

<u>The GOLD Standard</u> in Compliant SMT Support Tooling

- > Automatic SMT Tooling 100% pneumatically operated
- Conforms to any PCB single or double sided
- Fastest tooling set up available today
- Eliminates manual pin set up
- No programming required
- Eliminates potential for cracked components (due to misplaced hard tooling pins)
- Enhanced and stabilized print quality due to more thorough support and consistent set up
- > Automatic Mode allows for hands free set up



<u>The GOLD Standard</u> in Compliant SMT Support Tooling

- > **<u>The People</u>**: Driven to maximize price/performance
- Jim Bernhard and Charlie Moncavage:
- Founders of Ovation/Grid-lok
- Over 20 years of combined experience inventing and applying compliant tooling

> **<u>The Products</u>**: Leading in every performance category

- Focused on Ease of Use and Cost Effectiveness
- Runs in Automatic and Manual Mode
- High Density Pin Pitch High Density Only!
- Low cost of Entry-<u>Starter Kits \$1950</u>

Start Small, Add as Needed



Advantages

> Highest Holding force in industry

(patent pending locking technology)

- Lowest upward force great for thin/routed pcb's
 - Other systems bow boards up without a backing
- > Higher upward force capable for thick pcb's
- > Highest Component clearance

13.5 mm and 27mm true clearance

Largest support area per pin



<u>OPTI-FLOW</u> Technology:



With Opti-Flow

- ✓ Add or Remove modules with <u>NO AIRFLOW</u> <u>ADJUSTMENTS</u>
- ✓ More Automated
- ✓ Removes Variability

Competition

Closed System = 2 Bad Outcomes

- **1. Remove Modules**
- ✓ Remaining Module pins come up much harder
- 2. Add Modules
- Remaining Module pins come up much softer....or NOT AT ALL
- = Constant Air flow tweaking required



> Mistake proof connections:

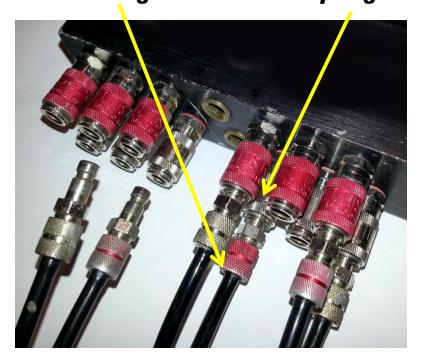
Male/Female (not color coded)

Quik-Tool





Competition – Red male fitting in a silver coupling





Advantages (cont.)

- Simple/Reliable Control System
 - One button hand held controller
 - All Air & Elec connections mistake proof
- Heavier pins more easily drop after reset
- Pins twice as thick won't bend easily!
- Support tips last much longer
- > Lower Maintenance
- Lowest cost of spares
 - Tips 1/10th the cost

***All at a lower cost







ROI Sample Calculation More Line Utilization = More Profit

- Line: 1 Printer and 2 Placement Machines
- Changeover Time Saved per Line = 10 minutes
- Changeovers per day = 3
- Line Utilization Rate = \$800 per hour (assumed profit generated per line per hour)
- Total Savings per Day = 1/6 hour x 3 x \$800 = \$400
- Quik-Tool cost on Line \$15,800 (5 module kit on printer, 3 module kits on 2 Placement machines)
- Payback in 40 days!





Machines:

<u>Printers:</u> Speedline(MPM), EKRA, DEK, Speedprint, ERSA, GKG, SJ Innotech, essemtec

<u>Placement:</u>

Siemens(ASM), Universal, Juki, Mydata, Samsung, Assembleon, Fuji, Europlacer, Panasonic,

...and MORE!



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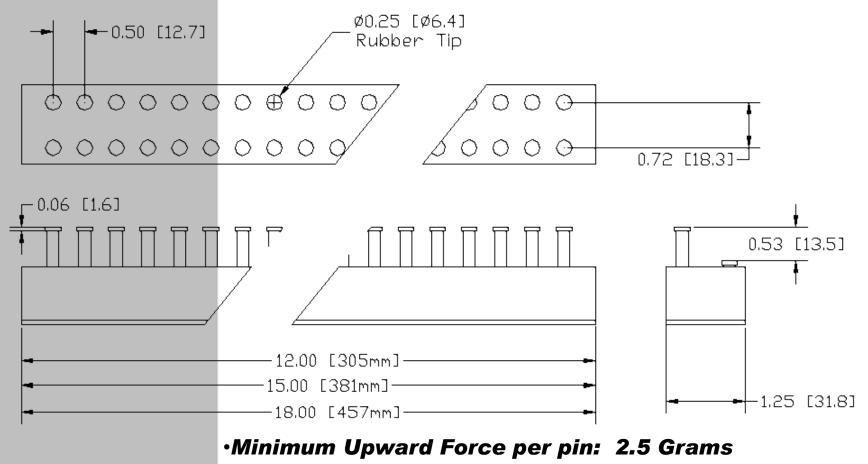


www.quik-tool.com



Standard Module Specifications

Minimum Module Height with Pins extended: <u>39.5mm</u>

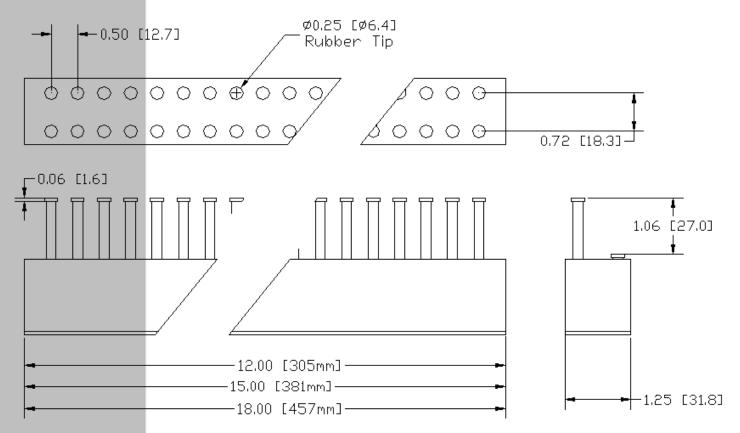


•Holding force per pin at 90 PSI: 2000 Grams



Z-MAX Module Specifications

Minimum Module Height with Pins extended: <u>66.5mm</u>



Minimum Upward Force per pin: 2.5 Grams
 Holding force per pin at 90 PSI: 2000 Grams