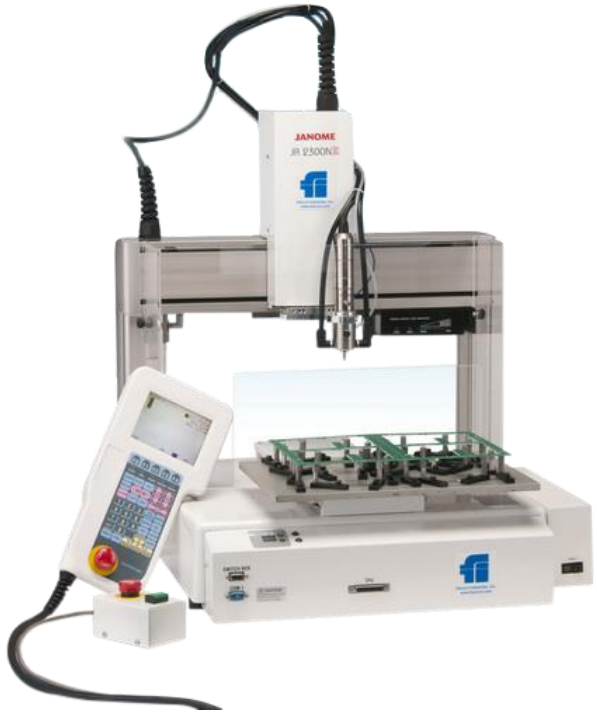
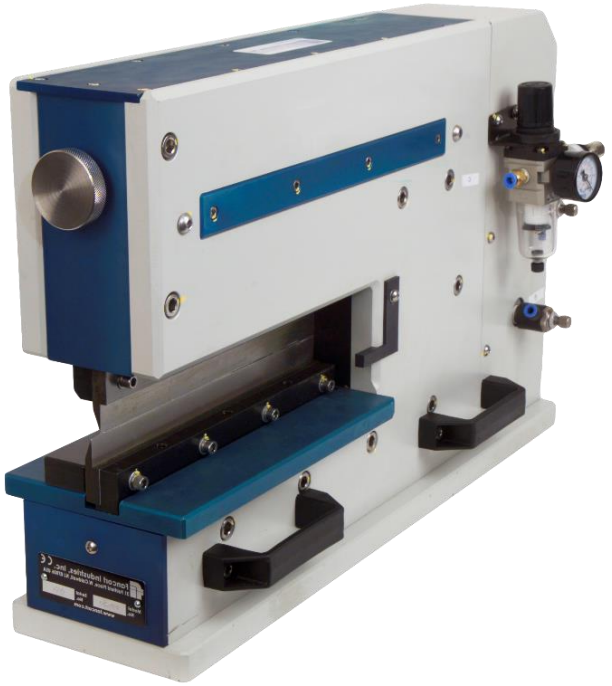


Fancort Industries

Desktop Depaneling

Fancort's family of desktop depaneling solutions offer one of the largest selections of equipment for tab and v-score boards in the industry.



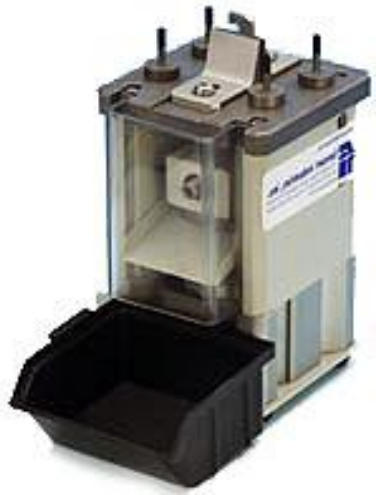
Oct 12-13 2016

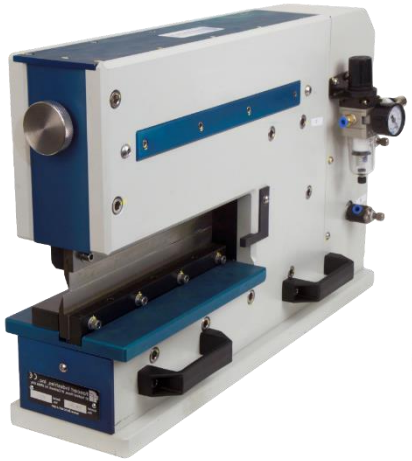
Why Select Fancort Depaneling Equipment

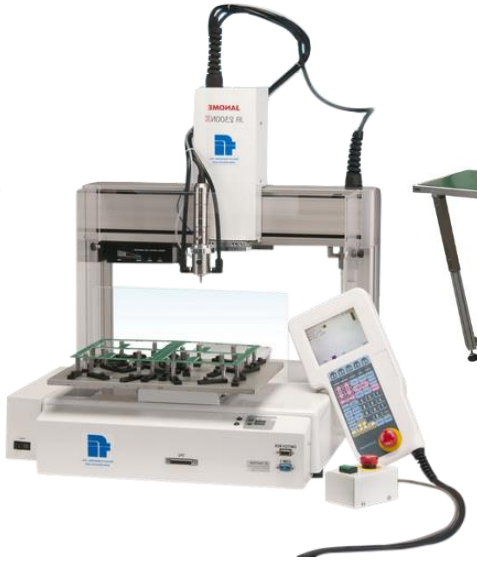
- Wide variety of choices of equipment for scored and routed panels
- Solid well constructed/built equipment;
- Hundreds of placements in many companies through out North America; some world wide; small and medium sized companies seem to be our niche although we do see opportunities at larger players also
- Ability to modify/customize equipment and “engineer” a solution where needed
- Spare parts in stock, spare part sales support; mainly blades for all equipment which can now be ordered on Fancort’s website.
- Blade resharpening service in house at Fancort less than 1 week turnaround
- Factory support & process development (sales, technical and service) in New Jersey along with strong local support and sales representatives throughout North America

