

SOLDER PREFORMED FEEDER



*"Best alternative solutions for
all of your SMT needs".*

Status Description

Miniaturization of electronics gradually, how to weld the tiny electronic parts on PCB intact, have no missing solder and short beat the SMT engineers' brains out. The bigger challenge is that these are not the only parts that need welding, because of the technique limits and consideration of cost, some parts can't be minimized yet(such as: most connector, USB plug, battery, coil, large capacitor...). Therefore, largely small electronic parts will be crowded into one board.

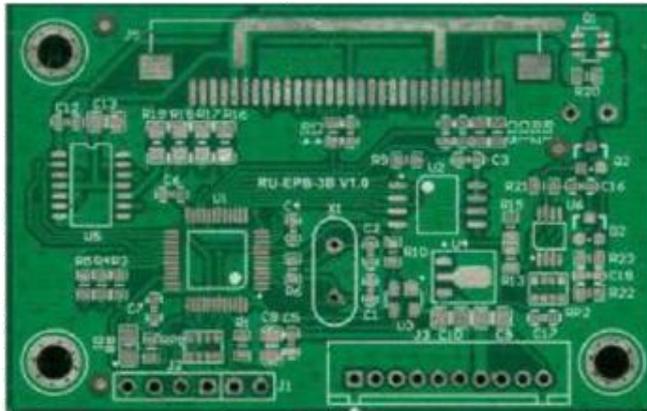


Since bigger parts require more solder to be printed on the solder joint, to ensure the reliability of the solder.

Small parts require more precise and fine solder paste control, otherwise, it is easy to cause the problems of soldering short or empty soldering.

But the solder paste (Volume) generally decided by the thickness of stencil and aperture, but the thickness of same stencil is basically the same, the thickness of stencil which is suitable for small parts won't be suitable for bigger parts. The rest can only be controlled by the aperture, aperture can not solve this problem also, it seems to be your problem.

At present in the general practice of the electronic industry is to make stencil paste volume condense to small parts, and then use different methods to increase local paste volume, as compared to small amount of solder volume bigger solder volume was more difficult to control.



Solutions

Increase solder volume manually



Advantages:

- High Maneuverability / Flexible

Disadvantages:

- Increasing labor cost
- Quality is not guaranteed
- Bad consistency
- Easy to make mistake

Solutions

Automatic spot-welder add solder volume



Advantage:

