

## THE "BEAVER" MODEL DIP SOLDERING MACHINE



Designed to solder most small to medium size coils and transformers, with many extra features to aid production.

- \* Automatic / pedal indexing.
- \* Optional turnover on flux and solder stations.
- \* Individual time setting for first and second solder operations.
- \* Patented, simple solder de-dross system.
- \* Recirculated flux system, with auto drain on shut off.
- \* Full wrap around guarding.
- \* Extractor fan with filter.
- \* Digital Batch Counter
- \* LCD display of flux and solder height

(see additional pages BEAVER)





## **BENCH TOP DIP SOLDERING MACHINE**

### **MODEL "BEAVER"**

Universal and ingenious designed four station round table soldering machine.

For flux and solder of parts, coils, transformers, printed board, cables and more.

Automatic test, automatic tag bent, automatic tag press for wire release as well as turn over 180° stations possible.

Easy handling and very quick change over times makes this machine for your ideal partner to produce your medium and large quantity production.

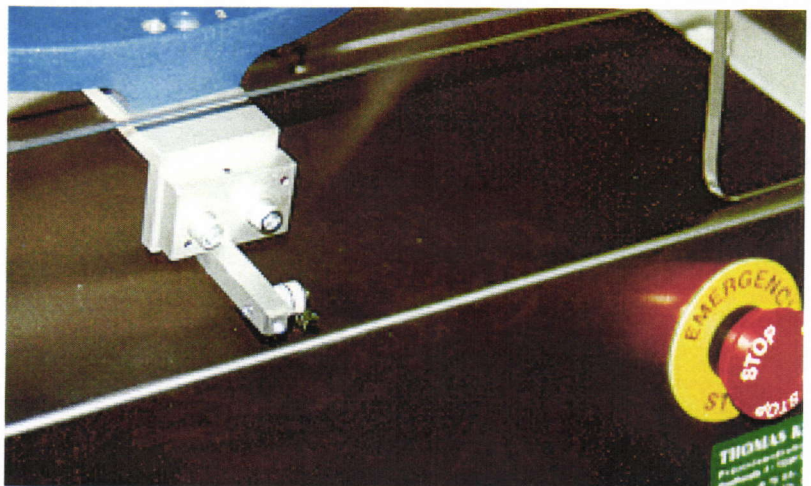
Uncomplicated technology and longlife components makes you as the client happy and is a basic of REEF philosophy.

### **Load/Unload**

The load and unload process happens manual at the front of the machine.

By integrated safety unit the turret will stop in case of emergency.

The output in the safety cover around the machine is able to be modified after clients requirements. There is an emergency stop button close to operator's position



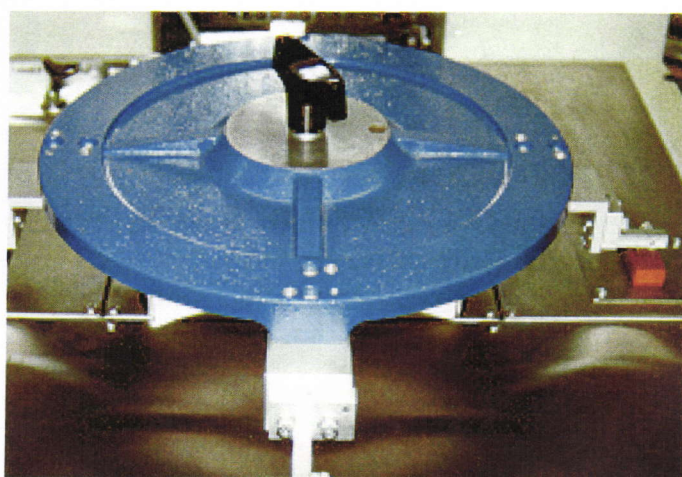
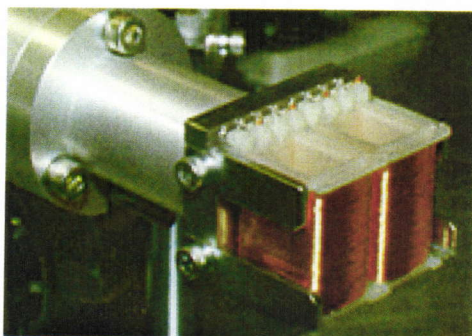


## Tooling

The machine owns a turret with 4 angle brackets. Various designed toolings can be mounted to this brackets. Not only single toolings but also double toolings. The change over of toolings can be done by simple change of each tooling. The toolings are fixed with a precise two point connection. The toolings are hold by one screw and one pin. With change over turret all parameters of flux and solder heigth are automatically set.