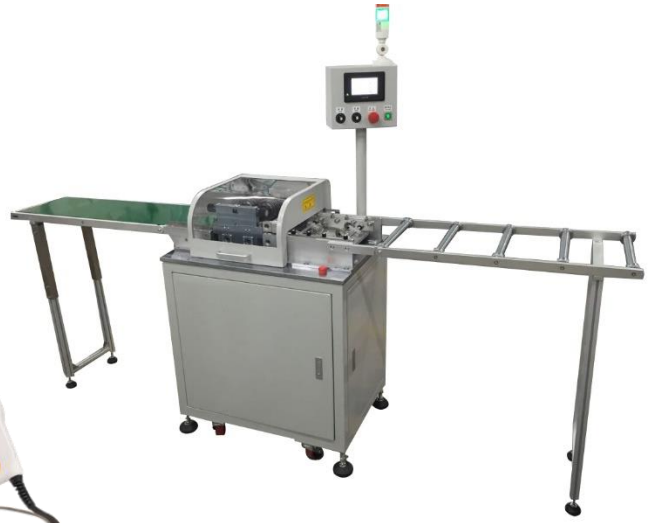
Fancort: Widest Range of Depaneling Solutions

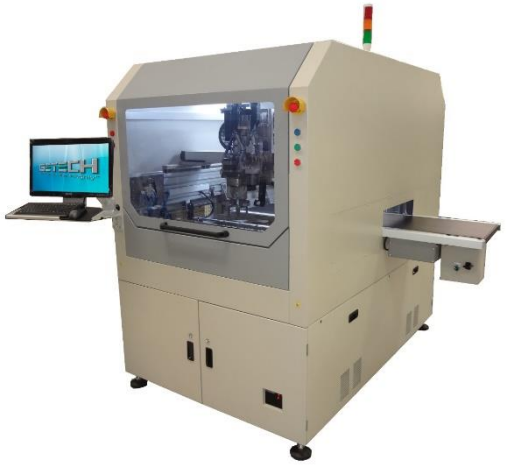
$1k → $300k+





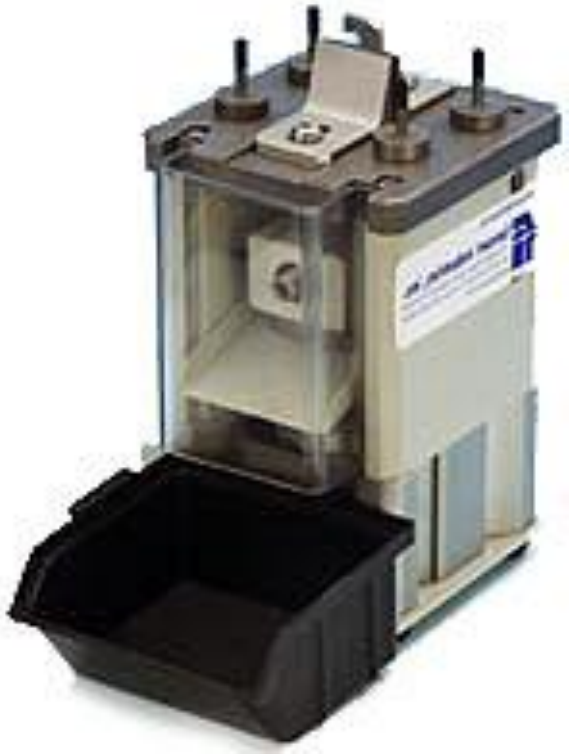






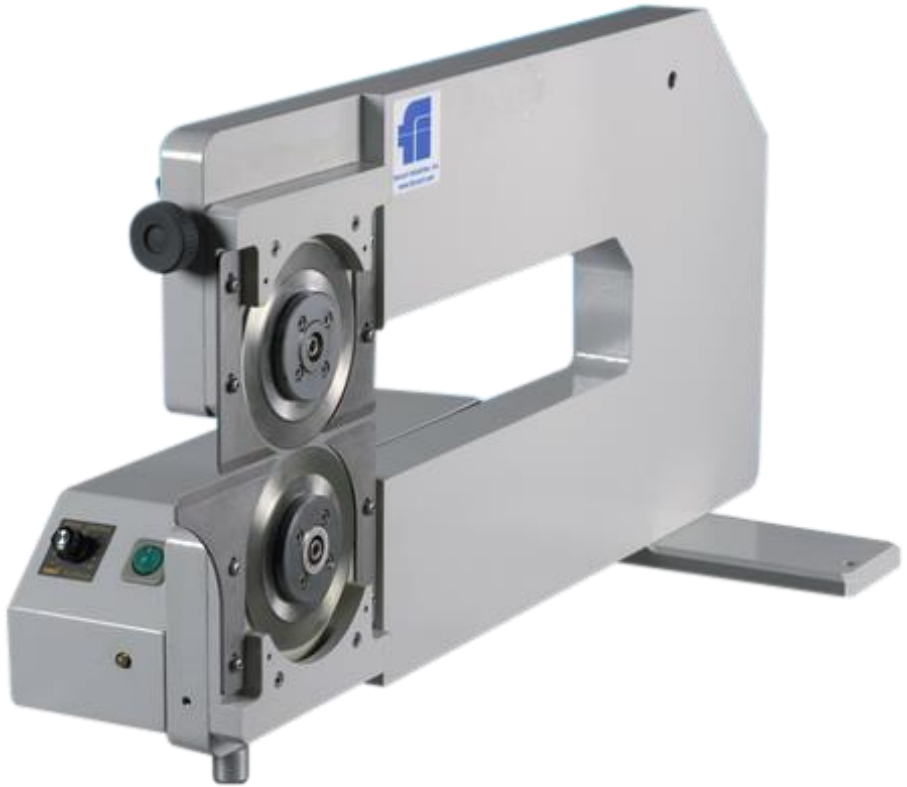
NTR-2

- Single knife tab removal handles PCB thickness to .125”
- Standard knife measures .600” in length; blade thickness available from .030” to .125”
- Standard knives remove tabs up to .240” in length
- Change knives in less than two minutes; hardened tool steel
- Four moveable magnetic posts to support the PCB
- Scrap collector
- Pneumatic operation with foot switch



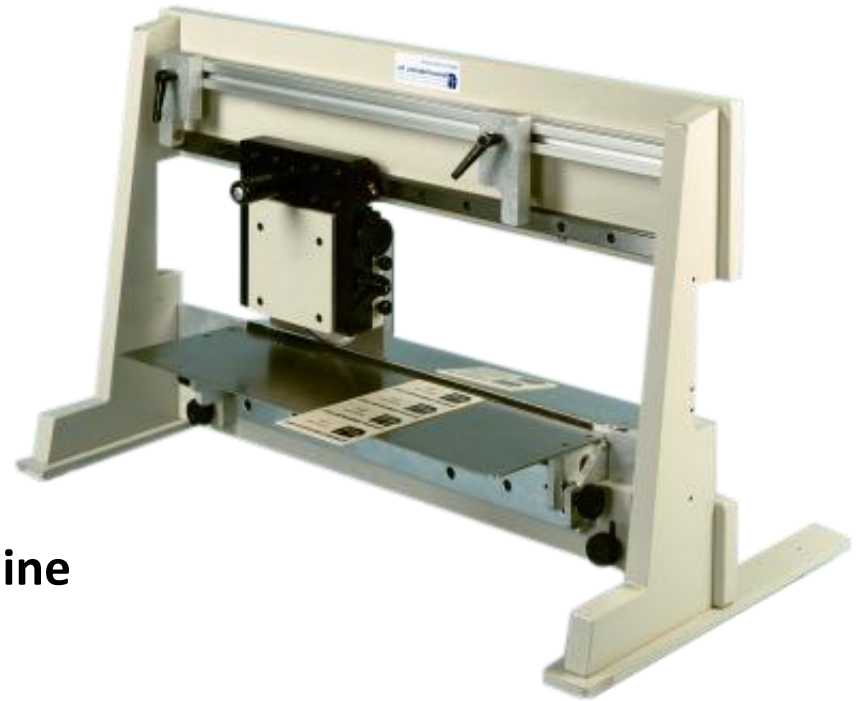
VPD2-400

- Separate scored boards up to 16” in length
- Motorized lower knife with variable speed motor