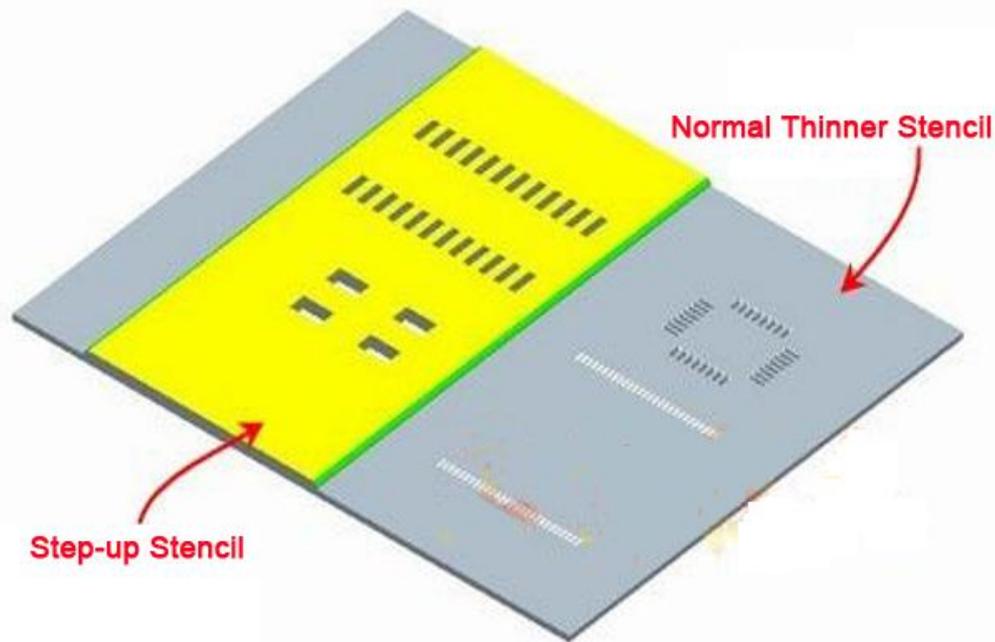
- Auto Add Solder

Disadvantage:

- Increase equipment investment

Solutions

Adopted Ladder Stencil For Improvement



Advantage:

- Normal Thinner Stencil can overcome the unfairness for the leads of parts
- Step-up Stencil is able to control the short for the leads of parts

Disadvantages:

- Stencil cost rise 20%~30%
- Hard to make Step-up Stencil
- Solder volume is limited
- The thickness can only increase about 0.12

Solutions

Adopted Solder pre-forms



Advantage:

- Add solder pre-reflow, convenient
- Effective solder added
- No residue

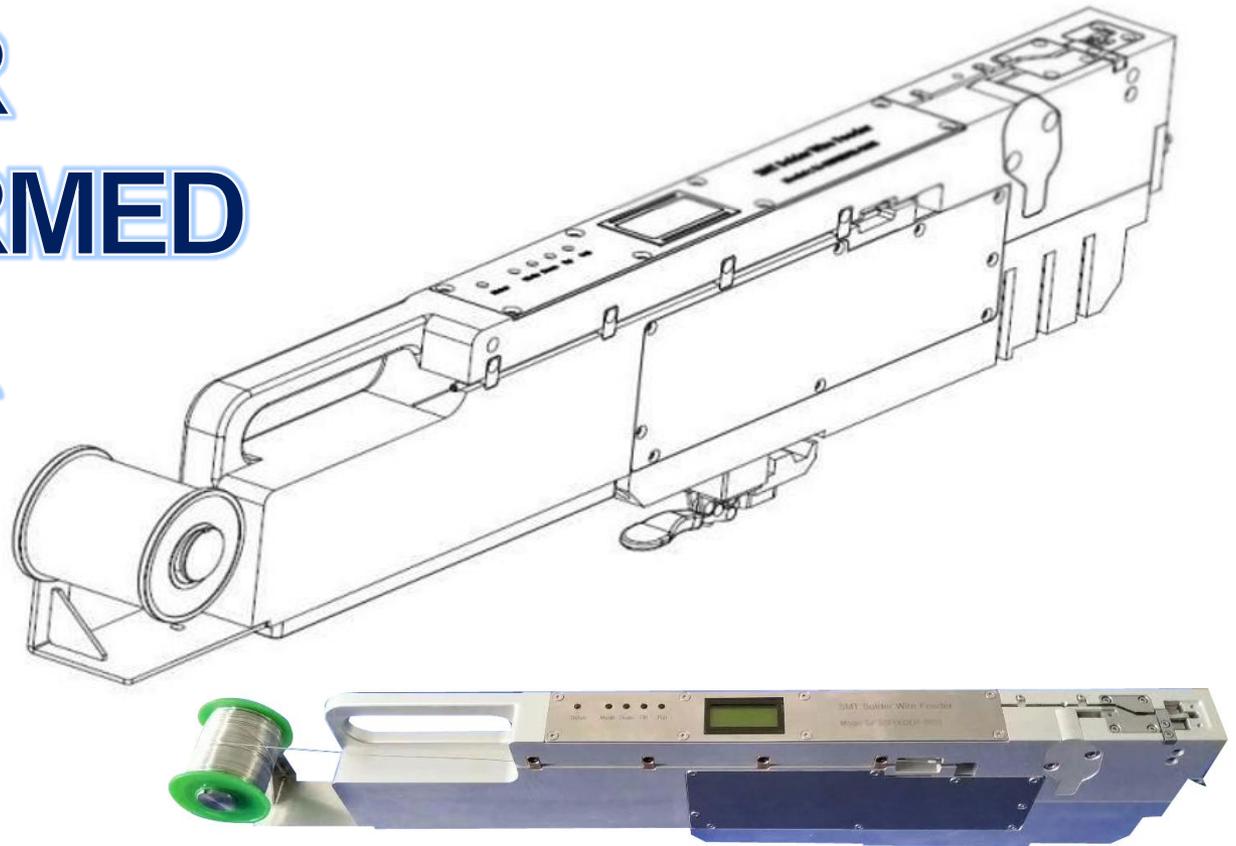
Disadvantage:

