ECO-88D

Double Rope High Speed Dyeing Machine

Piece Dyeing

Design Superiority

The ECO-88D Double Rope High Speed Dyeing Machine is the prime choice for the processing of light to medium weight woven and knitted goods made from synthetic and blended fiber. Particularly it is suitable for fabric which is sensitive to temperature and the formation of crease marks.

The fabric movement inside the storage chamber is well controlled thereby resulting in high fabric speed and minimum tension is exerted on the fabric. The PTFE rod lined bottom provides the smoothest surface in addition to the HydroSki supporting system.

The LN nozzle helps reduce the ballooning by fabric resulting in smooth running. The fabric processed in the ECO-88D Double Rope High Speed Dyeing Machine has an excellent finish and quality.

The fabric rope runs at a speed as high as 600m/min, achieving an excellent levelness.

Design Superiority

- High rope speed: the fabric rope speed can go up to 600m/min to allow an optimum loading of 200# kg per rope (400# kg per tube)
- Fast bath turnover rate: the circulation pump provides high flow rate to compliment the high rope speed
- Long Kier: the fabric spreads over the entire length of the kier so that fabric is not subject to high stack loading, thus reducing the formation of crease mark
- Controlled fabric movement: smooth fabric running with speed up to 600 m/min
- Minimum fabric tension: an excellent choice for stress sensitive fabric material owing to low lifting height
- LN Nozzle: reduces formation of fabric balloon, smoothens fabric running condition
- HydroSki supporting system: provides smoothest contact surface and good fabric finish as well as quality
- Reversing nozzle: ejects the fabric rope back into the kier to release the tangling automatically
- Conveyance tube: fabric rope immerse in the conveyance tube to complete the dyestuff exchange for evenness
- Rear section: the shape of rear section helps eliminate the swirling and twisting of the rope
- Seam detector*: speeds up locating the fabric seam for unloading and sampling inspection
- Sprayer: washes away dirts atop the fabric and reduces fabric damage due to contact with metal surface

* Option

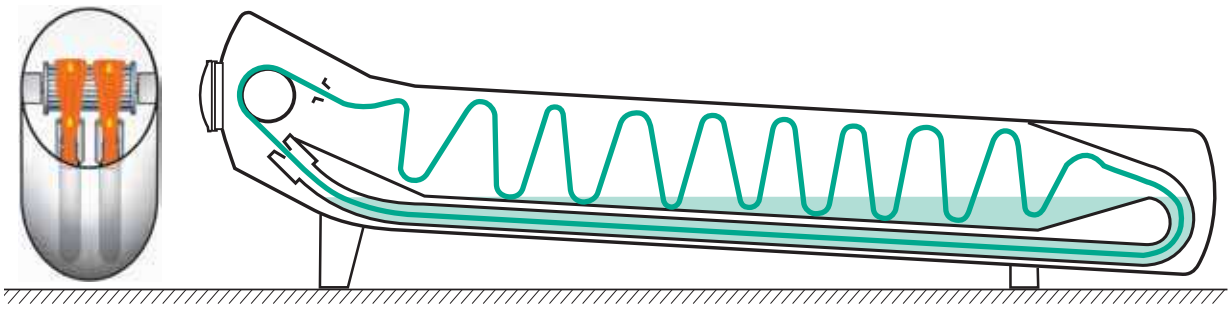
according to machine model

Technical Data

- Design pressure : 3.5bar
- Design temperature : 140°C
- Min liquor ratio: down to 1:6 - 8
- Heating gradient : 25°C - 130°C , total 27min. (at dry saturated steam pressure of 7bar)
- Cooling gradient : 130°C - 80°C , total 17.5min. (at cooling water of 3bar, 25°C)

Standard features, Options and Technical Data

Schematic Diagram



Standard features

- Machine body and major parts wetted by dye liquid are made of 316Ti/ 316L/ 1.4571/ 1.4404 highly corrosion resistant stainless steel
- Highiy efficient stainless steel centrifugal pump for fast dye liquor circulation
- Lifter reel driven by frequency inverter controlled motor, for speed up to 600 m/min.
- Service tank with feed pump, valves and stirring function
- Highly efficient heat exchanger for fast heating and cooling
- Take-off roller
- Level indicator
- Automatic tangling release system
- Pneumatic fill and drain
- Analog dosing system
- Frequency inverter drive for main pump
- Main control cabinet with FC28 program controller
- Fuzzy logic temperature control software
- Service platform

Options

- Analog fresh water metering fill
- Layout plaiter
- Programmable 2nd fill
- Programmable 2nd drain
- Coupling accessories
- Extra length of multi core cable
- Second service tank
- HST hot water Stock tank
- Seam detector
- Thermal insulation

Model	Type	No. of tubes	Nominal capacity g/m<120 Length (m)	Nominal capacity g/m>120 Weight (kg)	Total installed power (kW)	Dimensions (mm) L	W	H
ECO-88D-1T	T45	1	1800	200	27.5	7800	2000	2760
	T55	1	2400	300	27.5	8800	2050	2760
ECO-88D-2T	T45	2	3600	400	54.9	7800	3400	2760
	T55	2	4800	600	54.9	8800	3500	2760
ECO-88D-4T	T45	4	7200	800	111.3	7800	7700	2760
	T55	4	9600	1200	111.3	8800	7800	2760

Notes: Capacity changes according to different kinds of fabric and operating conditions. If the actual speed of fabric < 600m/min or fabric turn around time < 2.5mins, then the actual capacity maybe less than the figures stated in the above table.

FC Series Program Controller* for the Dyehouse Network Advanced Control System

Microprocessor based FC Series program controller* provides cost-effective and high performance dye cycle control facility.

Comprehensive control management is achievable by integrating individual FC Series program controller with the central computer system Viewtex.

Viewtex. is developed by FONG'S to program and monitor a number of linked machines.

* FC program controller refers to the latest version in the series.

Fong's National Engineering (Shenzhen) Co., Ltd.
receives ISO9001:2000 QMS and ISO 14001:2004 EMS certification.

Fong's National Engineering (Shenzhen) Co., Ltd.
Is competent to manufacture pressure vessels according to the requirements of ASME BPV Sec VIII DIV.1, EN13445, BS PD5500, AS1210, JIS B8243, GB 150/151 etc.
Unless specified in the order, standard execution of pressure vessel parts/components are designed, produced and inspected according to GB 150/151.

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