- Guides on front for easy feeding
- Rugged aluminum casting
- Knives can be re-sharpened



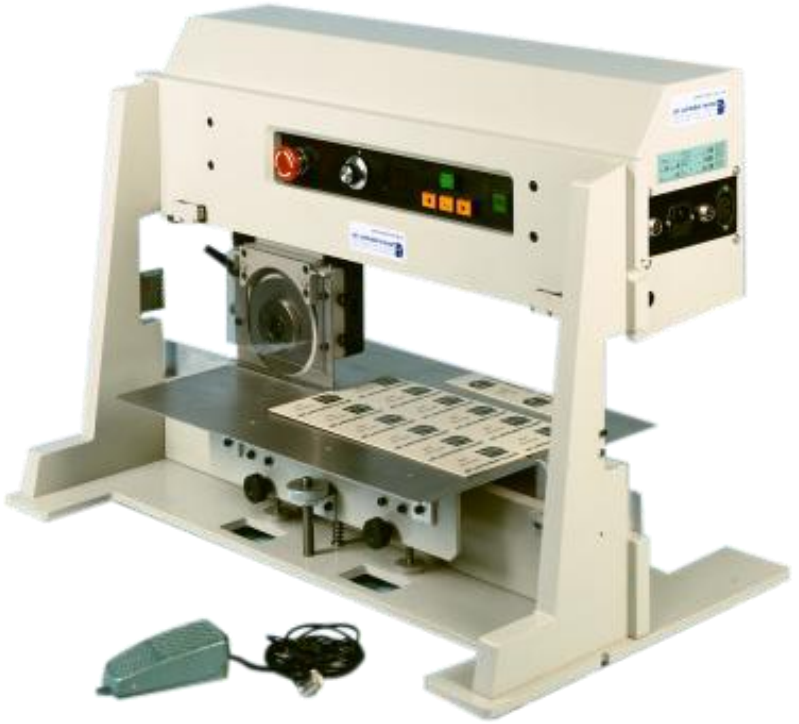
VPD3-1M

- Separate scored boards up to 18” in length, and from .032” to .100” thick
- VPD3-1M-600 separates panels up to 24” long
- Safely separate as close as .040” from score line
- Manually slide round knife along linear knife
- Adjustable stops on both ends
- Tables angle to discharge finished boards
- Heavy duty steel frame, weighs 80lbs
- High quality linear bearing used in round knife to maintain alignment with linear knife
- Knives can be modified for clearance on parts along the score line
- 24” model available as a custom
- Knifes can be re-sharpened; 3 day turnaround