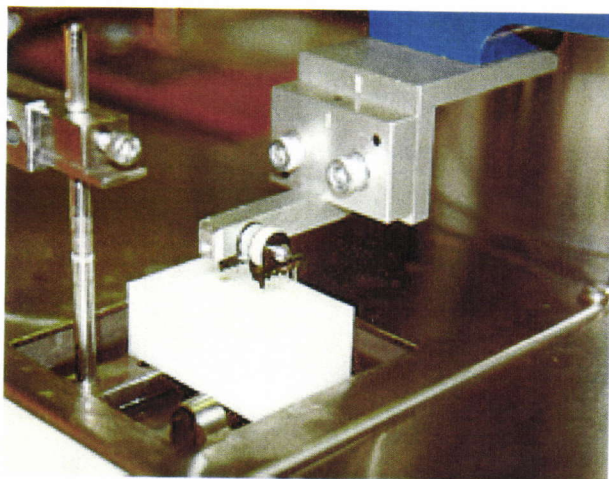
(Pict. rigth Turret with quick change over screw)

(Pict. below Single tooling)



## Flux station

The first station after load is the flux station. The flux lift pot will come up to the pins or parts and dip in the area to be soldered. The adjustment of lift pot heigth can be adjusted easily by mechanical screw. The actual lift heigth is shown on a LCD display in 0,1 mm steps.



To avoi dirty machine the flux is permanent pumped from pool tank to work tank. The lost thinner can be replaced easily by simple mechanical unit. In case of switch off the machine, all flux will run to the pool tank. To clean work tank just pump thinner at time through the work tank.

The main tank with Heidolph pump takes approx. 5 liters.

(Pict. left single Flux station on bobbin EP-13)



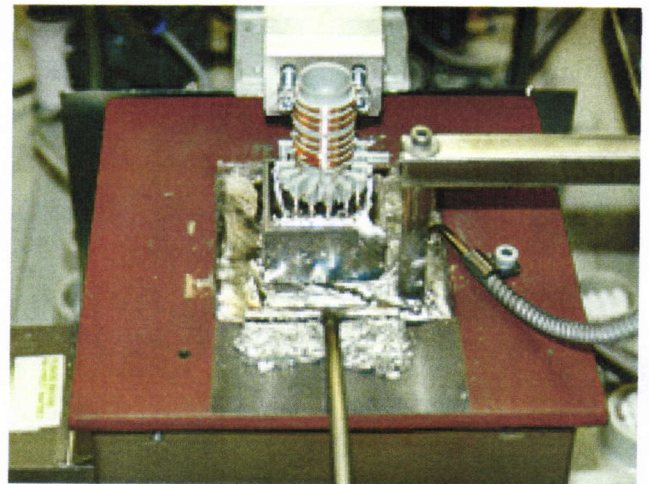
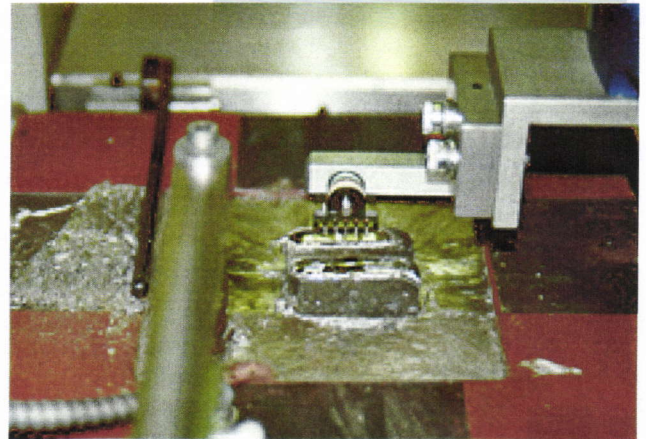
### Solder station

On this important station the parts will be soldered. By exact setting of solder time up to 9,9 sec. in steps of 0,1 and a temperatur control up to max. 550°C, you have the possibility to work on all normal solderable and high temp. resistance copper wires on the market. By using our patented de dross system there will be always a dross free area in the solder lift pot to guarantee a perfect soldering process. This patented special de dross system works within a solder level difference of 5-8 mm and the consumption of solder material is minimised.

