



Fong's National Engineering Co., Ltd.

Members of Fong's Industries Group

LABWIN

Laboratory Package Dyeing Machine



MICROWIN

Mini Sample Yarn Dyeing Machine



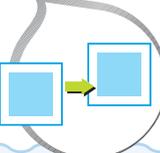
50th ANNIVERSARY
SINCE 1963 | FONG'S INDUSTRIES
立信工業

Yarn Dyeing

LABWIN

Laboratory Package Dyeing Machine

“ LABWIN is designed for dyeing 1-6 standard packages. It apart from a high-quality sampling, it can also be used as small batch dyeing. It is an essential package dyeing machine for every dyehouse. ”



High Reproducibility

Liquor ratio same with production machine, recipe can be directly adapted.



Dual directional dyeing

Dual directional dyeing with ILC* enhances levelness of dyeing.



Wide range of machine models

1, 3 and 6 package models available.



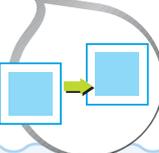
Versatility in capacity

Airpad technology and spindle for reduced loading ensures consistent liquor ratio.



Linking machine functions

Maximum of 4 units of individual machines can be easily linked.



Directly application of processing

Using FC Program Controller, developed recipe is transferable to production.

* ILC : Intelligent Levelness Control



Technical Data

- Design temp: 140°C
- Design pressure: 5.2bar
- Heating gradient: 20 ~ 130°C approx 30min (dry saturated steam pressure at 7bar)
- Cooling gradient: 130 ~ 80°C approx 20min (water pressure at 3bar, at 25°C)

Versatility in Variable Loading

Airpad technology with spindle for reduced loading, the consistency of the liquor ratio is controllable.



| Model | Type | No. of linked machines | No. of packages | Max* capacity (kg) | Overall dimension (mm) | | |
|-----------|------|------------------------|-----------------|--------------------|------------------------|-----|------|
| | | | | | L | W | H |
| LABWIN-1 | K0 | 0 | 1 | 1.2 | 1200 | 863 | 1122 |
| | K1 | 1 | 2 | 2.4 | 2400 | 863 | 1122 |
| | K2 | 2 | 3 | 3.6 | 3600 | 863 | 1122 |
| | K3 | 3 | 4 | 4.8 | 4800 | 863 | 1122 |
| LABWIN-3 | K0 | 0 | 3 | 3.6 | 1200 | 980 | 1222 |
| | K1 | 1 | 6 | 7.2 | 2400 | 980 | 1222 |
| | K2 | 2 | 9 | 10.8 | 3600 | 980 | 1222 |
| | K3 | 3 | 12 | 14.4 | 4800 | 980 | 1222 |
| LABWIN-6 | K0 | 0 | 6 | 7.2 | 1260 | 980 | 3590 |
| | K1 | 1 | 12 | 14.4 | 2520 | 980 | 3590 |
| | K2 | 2 | 18 | 21.6 | 3780 | 980 | 3590 |
| | K3 | 3 | 24 | 28.8 | 5040 | 980 | 3590 |
| LABWIN-12 | K0 | 0 | 12 | 14.4 | 1850 | 950 | 3882 |

* The capacity is based on a package with an outside winding diameter of 165mm and a weight of 1.2kg. If the winding weight of each package is less than 1.2kg, the capacity is proportionally reduced. Max. package diameter is 165 mm. Enquiries for other matching diameters are welcome.

Application of Linking Machine

4 individual machines can be linked, which also can be easily restored to its original configuration.



Examples of 4 single machines linked together



4 linked machines:

4 linked machines as one unit, producing the same colour; each kier has the same loading.

3+1 Formation:

3 linked machines as one unit, producing the same colour; each kier has the same loading, and 1 individual machine producing different colour from the linked unit, and the kier has different loadings.



2+2 Formation:

2 linked machines as one unit, total 2 units, the colour produced and the loading within each unit are the same but are different from each other.

2+1+1 Formation:

2 linked machines are combined as single unit which produces same colour and has same loading. The remaining two individual machines produce different colour and have different loading from each other.



Split use:

4 linked machines all separated from each other, producing different colour, each kier has different loadings.

MICROWIN

Mini Sample Yarn Dyeing Machine

“ MICROWIN can be used to dye small packages, saving expensive yarn materials, dyestuff, chemical and energy cost. It is suitable for laboratory use and is a good companion in high quality dyeing workplace. ”



Ultra-low Liquor Ratio
Liquor ratio same with production machines, ensures reproducibility.

Dual Directional Dyeing
Smallest yarn dyeing machine with true dual directional dyeing.

Suitable for Laboratory Use
Immersed electrical heater, no steam required.

Compact and Light-weight
Each side only 1m. Suitable for the work bench.

Easy dye liquor sample collection
Sampling port for dye liquor sample collection, no need to open kier cover.

