## Technical Data and Specifications

<table>
<thead>
<tr>
<th>Model Type</th>
<th>No. of tubes</th>
<th>Nominal capacity</th>
<th>Length* (m)</th>
<th>Weight (kg)</th>
<th>Total installed power (kW)</th>
<th>Dimensions [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC0-88-1T</td>
<td>1</td>
<td>T12 1 170</td>
<td>20</td>
<td>6.2</td>
<td>4700</td>
<td>1250 2100</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>T35 1 850</td>
<td>100</td>
<td>11.1</td>
<td>8000</td>
<td>1500 2600</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>T50 1 1200</td>
<td>165</td>
<td>11.1</td>
<td>9500</td>
<td>1550 2600</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>T70 1 1200</td>
<td>220</td>
<td>11.1</td>
<td>11500</td>
<td>1700 2600</td>
</tr>
<tr>
<td>EC0-88-2T</td>
<td>2</td>
<td>T50 2 2400</td>
<td>330</td>
<td>20.0</td>
<td>9500</td>
<td>2700 2950</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>T70 2 2400</td>
<td>440</td>
<td>20.0</td>
<td>11500</td>
<td>2850 2950</td>
</tr>
<tr>
<td>EC0-88-3T</td>
<td>3</td>
<td>T50 3 3600</td>
<td>495</td>
<td>37.0</td>
<td>9500</td>
<td>3950 2950</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>T70 3 3600</td>
<td>660</td>
<td>37.0</td>
<td>11500</td>
<td>4150 2950</td>
</tr>
<tr>
<td>EC0-88-4T</td>
<td>4</td>
<td>T50 4 4800</td>
<td>660</td>
<td>47.5</td>
<td>9500</td>
<td>5350 2950</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>T70 4 4800</td>
<td>880</td>
<td>47.5</td>
<td>11500</td>
<td>5500 2950</td>
</tr>
</tbody>
</table>

*The length in nominal capacity is based on a fabric turn around time of 2 minutes.

- Design pressure: 3.5 bar
- Heating time: 25°C - 130°C, total 27 min. (at saturated steam pressure of 7 bar)
- Design temperature: 140°C
- Cooling time: 130°C - 80°C, total 17.5 min. (at cooling water of 3 bar, 25°C)

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. Fong’s National Engineering (Shenzhen) Co., Ltd. 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, JlS 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.

We reserve our rights to make any technical improvement without further notice. Details shown in this leaflet are only for information. Scope of delivery and technical specification of product supplied shall be in accordance with the contract.

Fong’s National Engineering Co., Ltd.
8/F., 22–28 Cheung Tat Road, Tsing Yi, Hong Kong
Tel:  +852 2497 3300
Fax: +852 2432 2552
Email: enquiry@fongs.com
www.fongs.com

FONG’S EUROPE GMBH
Milchgrundstraße 32,74523 Schwäbisch Hall, Germany
Tel: +49 (0) 791 403 0
Fax:+49 (0) 791 403 166
E-Mail  info@fongs.eu
www.fongs.eu

Fong’s National Engineering (Shenzhen) Co., Ltd.
17-19, Lixin Road, Danzhutou Industrial Zone, Nanwan Sub-District, Longgang District, Shenzhen, Guangdong, PRC.
Postal Code: 518114
Tel:  +86 755 8473 6288
Fax: +86 755 8473 6154
Suitable for Sensitive Fabrics

The ECO-88 High Speed Dyeing Machine is suitable for woven and knitted fabrics, especially the light weight materials and fabrics, which are sensitive to crease marks, such as polyester and microfibres etc.

Depending on the fabric weight per linear meter (ranging from 60 to 500 g/L.M.*), fabric speed can go up to 600 m/min.

The highly efficient heat exchanger is the ideal supplement to the high fabric speed, which ensures the shortest dyeing cycle.

