

# TCS INFRA COLOR SAMPLE DYEING MACHINE



Truly we fulfill your wish

## **BEAKER LOCKING IN CARRIAGE**



#### Main advantages:

- Crease- and spot-free sample dyeing.
- Knitted and woven fabrics as well as yarn can be dyed.
- Cotton, wool and synthetic materials.
- State of the art process controller with large
  Integrated program memory.
- Low liquor ratio: 1:5 fabric dyeing cotton.
- Stainless steel cabinet.
- Soda ash adding without opening the beakers.
- No glycerin or cooling water needed.
- Very good price / performance value.

#### Simple operation:

- Filling dye liquor and textile.
- Optional: liquid chemical to be added later on during the dye process.
- Simple fixation of the beakers into the machine.
- Calling of the dye program from memory and starting the dye process.

#### Beaker support:

• Three-dimensional movement and 360° rotation (Forwards and Reverse) allows even and dyed through samples.

• Depending on structure and kind of the material to be dyed, the rotational Speed can be varied between 1 and 18 rotations per minute.

#### Temperature measuring:

• The measuring of the temperature takes place inside the beakers allowing the direct measurement of the dye liquor. This enables the machine to accurately control and regulate the temperature.

#### Heating system:

• The laboratory dye machine is equipped with four 0.75 kW or 1 kW (max.) infrared heating tubes.

• Maximal temperature: 140 °C.

• Heating rate can be varied between 0.5 °C/min and 2 °C/min.

#### Cooling system:

• Air cools down to the required temperature. The machine does not need any cooling water.

#### Process controller:

- DP-02 dyeing controller
- Display showing dyeing process steps, temperature and rotation direction.

• 50 programs with 32 process steps can be stored inside of the controller memory.

#### **Options:**

• Chemical adding system: Into the specially designed chemical add system liquid chemicals can be filled. During the dye process, the chemical can be directly injected in to the beaker which is automatically added to the dye bath. Therefore the beakers do not have to be opened during the dye process. This allows even dyeing since during dosing the movement of the beaker continues very shortly after the dosing start.

• The standard beaker holder has 12,18 and 24 positions.

• To dye yarn we suggest our yarn holder. This accessory is available with extra cost with all combination of beakers.

• Loose stock carrier is also available for dye crease sensitive and delicate materials like silk, wools etc.

• Graphical display touch screen controller can also provide on request.

### Specification and comparison between glycerin and infra red heating:

MODEL	4 X 6000ML INFRA	4 X 6 LITRE GBBD
HEATING	INFRA RED RAYS	GLYCERINE 120LTR.
COOLING	BY AIR	BY WATER
HEATING POWER	6KW	18KW
COOLING POWER	1/10HP MOTOR	NIL / MANUAL
DRIVE POWER	½ HP	1 HP
ROTATION (RPM)	1 TO 18	1 TO 18 RPM
AUTOMATION	DP-02	DP-02
MAX.TEMPERATURE	145 DEGREE	145 DEGREE
MAX.RATE OF HEATING	2 DEGREE	2.5 DEGREE
MAX.RATE OF COOLING	1 DEGREE	1.5 DEGREE
MATERIAL OF BEAKER	S.S 316L	S.S 316L
MACHINE BODY	S.S 304	S.S 304
ELECTRIC SUPPLY	415V, 3PHASE,16A	415V, 3PHASE,28A
MACHINE DIMENSIONS	720 <mark>X 680 X</mark> 990	1240 X 780 X 1400
MACHINE NET WEIGHTS	155KGS	265KGS
MACHINE GROSS WEIGHTS	225KGS	370 KGS