Cost Saving
Saving 75% of yarn materials, dyes, additives, and energy costs.

Technical Data

- Design temp: 140°C
- Design pressure: 5.2bar
- Heating gradient: 20 ~ 130°C approx 20min
- Cooling gradient: 130 ~ 80°C approx 8min

| Model | Capacity (g) | Max package diameter (mm) | Dye tube dimension (mm) | Overall dimension(mm) | | |
|------------|--------------|---------------------------|--------------------------|-----------------------|-----|-----|
| | | | | L | W | H |
| MICROWIN-1 | 200 ~ 300 | O/D 95mm | I/D 50mm × H 170mm | 600 | 520 | 900 |
| MICROWIN-2 | 400 ~ 600 | | | 1053 | 520 | 900 |

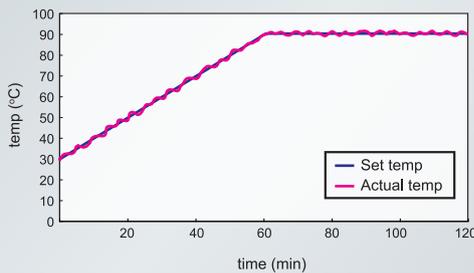
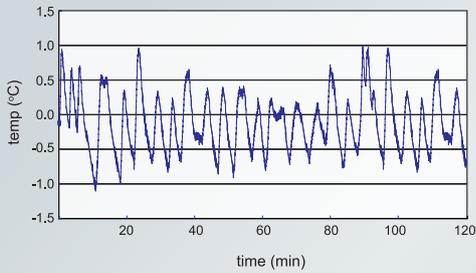
FC30 Series Program Controller

For The Most Dyehouse Network Advanced Control System

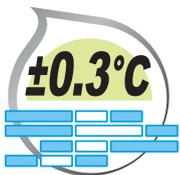
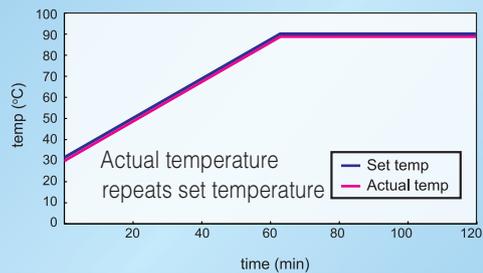
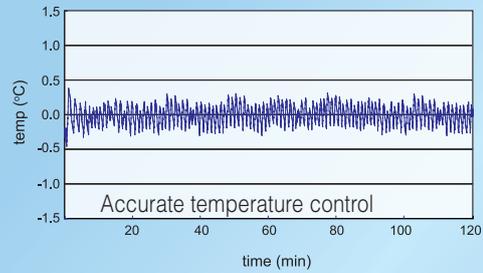
New generation of FC30 program controller has a 6.5-inch 640x480-pixel, TFT color LCD display together with novel control functions, provides the most cost-effective dye cycle control. FC30 can also integrate with our **Viewtex** and THEN-TDS central computer system, providing comprehensive control management.



Conventional PI Control Temp $\pm 1^{\circ}\text{C}$



Fuzzy Control Temp $\pm 0.3^{\circ}\text{C}$



Fuzzy Logic Temperature Control

Unique Fuzzy Logic Temperature Control technology, temperature control can be confined down to $\pm 0.3^{\circ}\text{C}$.



Fong's National Engineering Co., Ltd.

8/F., 22-28 Cheung Tat Road,
Tsing Yi, Hong Kong, PRC
Tel: +852 2497 3300
Fax: +852 2432 2552
E-mail: enquiry@fongs.com
Website: www.fongs.com

Sales Enquiry

Tel: +86 755 8473 6288 Ext. 183
Fax: +86 755 8473 6808
E-mail: enquiry@fongs.com

Technical Services

Tel: +86 755 8473 6288 Ext. 234
Fax: +86 755 8473 7972
E-mail: service-os@fongs.com

Fong's National Engineering (Shenzhen) Co., Ltd.

17-19, Lixin Road, Danzhotou Industrial Zone,
Nanwan Sub-District, Longgang District,
Shenzhen, Guangdong, PRC.
Postal Code: 518114
Tel: +86 755 8473 6288
Fax: +86 755 8473 6154

Logistics

Tel: +86 755 8473 6288 Ext. 399
Fax: +86 755 8473 6808
E-mail: shipping@fongs.com

Parts

Tel: +86 755 8473 6288 Ext. 169
Fax: +86 755 8473 6691
E-mail: spareparts@fongs.com

FONG'S EUROPE GMBH

Milchgrundstrasse 32,
74523 Schwäbisch Hall, Germany
Tel: +49 791 403 0
Fax: +49 791 403 166
E-mail: info@fongs.eu
Website: www.fongs.eu



Members of Fong's Industries Group

We reserve the rights to make changes and improvements to any of the products described in this document without prior notice. Details in this document are provided for information only.