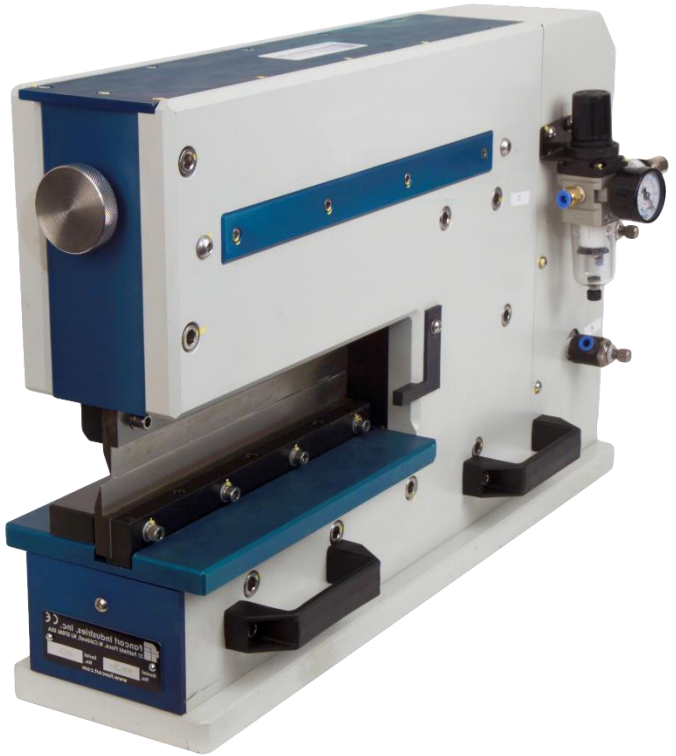
VPD3-1

- Motorized model separates panels up to 18”; 24”
- Program cut length and speed
- Light curtain for safety
- Other features same as VPD3-1M
- Foot switch operated; 110V

