



PCB Singulation Press

The Wand Singulation 2016-AT Press is a patented punch and die system designed exclusively to safely and accurately depanel populated printed circuit board assemblies with minimal stress. The press is extremely reliable and accurate and is ideal for medium to high volume, low-mix environments.

Operational Sequence

An operator places the populated paneled array onto the dedicated die. Once the panel is staged, the operator activates the shuttle by the anti-repeat, anti-tie-down palm buttons. The shuttle transports the tool into the enclosed cutting area for singulation. The bottom tool returns to the operator load/unload area — completing the cycle in less than 12 seconds.

For in-line processing, a robot can be incorporated to the press and configured with custom designed end-effectors to pick up the assemblies from the upstream conveyor and drop off the singulated assemblies to a preprogrammed downstream location.

Singulation Die

The 2016-AT Press uses a two-stage power package, which allows the tool to shear through the tab to completely remove it. The tool uses a perforator / punch and a die to remove the tabs from the array. The power package uses pneumatic pressure to approach the PCB. Once resistance is detected, the power package switches over to hydraulic pressure and the perforator gently shears through the PCB tab material.

Tooling weighs less than 90 lbs., and with the built-in quick-change design, product changeover can be completed in less than 3 minutes.

We offer the broadest range of singulation solutions, from tabletop and stand-alone routers to stand-alone and in-line punching systems. We have combined industry experience and proven technology to supply cost effective PCB singulation equipment and custom designed tooling to the electronics industry.

PCB Singulation Press

Machine Dimensions:

Width: 30"

Length: 62"

Height: 83.25"

Table Height: 33.75"

Weight: 3500 (±300) lbs

Facility Specifications:

Power: 120 VAC, 7 AMPS, 60 HZ, 1 Phase

Air: 85 PSI

Control Specifications:

Capacitive Palm Buttons

10.4" Touch-screen: Password Protection

STI Light Curtain

Panel Specifications:

Max. Panel Size: 18" [457.2mm] x 16" [406.4mm]

Max. Board Thickness: .070"

Max. Component Height - Top: 2.5" [63.5mm]

Max. Component Height - Bottom: 1.0" [25.4mm]

Component Free Zone: .060" from the edge at tab location

* Specifications are subject to change based on non-standard configuration.



The 2016-AT press is capable of punching individual or multiple populated panels within an 18" x 16" working area.

System Features:

Air/Oil power pack

PLC control

Structural tube frame

Completely guarded work area

Anti-repeat, anti-tie-down palm buttons

Automatic tool shuttle

Optional Features:

Quick change clamping

Electronically controlled storage elevators (stores up to four "Singulators")

Storage racks

Robotics for in-line processing



The Singulation Press is extremely accurate, reliable and fast. Panels are singulated in less than 12 seconds, regardless of the number of boards within the array.

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The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult Tyco Electronics for the latest dimensions and design specifications.

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