dyes and acid dyes, chemical additions is always applied.

Measuring first the required quantity of chemical solution or chemical powder by scale or pipette, then load chemical into the reserve cup of dyepot and go for dyeing process, when opening the door of the ECO DYER, the drum rotation is automatically stopped, just push the button on the top of injection lid while chemical addition is required, the chemical solution is then fed into the dyepots from reserve cup slowly as similar as bulk dyeing to avoid direct contact with the substrate. Thanks to this "ONE TOUCH" injection system, shade leveling and reproducibility are assured.

# **APPLICATION**

The most versatile and ECO laboratory dyeing machine, suitable for general laboratory purpose under high temperature condition, such as recipe dyeing test, washing fastness test, and other laboratory R&D applications—etc, now with modern temperature control system and wide range of dye pots sizes available ensures safe and level dyeing results.

# **SPECIFICATION**

■ Working temperature : Max. 140°C
■ Rate of temperature rise : Max. 3.5°C/min
■ Heating source : Electric heat -conduct

■ Volume of dyepot : 300cc, 420cc

■ No. of pot position : (ECO-24) 24 x 300cc pot

(ECO-18) 18 x 420cc pot

■ Control Panel : LCD graphic display microprocessor

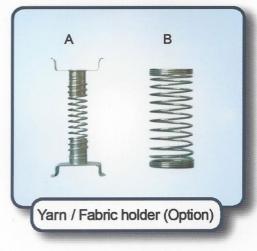
(50 programs,50 steps)

■ Cooling system : Dual Air cooling design
■ Power consumption : 4.5 KW

■ Electric connection : 220V x single phase ■ Machine dimension : 69 x 73 x 75 cm (LxWxH)

■ Machine weight : About 150kg







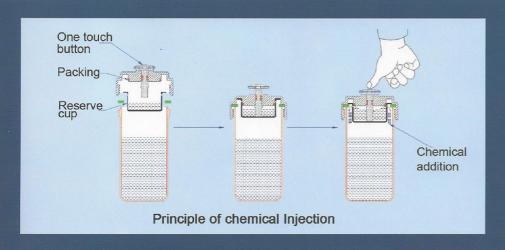
# **MODEL OF DESIGNATION**

NO. OF POT POSITION
24: 24 x 300cc pot
18: 18 x 420cc pot

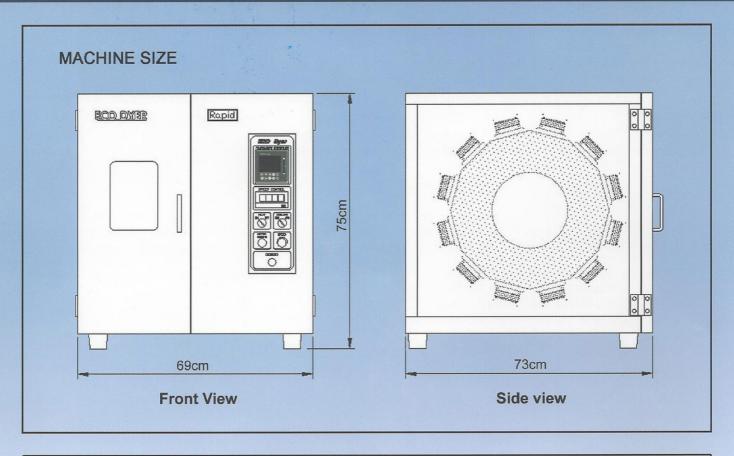
Option: (Available on request only)

1. YARN HOLDER (A) and SPRING HOLDER (B)

2. "ONE TOUCH" CHEMICAL INJECTION DEVICE







Description	Comparison ECO DYER vs. Traditional Lab dyeing machines		
	ECO DYER	Glycerin type dyeing machine	IR type dyeing machine
Power consumption	4.5 KW	10 KW	6KW
Heating principle	Electric heat conducting technology	Glycerin as heating media	Infra red heating
Pollution	Free	Fume pollution	Free
Cooling system	Air	Water	Air
Operation	Simple and easy to use	Simple and easy to use	Complicated
Maintenance	Free	Free	Spare temp. probe, IR lamp are required
Rotation speed	Variable control	Fix speed	Variable control
Chemical addition	"One Touch" injection	Not available	Traditional syringe injection
Different size of pot	Not Convertible	Convertible	Convertible
Appearance	Modernized design with sight glass	Conventional design	Conventional design

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Specifications subject to change without notice.



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