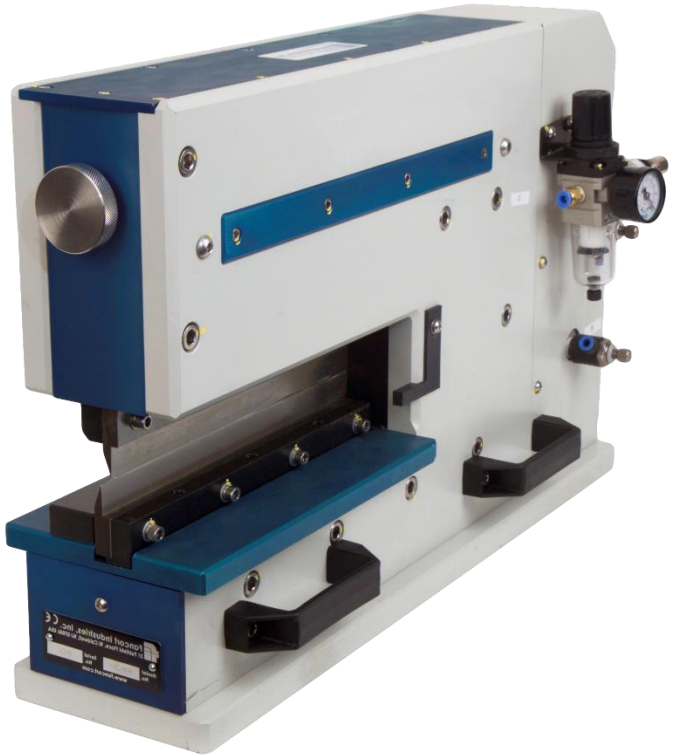


VPD5

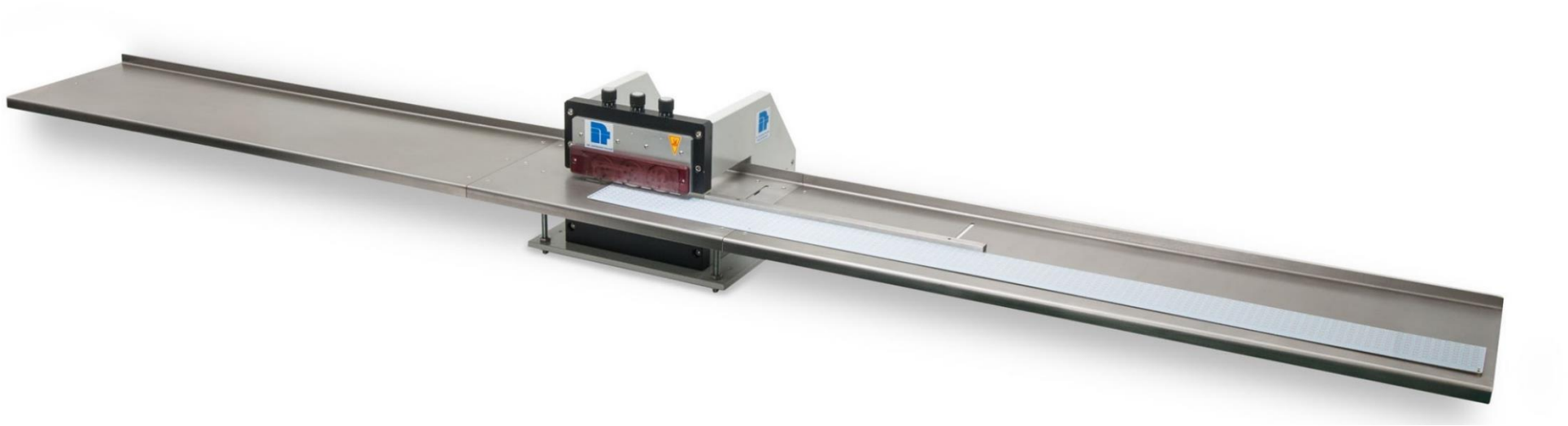
- Two linear knives with powerful pneumatics and cam action
- Separates boards with parts as close as .020” (.5mm) from score line
- Operator “goof proof” and totally safe; blade gap set to thickness along score line
- VPD5-330 separates panels up to 330mm
- Pneumatic with foot switch
- Handle boards from .030” to .100” thick



VPD5 Demonstration Video



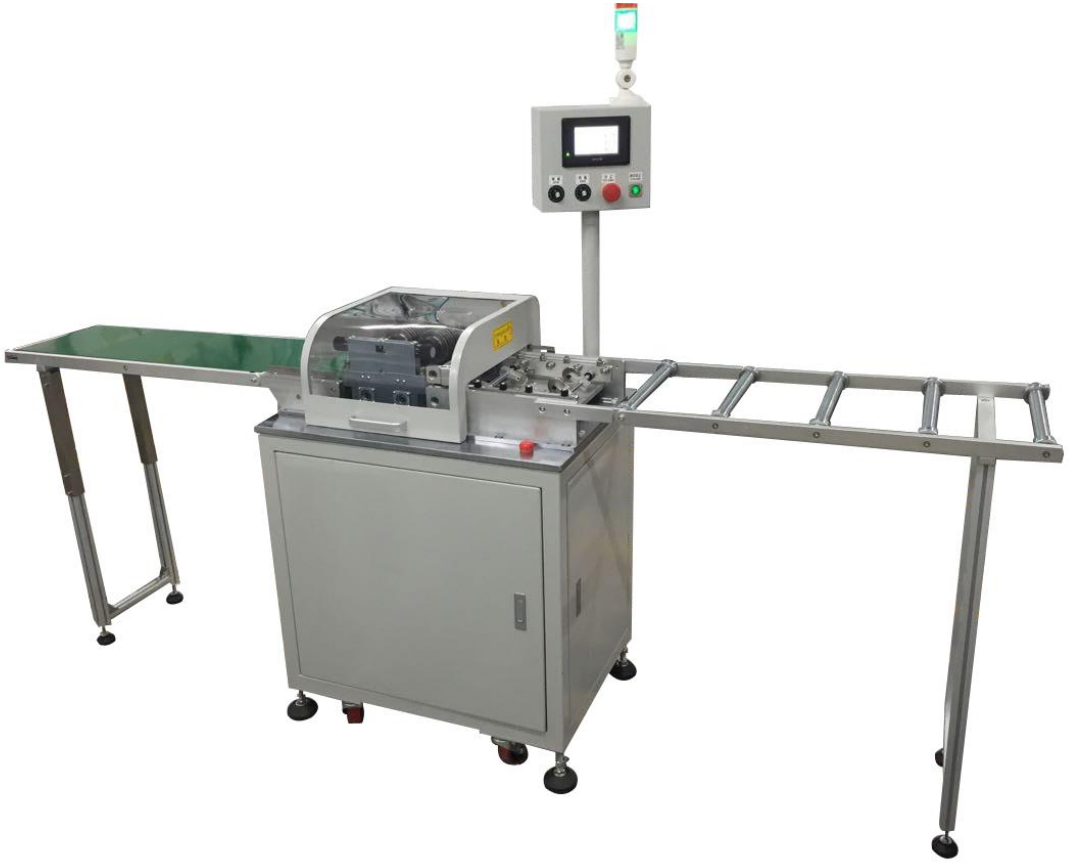
CL100: Separating LED Metallized Boards



- Three pairs of precision beveled cutting blades
- Motor driven; process any length single-sided boards
- Stainless steel platform 2.4m long; optional lengths available
- Blades can be adjusted vertically to suit different boards

