Equipment Line Card 2020

345 Mira Loma Ave, Glendale CA 91204 Toll Free at 866 734 9403

all4-PCB®
WORLDWIDE

Automation
(loaders & unloaders)

Slip sheeting
Innerlayer
Outerlayer
Slot pallet
Accumulators
Trolleys

pola e massa

Super small foot print
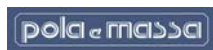Heron robot arm
automation options

Batch Ovens

Convection
Single & dual chamber
Vacuum
Nitrogen
High Temperature
Clean-Room
Various rack systems

GP 群翊 GRO·UP

Brushing & Cleaning
Pumice &
Aluminumoxide
brushing
Deburr Machines
Nylon brush cleaning
Post HASL cleaning
Small parts washer

pola e massa

Hole Checking
Post deburr
conveyorized

Drill quality analyzer
Hole positions
Hole quality
Routed board features
CMM function
Lines & spaces

WINTANK AOTOMATION INC.

Conveyor Ovens

UV Single & double
sided, Cool
IR conveyor
Screen drying oven
Rack conveyor
Hang conveyor

GP 群翊 GRO·UP

Cross Sectioning

S-OSR: Coupon router with precision saw
SPA: Polishing system
OSR: Coupon router
No pins needed
Simple method for laser vias

Drilling & Routing

To 7 stations
Sieb & Meyer
Pressure foot
Depth control
Broken tool detection

Dry Film Lamination & Peeling

25 um to 6mm possible
Pre-heater unit
Post Laminator unit for difficult jobs

Mylar Peeler

Electrical Test

GridTesters
Double and or Quad Density

Flying probe testers
Double tester with robotic loading & unloading

Exposure

UV DMD Direct Image
ED1500 & 700
Very large format available
R2R
365-450nm lamp spectrum

UV phototool exposure machines

Hot Air Leveling

HASL machines
Fluxers
Cooling units
Air Cleaners
& more

Ink Jet Printing

Nomenclature

Ink recycling
Serialization
UV pinning

Lamination

Electric
Hot oil
800F High temperature
Automation
Lay-up and de-booking tables
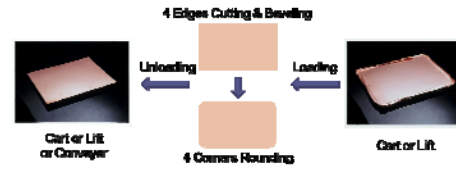Depinning unit

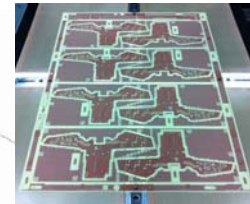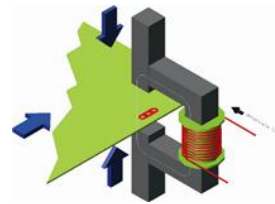## Lamination Area Tools

Tooling hole drilling
Spot facer

Innerlayer & prepreg dispensing

Post Lamination Marking

Bevel and Shear Equipment

Lamination Registration

Inductive bonding
No pin tooling during lamination
Compatible with Multiline and two pin lay-up
Quadrant bonding system for rigid-flex

Measurement

Automatic & manual panel thickness

Line width gauge
Artwork measurement

Drill & routing quality analyzer
Routed board measurement
Coordinate measurement system (CMM)

Blind via inspection equipment

Photo-plotter

From 20.5" x 26"
to 34" x 56"
Up to 50,000 DPI
0.32mil line width
possible

Plasma Desmear
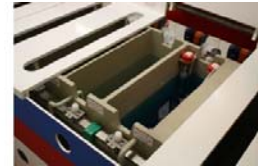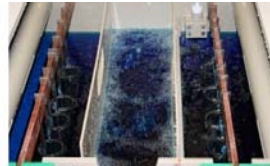
Vertical gas flow
Excellent uniformity

R2R

Plating

Vertical Plating lines

Excellent uniformity
Compact design
Linear drive system
Cableless data transfer

Screen Printing

From hand to full
automated
NEW
Vertical printer
No ink dripping
Less mask in holes
High productivity

Spray Coating

Single & double sided
Pump delivery system
Parts cleaner
Gap reduction
Double spray gun

Via Fill

Vertical
Horizontal
With & without vacuum
Silver paste processing
Table top system
Manual & automatic
scavenger
Head Cleaning unit
Paste recycle unit

Via Fill
Sanding
(Planarization)

Conveyorized sanding 10 brushes or single brush version

Dry orbital manual sanding or wet orbital manual sanding

Via Plugging

Selective with stencil for via plug with and without vacuum.

Stand alone vacuum ovens available

V-Scoring

Pin or Camera Registration
Various levels of automation
Metal Laminate Scoring Equipment

Wet Process

Oxide
Pre-clean
Developer
Stripper
DES & SES
Sn Strip
Other