- Expensive

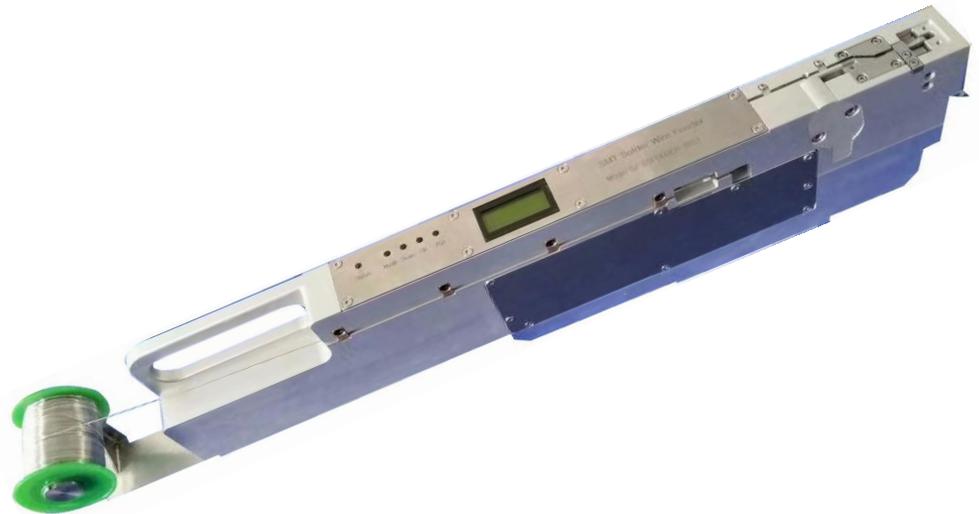


INNOVATIVE SOLDER ADDED SOLUTION

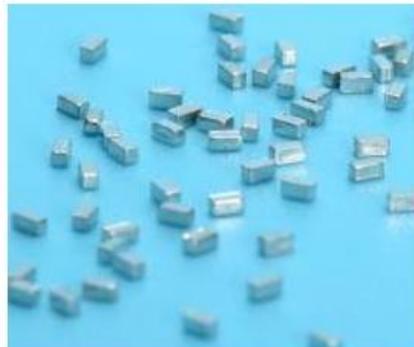
**SOLDER
PREFORMED
FEEDER**



Lead-free/lead solder wire can be pressed into solder plate through the central of feeder and then cut into 0603, 0805 1206 or customized size component) and feed those component into pick up area and pick up by all brand of SMT machine.