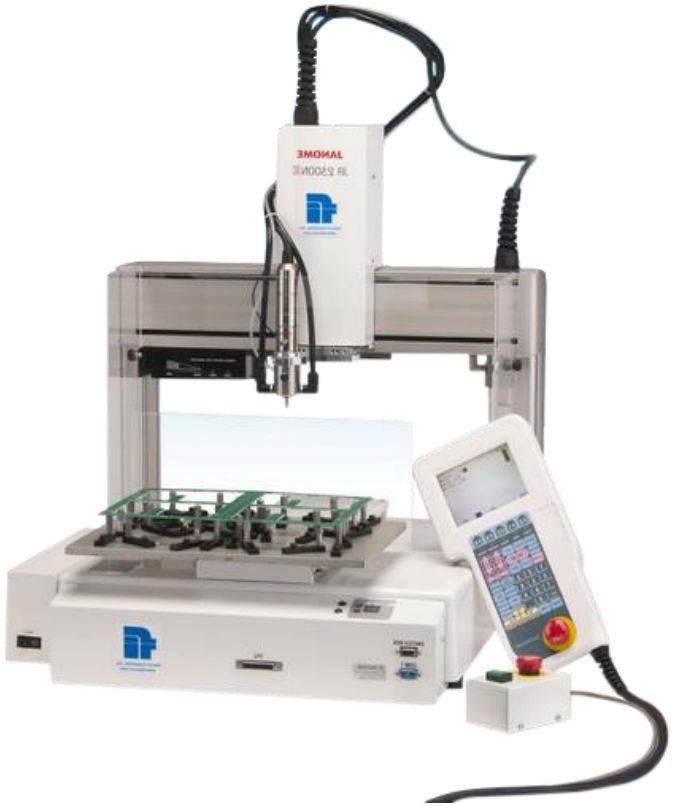
CL500: Multi-Blade/conveyor for Metallized Boards

- Two rows of blades to make multiple simultaneous cuts.
- Up to 10 times more productive than single cut machine.
- Motor driven; process any length single-sided boards
- Stainless steel platform; optional lengths available
- Conveyor to pull boards out of blades.
- Blades can be adjusted vertically to suit different boards



Desktop Router with Adjustable Fixture

- Debris is pulled up and drawn through a vacuum system around the spindle motor into a reservoir
- Uses dedicated fixture or new adjustable fixture
- Three models up to working area of 20” x 20”
- Easy programming and maintenance
- Spindle motor load indicator to monitor wear on router bits
- Comes with clear plastic shield or optional enclosure with light curtain.

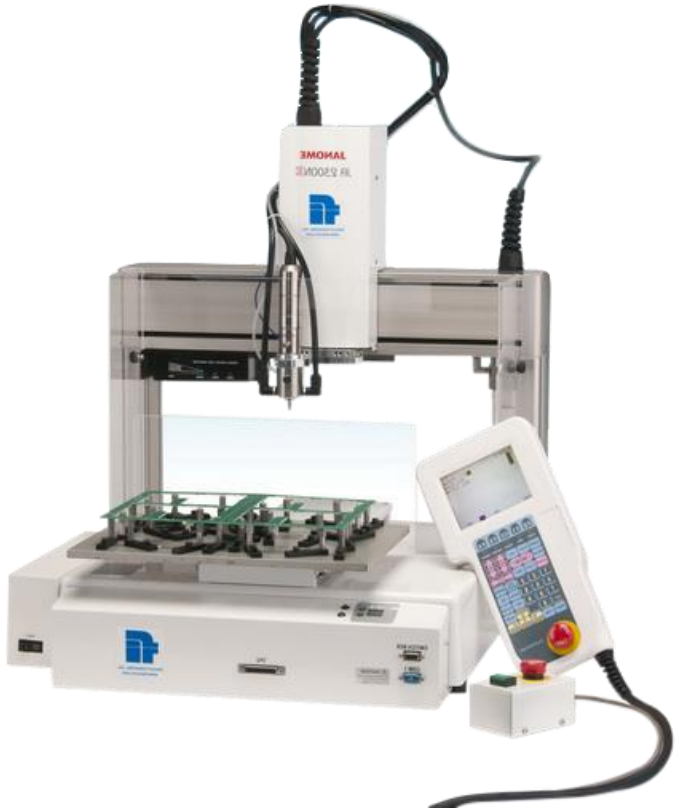


Price List Range $28-35k.

Magnetically Adjustable Fixture

How Do We Close Orders on Depaneling?

- Discover and address a unique need.
- Offer solutions not just equipment.
- Offer process development help & demonstration videos.
- Stock most machines for quick delivery.
- Offer best value and best support.
- Get application development forms.



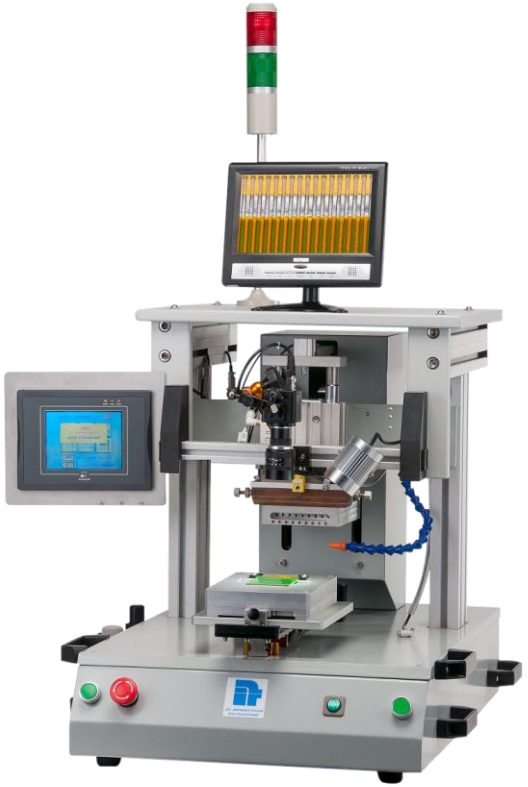
Fancort Industries – PCB Depaneling Solutions

