



ToolMaker™



Stop tooling around! Make your own! **Make your own dedicated tooling in pliable material (Tool™)**
Make your own! **Ideal for SMT machines, including the stencil printer.**

Overview

The award-winning ToolMaker 365™ enables in-house, on-demand dedicated tooling production of your unique PCB assemblies.

The patented subtractive technology utilizes simultaneous scan of PCB and route into Tool™.

Tool™ material has an optimized degree of pliability

- Dedicated tooling offers ensconced support both on PCB and components
- While metal tooling damage components upon contact, Tool™ flex material eliminates this risk

The component pockets are carved with a 1.5 mm perimeter margin.

The resulting dedicated tooling snaps into the relevant stencil printer with the use of risers that adjust for the tooling heights unique to each printer model or brand.

60 second setup

- No programming required
- Accepts input from
 - Physical PCB assembly
 - 3D digital assembly file

Available as a floor standing machine or table-top for reduced floorspace requirements

Dedicated tooling:

Keep the pros – Eliminate the cons

Dedicated tooling provides superior PCB support

inspire corrects problems with current dedicated tooling plates

- Replace days long wait with on-demand in-house production
- Reduce expense to < \$100 ea. tooling plate
- Stop sending sensitive assembly files to third parties
- Enable stencil printer vacuum to flatten the PCB
- Low weight

Low cost dedicated tooling on-demand

- The ToolMaker 365™ produces dedicated tooling for < \$100ea. in material.
- Production time for a small PCB is less than 1/2 hour
- Larger and complex PCBs may take 2 hours or more
- ESD
- Machine will run unsupervised until the tooling has been completed.

Improved stencil printability

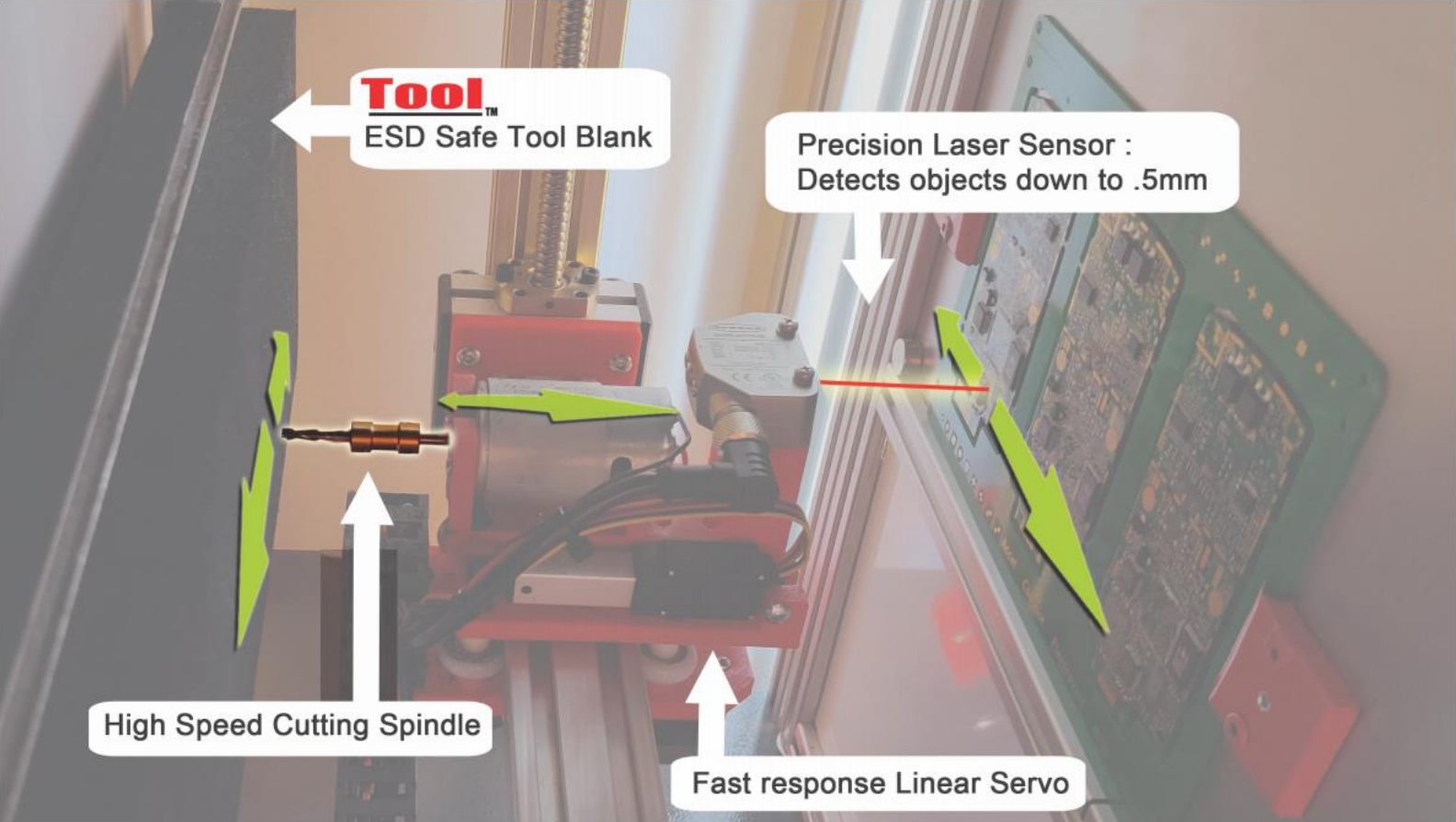
Tool™ pliability improves solder paste printing