THIN WIRE



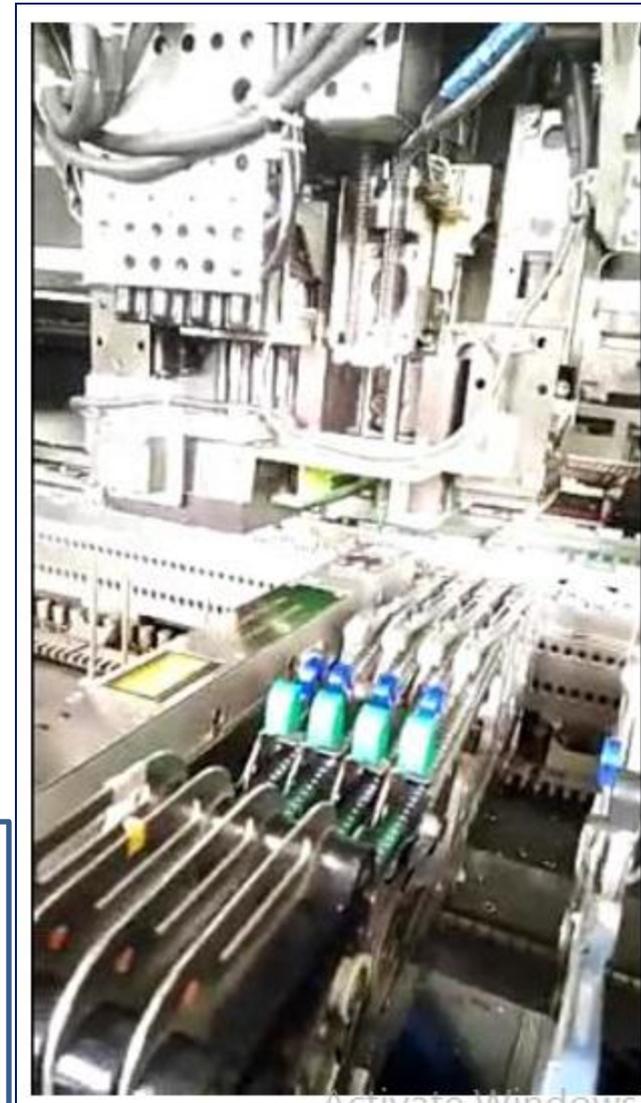
SOLDER PLATE



SMT

Features

- 0.25 sec / grain, high efficient
- Pure electric, precision cam group, low noise
- Width : 36mm, small volume, light weight
- Automatic & manual mode, electronic screen
- Customized any brand mounter and type
- Customized solder plate size
- Corresponding to any brand solder wire

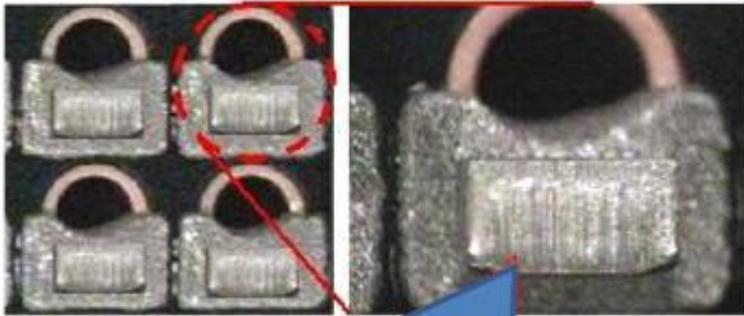


Features

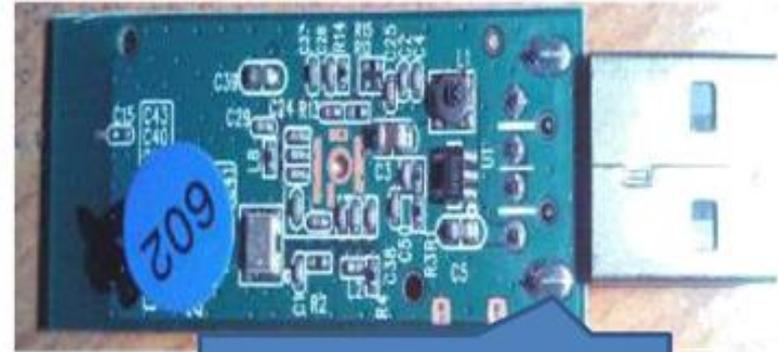
- Apply to any occasion with particular needs for solder shape and quality
- Collocation use with solder, improving metal content, enhance solder join
- Reduce splash and residual of flux efficient
- Make sure high consistency of soldering
- Flux in solder paste surface, avoid gluing flux manually
- Reduce labor cost and quality stability caused by artificial factor
- Good solderability, no-clean, environmental, convenient