Thank you for your time. Please contact Steve Hoover (The Hoove!) with questions!!!

www.fancort.com

Fancort Industries

Hot Bar/Pulse Bonding



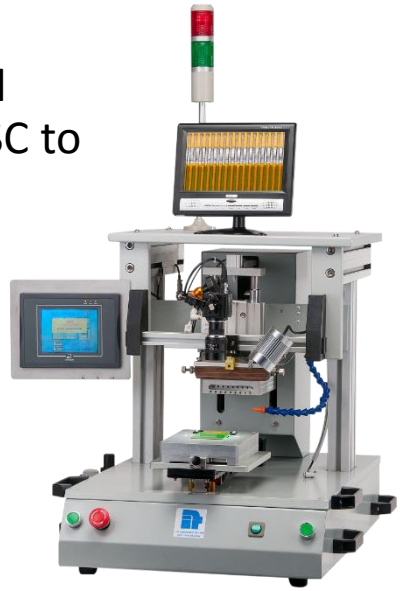
Fancort's family of desktop Hot Bar/Pulse Bonding offer solutions for flex circuit soldering.

Oct 12-13 2016

Fancort Pulse Bonding/Hot Bar Equipment

Easily Bond Flex Circuits

- Fancort offers 2 models of Hot Bar Bonding & Soldering machines which are easy to use, robust and economical for bonding flex to rigid assemblies such as Flex to PCB, LCD-Flex to PCB, Flex to LCD, HSC to LCD, HSC to PCB.

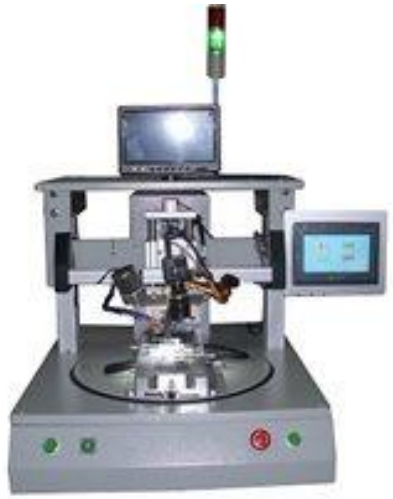


Features:

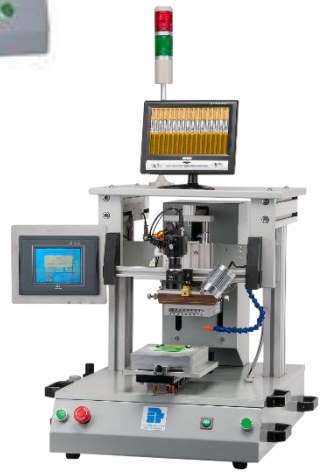
•Microprocessor-based controller provides precise and consistent temperature control.
•Unique pulsed heat thermode offers uniform temperature distribution, fast heating and cool-down.
•Flexible programmable profiles for targeted idle, preheat and reflow temperature.
•Floating thermode and digital pressure control.
•Manual shuttle of work; optional pneumatic shuttle.
•NEW: Bonder machine uses conductive adhesive film (ACF) for very fine pitch devices.
•Fancort can supply fixtures and thermodes
•"Smarttherm" constant heat-type machine for heat seal applications
•Optional CCD camera system and monitor

Fancort Pulse Bonding/Hot Bar Equipment

System Specifications	System PHM 1-1	System PHM 2-2
Dimensions	690mm(D)x520mm(W)x800mm(H)	840mm(D)x790(W)x280mm(H)
Weight	82kg	120kg
Work Table Type	Sliding	Rotary
Vaccum	1 Set	2 Sets
Air Supply	0.4 to 0.6 MPa	
Power Consumption	AC110V, 60Hz, 15 Amp max.	
Working Area	150mm x 200mm (normal); 250mm x 200mm (maximum)	



Thermode Specifications	
Maximum Thermode Area	400 mm²
Maximum Thermode Length	100 mm (normal)
Force Range	30 N @ 0.09 MPa to 600 N @ 0.6 MPa
Thermode Stroke	50 mm
Force Accuracy	±
Actuation Type	Pneumatic



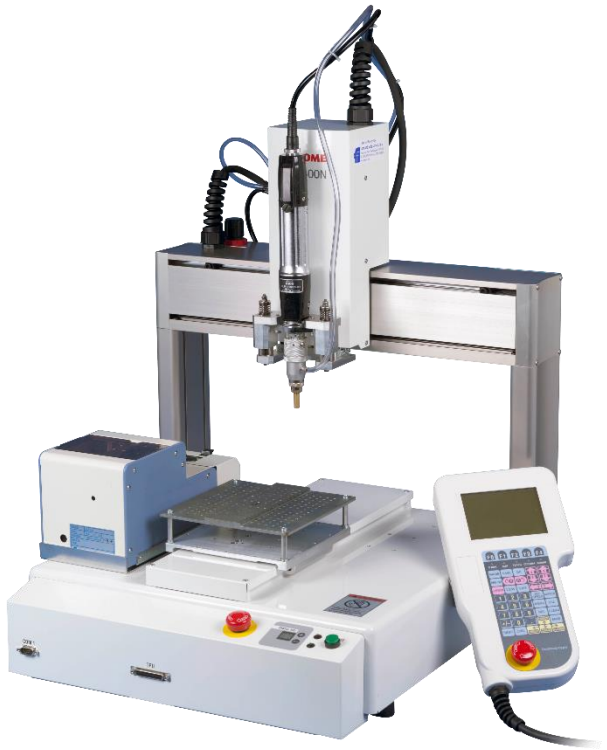
Fancort Industries – Pulse Bonding/Hot Bar Solutions