Accommodates printer vacuum to flatten PCB

The printing challenge

- A “sandwich” of metal parts converging to create a good print leaves little margin of error.
 - Printer tower
 - Tooling
 - PCB
 - Stencil
 - Squeegee

A flexible dedicated tooling is forgiving = better prints
Use of vacuum to flatten warped PCBs prior to print



ToolMaker 365™ Machine Specs:

Dimensions:

Width: 610 mm / 24"
 Height: 610 mm / 24"
 Depth: 305 mm / 12"

Max tooling support area:

X Axis: 368 mm / 14.5"
 Y Axis: 368 mm / 14.5"

Will typically support a max PCB dimension:

X Axis: 380 mm / 15"
 Y Axis: 380 mm / 15"

Max component height:

16 mm / 0.62" (Taller height capability available upon request)

Z axis accuracy:

0.13 mm / 0.005"

Cutting rate: 1 minute per 25 mm square / square inch

Component pockets: 1.5 mm \pm 0.06" larger than components all around

Cutting tool diameter: 3 mm

Indexing in Y direction: 1 mm

Weight (with legs): 29 kg / 65 lbs

Power: 120/240 VAC 50/60 Hz

Tool™ Material Specs:

Composition:

- Polyethylene
- Carbon Black

Flash point: >300 C

Autoflammability: >300C

Explosive properties: None

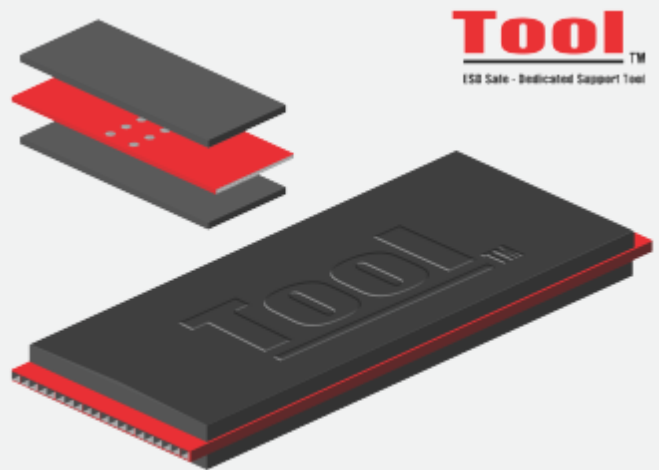
Toxicological information: In normal use no toxic effects are known

Ecological information: Material is inert and insoluble in water

Disposal information:

- Dispose according to local regulations
- Recycling possible

Transport information: Material is classified as non-hazardous



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