Develop Capabilities: *

- Dependent on film thickness and exposure resolution.
- 1 mil lines and spaces in 30um dry film with good exposure
- 10 – 12 um lines and spaces with wet resists at 5 um thickness with good exposure

Dry Film Developing Parameters for High Quality Etch:

- Temperature: 85° F (29° C)
- pH: 10.7 – 10.8
- Chemistry: 0.9 – 1% sodium or potassium carbonate
- Spray Pressure: 30 psi (2.0 bar)

Estimated Conveyor Speed for 30 um dry films at 50% breakpoint:

- Standard Length XLI Series – 50 ipm (1.27 meters/min.)
STANDARD CONFIGURATION

Station 1 – Load (18 in. 457mm)
  o Vent Connection
Station 2 – Develop (57 in. 1448mm)
  o 38 in. 965mm Effective
  o Glass viewing window (w/yellow viewing lamp)
  o pH monitor
  o Pump out
  o Exhaust
  o 1.5 gpm (5.68 lit./min) cone nozzles
  o Upper/Lower Pressure Gauges
Station 3 – Isolation (12 in. 305mm)
  o Drag out control ( Rollers)
  o Fresh Air inlet
Station 4 – Rinse (19.7 in. 500mm)
  o Fresh to drain
Station 5 – Double Stage Rinse (28 in. 711 mm)
  o Split manifold: 2 recirculation / 2 fresh
Station 6 – Unload (18 in. 457mm)

System Total Length: 152.7in. 3.9m

SYSTEM OPTIONS

  o Containment Pan
  o PLC Control
  o Bath control, pH Controller or panel count dosing.
  o Optional Develop Chamber Lengths
    • 77 in. 58 in. effective
    • 102 in. 82 in. effective
  o Optional Rinses
  o Inline Filters (150 micron)
  o Dryer
  o Flextrak Package (below .004 in., 0.1mm)
  o Ventilation Demister
  o Cooling System (Chiller)
  o Extended Load & Unloads
  o Solder mask option (higher pressure w/high impingement nozzles)
  o Available Conveyor Widths
    • 20, 30, 40 and 60 Inch(508, 762, 1016, 1524mm)
  o Power Options
    • 208/3/60, 230/3/60, 460/3/60, 400/3/50
  o Other options available upon request

Notes:
  o Ultra-Thin conveyor Standard
  o 75 ft. (22.8m) Wiring Harness
  o Adjustable Conveyor Speed Range: 14 -140 ipm
  o Product Thickness – 0.004(0.1mm)- 0.250(6.35mm)
  o Maximum Operating Temperature: 130°F, 54.4°C
Develop Capabilities: *
- Dependent on film thickness and exposure resolution.

Dry Film Developing Parameters for High Quality Etch:
- Temperature: 85°F (29°C)
- pH: 10.7 – 10.8
- Chemistry: 0.9 – 1% sodium or potassium carbonate
- Spray Pressure: 40 - 45 psi (2.75 to 3.10 bar)

Estimated Conveyor Speed for 30 um dry films at 50% breakpoint:
- Standard Length XLI Series – 25 ipm (0.63 meters/min.)
**STANDARD CONFIGURATION**

Station 1 – Load (18 in. 457mm)
- Vent Connection

Station 2 – Develop (57 in. 1448mm)
- 38 in. 965mm Effective
- Glass viewing window (w/yellow viewing lamp)
- pH monitor
- Pump out
- Exhaust
- 1.5 gpm (5.68 lit./min) fan nozzles
- Upper/Lower Pressure Gauges

Station 3 – Isolation (12 in. 305mm)
- Drag out control ( Rollers)
- Fresh Air inlet

Station 4 – Rinse (19.7 in. 500mm)
- Fresh to drain

Station 5 – Double Stage Rinse (28 in. 711 mm)
- Split manifold: 2 recirculation / 2 fresh

Station 6 – Unload (18 in. 457mm)

System Total Length: 152.7 in. 3.9m

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**SYSTEM OPTIONS**

- Containment Pan
- PLC Control
- Bath control, pH Controller or panel count dosing.
- Optional Develop Chamber Lengths
  - 77 in. 58 in. effective
  - 102 in. 82 in. effective
- Optional Rinses
- Inline Filters (150 micron)
- Dryer
- Flextrak Package (below .004 in., 0.1mm)
- Ventilation Demister
- Cooling System (Chiller)
- Extended Load & Unloads
- Post Develop with AFD (28 inch)
- Available Conveyor Widths
  - 20, 30, 40 and 60 Inch(508, 762, 1016, 1524mm)
- Power Options
  - 208/3/60, 230/3/60, 460/3/60, 400/3/50
- Other options available upon request

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**Notes:**

- Ultra-Thin conveyor Standard
- 75 ft. (22.8m) Wiring Harness
- Adjustable Conveyor Speed Range: 14 -140 ipm
- Product Thickness – 0.004(0.1mm)- 0.250(6.35mm)
- Maximum Operating Temperature: 130°F, 54.4°C

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**Customer Notes And Additional Details: (ex. voltage, width, etc)**