The adjustment of lift pot height can be adjusted easily by mechanical screw.

As option a mechanical scraper and automatic solder feed can be mount on

(Pict. right mechanical scraper on a FBT)



### Exhaust

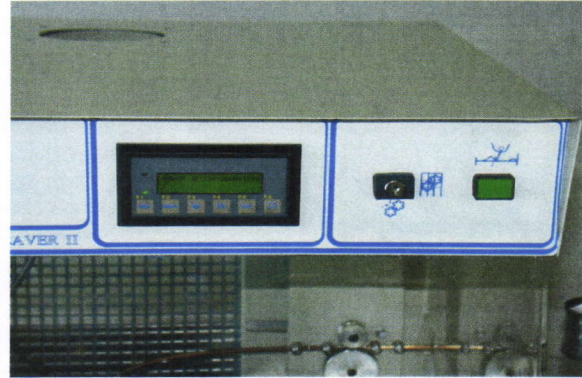
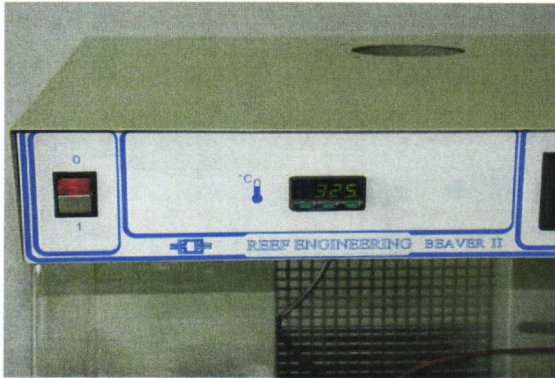
Over the top of the solder station there is a ventilation, prepared for connection to your central exhaust.

### Turnover Station

For different parts it is necessary to solder 2 points on 180° turned position. (Transformers, Coils.) For this application, the machine can be equipped with a turnover station. By air cylinder the toolings will be turned between 1st and 2nd flux and solder process. The solder time for second soldering is separately programmable up to 9,9 sec.



## Settings

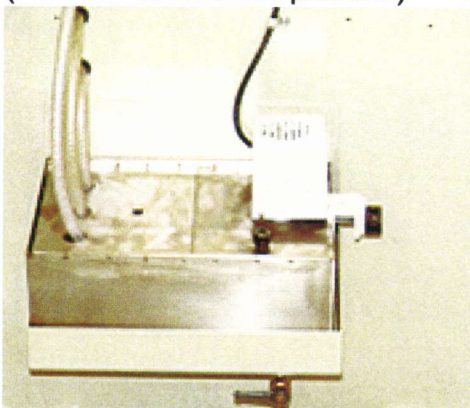


(Pict. above Operation panel for settings)

The temperatur setting can be done by simple turning the controm knop. The set temperatur is shown on a scale. If set temperatur has not reached the funktion of lift arms is blocked. Reaching the set temperatur is shown by a LED.

Solder times will be set by switches, in 0,1 + 1,0 sec. steps.

The setting of dipping depth at flx and solder station will be set directly at the station in the lift unit by mechanical screws with special fixing.  
Machines with turnover unit do have additional a LCD display for Lift unit heighths.  
(Flux & Solder sepearate)



## Flux & Density

The flux material s stored in the external flux tank below the machine.

(see pict. on the left)

As an option this tank can be replaced by an automatic density controller.

This automatic density controller Model AFD 1is easily set up for different densities and drives automatic always the same density. Please ask for detailed quotation about AFD 1.