Thank you for your time. Please contact Steve Hoover (The Hoove!) with questions!!!

www.fancort.com

Fancort Industries

Desktop Screw Fastening



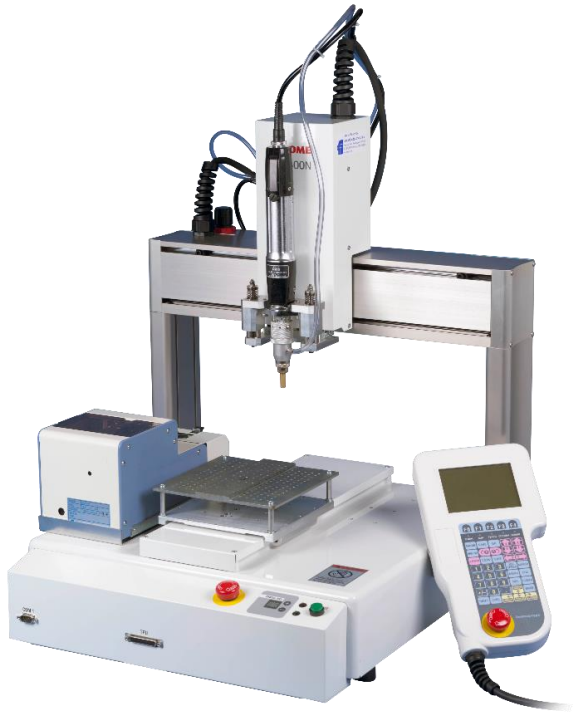
Fancort's family of desktop screw fastening solutions offer one productivity and value.

Oct 12-13 2016

Fancort Screw Fastening Equipment

Automated Screw Fastening for Medium to High Volume Production

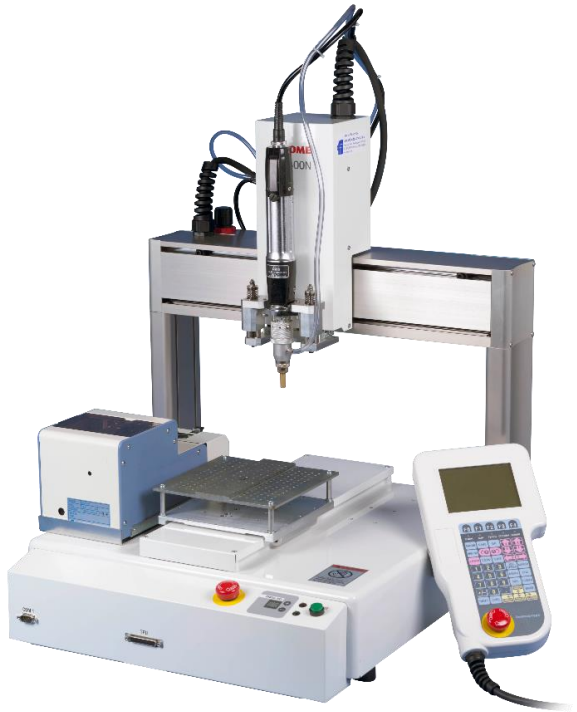
- Automatic screw fastening systems with desktop or SCARA robots will increase throughput on a variety of assembly applications. These systems are completely integrated and include robot (desktop or SCARA), electric drivers, screw feeder systems. Our automation department can customize the system to suit your needs.



Fancort Screw Fastening Equipment

Automated Screw Fastening for Medium to High Volume Production

- **Electric drivers** with mechanical clutch for routine screw fastening applications are the most economical with a torque range from .285Kgf.cm (.028N.m) and a tolerance of +/-6%. For tighter torque control and verification of torque values we offer servomotor drivers.
- **Servomotor drivers** are designed to more accurately control rotation and monitor torque by measuring the current to produce the correct torque value with a tolerance of +/-3%. Small and large drivers are available with a torque range from .07kgf.cm (.007N.m) for small screws, to 50Kgf.cm (5N.m) for larger screws. The driver uses a two-stage motion with high rpm at the start of the run-down cycle, a momentary pause and final torque setting at a slower rpm. The driver or robot can also monitor screw depth to ensure that the screw is properly seated and has reached the programmed torque value. The controller can store up to 16 programs. Another servomotor driver is available with similar features but can produce a data log in Nm.
- **Robot repeatable accuracy** of +/-.01mm.
- **Various screw feeder systems** are available that can be changed in less than five minutes for different screw types and sizes, including a blow feeder for higher volume applications.
- **Four models** of three or four axis robots with work areas from 200mm x 200mm x 50mm to 510mm x 510mm x 150mm, including SCARA robots for in-line production or large fixtures.
- Fancort is working to introduce lower cost and higher volume solutions.



Fancort Industries – Screw Fastening Solutions

Thank you for your time. Please contact Steve Hoover (The Hoove!) with questions!!!

www.fancort.com