

# Shenzen Mactech Electronics Co., Ltd. SMT SOLUTIONS

**JUKI Electronic FEEDER Evaluation Report** 



## **JUKI Electronic FEEDER Evaluation Report**

- Efficiency Comparison with MT Juki Electronic Feeder
- Pick up Rate Comparison with MT Juki Electronic Feeder
- Picture Comparison between MT Electronic and Mechanical Feeder
- Feeder Calibration Comparison



#### 1. Efficiency:

Tested in 4 machines, each analyzed with Single PCB and Double PCB Panel production. The following are comparisons between Original Mechanical Feeder and MT Electronic Feeder; efficiency can be increased by 22.47% with MT Electronic feeder in Double PCB Panelization production.

Machine Type	<b>Pick-up Rate</b> For 1PCB 2H	Pick-up Rate For Double PCB Panelization 2H	Double PCB Panelization efficiency of pick up (%)	Pick-up rate by Double PCB Panelization and MT Electronic Feeder	Improved Efficiency by Double PCB Panelization and MT Electronic Feeder (%)
А	39983	54580	36.51%	67840	24.29%
В	14400	31052	115.64%	39576	27.45%
С	34928	69120	97.89%	84521	22.28%
В	34800	66071	89.86%	76549	15.86%

Efficiency Improved:

22.47%



#### 2. Pick-up Rate Error

Export data from 4 production machine. Average pick up error by MT Juki Electronic Feeder is 0.47%, while average pick up error for Original Mechanical Feeder is 3.6%. Pick-up rate error drops down by 0.3% using MT Electronic feeder.

Pick up error rate using MT Juki Electronic Feeder	ng MT Juki Electronic Feeder	Pick up error rate using
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Machine	Pick-up Attempts	Pick-up Rate	Component Mounted	Pick-up error	Pick-up rate (%)	Pick-up error Rate (%)
А	627903	627705	626806	198	99.969	0.031
В	113605	113571	113406	34	99.978	0.022
С	326648	326281	325358	367	99.887	0.113
D	169483	169402	169216	81	99.95	0.023
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Average Pick-up Error
Rate: 0.04725

### Pick up error rate using original mechanical Feeder

Machine	Pick up Attempts	Pick Up Rate	Component Mounted	Pick up error	Pick up rate (%)	Pick up error Rate (%)
А		456974	456785	189	99.619	0.381
В		357548	357347	201	99.667	0.333
С		324876	324712	164	99.695	0.305
D		293356	293223	133	99.582	0.418

Average Pick-up Error Rate:

0.359