A manufacturer who mainly produce H's network card series products. There is USB head in 90% network card now, at the request of H, in need of mounting 0805 preformed solder in USB's head to increase the intensity of soldering. As shown below;



Surface Mount
Solder Plate



Reflow Solder
Joint Formation

Manufacturer use FUJI series Mounter equip with SHENJI patented " Automatic solder paste moulding Feeder ". Reducing the solder added cost, and exceed expectations.

According to solder added capacity

40K /day (PCB totals)

80K /day (paste totals)

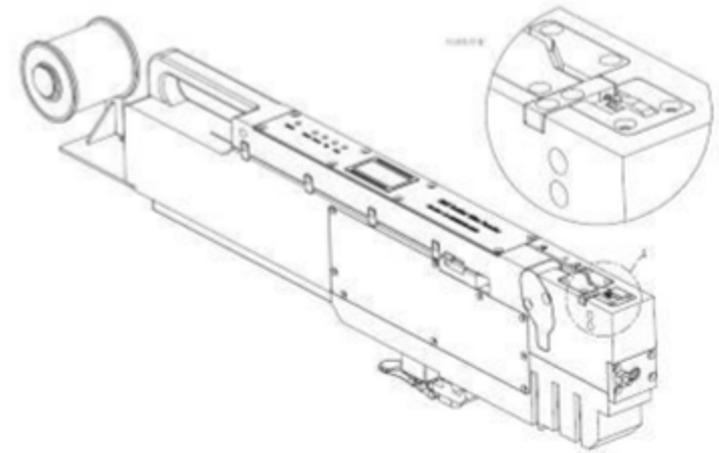
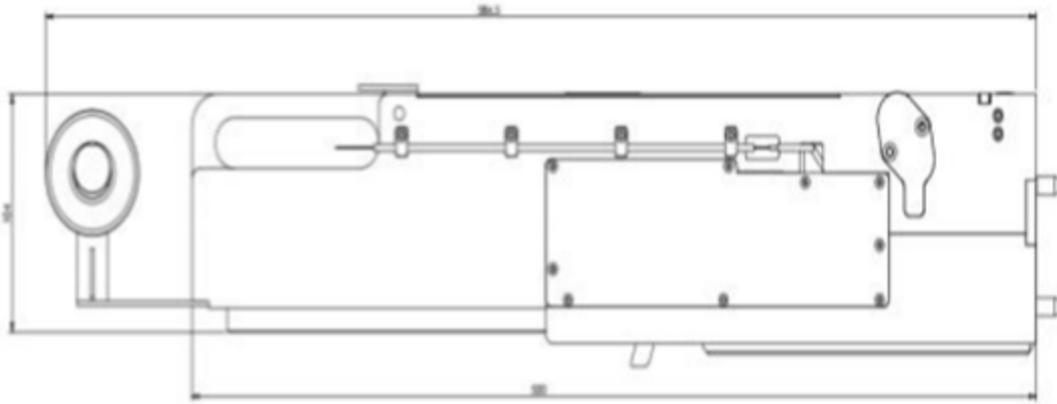
30 days each month

COMPARISON BETWEEN SOLDER PREFORMS & SOLDER WIRE		
	Solder Preforms	Solder Wire
Price	USD 0.0021	USD 0.0013
Consumption	2,400,000	2,400,000
Cost	USD 5,040.00	USD 3,120.00
COST SAVING:		USD 1,920.00

Compare to preformed solder, save cost: 95.68%



Feeder Image



SJ-SSFeeder-XXXX	weight	size
	3.5 kg	(L) 500 × (W) 36 × (H) 100 mm ※