Design Specialty

High fabric speed
– the fastest fabric speed of 600 m/min ensures to achieve optimum loading within 2 minutes of fabric turn around time

Fast bath turnover rate
– The circulation pump provides high flow rate to sustain the high fabric speed

Long kier
– The fabric spreads over the whole length of the kier so that the fabric is not subject to high stack loading, thus reducing the formation of crease mark

Sloped kier
– It assists the smooth forward movement of fabric

Upward sloped front kier
– It helps lift up the fabric rope from the pile

# L.M. : Linear Meter
**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
- Heavy-duty 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

**Options**

- Analog fresh water metering fill
- Layout plaiter
- Programmable second fill
- Programmable second drain
- Coupling accessories
- Extra length of multi core cable
- Second service tank
- Hot Water Stock Tank (HST)
- Seam detector
- Thermal insulation
Reversing nozzle
- When tangling occurs, the reversing nozzle ejects the fabric rope back into the kier to dismantle the tangling automatically

Quick opening service door
- Provides fast access for loading and unloading

Conveyance tube
- Fabric rope immerses in the conveyance tube to complete the dyestuff exchange for evenness

* Options

Rear taper section
- Slows down the liquid and fabric speed after entering into the kier thereby reduces fabric tangling

Seam detector*
- Speeds up locating the fabric seam for unloading

Fabric tangling alarm device

Service tank with feed pump, valves and stirring function.
Heavy-duty stainless steel centrifugal pump.
Technical Data and Specifications

Technical Data

- Design pressure: 3.5 bar
- Heating time: 25°C - 130°C, total 27 min. (at saturated steam pressure of 7 bar)
- Design temperature: 140°C
- Cooling time: 130°C - 80°C, total 17.5 min. (at cooling water of 3 bar, 25°C)

Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>No. of tubes</th>
<th>Nominal capacity g/m&lt;120 Length* (m)</th>
<th>Weight (kg)</th>
<th>Total installed power (kW)</th>
<th>Dimensions [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO-88-1T</td>
<td>T12</td>
<td>1</td>
<td>170</td>
<td>20</td>
<td>6.2</td>
<td>L: 4700 W: 1250 H: 2100</td>
</tr>
<tr>
<td></td>
<td>T35</td>
<td>1</td>
<td>850</td>
<td>100</td>
<td>11.1</td>
<td>L: 8000 W: 1500 H: 2600</td>
</tr>
<tr>
<td></td>
<td>T50</td>
<td>1</td>
<td>1200</td>
<td>165</td>
<td>11.1</td>
<td>L: 9500 W: 1550 H: 2600</td>
</tr>
<tr>
<td></td>
<td>T70</td>
<td>1</td>
<td>1200</td>
<td>220</td>
<td>11.1</td>
<td>L: 11500 W: 1700 H: 2600</td>
</tr>
<tr>
<td>ECO-88-2T</td>
<td>T50</td>
<td>2</td>
<td>2400</td>
<td>330</td>
<td>20.0</td>
<td>L: 9500 W: 2700 H: 2950</td>
</tr>
<tr>
<td></td>
<td>T70</td>
<td>2</td>
<td>2400</td>
<td>440</td>
<td>20.0</td>
<td>L: 11500 W: 2850 H: 2950</td>
</tr>
<tr>
<td>ECO-88-3T</td>
<td>T50</td>
<td>3</td>
<td>3600</td>
<td>495</td>
<td>37.0</td>
<td>L: 9500 W: 3950 H: 2950</td>
</tr>
<tr>
<td></td>
<td>T70</td>
<td>3</td>
<td>3600</td>
<td>660</td>
<td>37.0</td>
<td>L: 11500 W: 4150 H: 2950</td>
</tr>
<tr>
<td>ECO-88-4T</td>
<td>T50</td>
<td>4</td>
<td>4800</td>
<td>660</td>
<td>47.5</td>
<td>L: 9500 W: 5350 H: 2950</td>
</tr>
<tr>
<td></td>
<td>T70</td>
<td>4</td>
<td>4800</td>
<td>880</td>
<td>47.5</td>
<td>L: 11500 W: 5500 H: 2950</td>
</tr>
</tbody>
</table>

* The length in nominal capacity is based on a fabric turn around time of 2 minutes.
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.

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.

Fong’s National Engineering Co., Ltd.
8/F., 22–28 Cheung Tat Road, Tsing Yi, Hong Kong
Tel: +852 2497 3300
Fax: +852 2432 2552
Email: enquiry@fongs.com
www.fongs.com

FONG’S EUROPE GMBH
Milchgrundstraße 32,74523 Schwäbisch Hall, Germany
Tel: +49 (0) 791 403 0
Fax:+49 (0) 791 403 166
E-Mail info@fongs.eu
www.fongs.eu

Fong’s National Engineering (Shenzhen) Co., Ltd.
17-19, Lixin Road, Danzhetou Industrial Zone, Nanwan Sub-District,
Longgang District, Shenzhen, Guangdong, PRC.
Postal Code: 518114
Tel: +86 755 8473 6288
Fax: +86 755 8473 6154