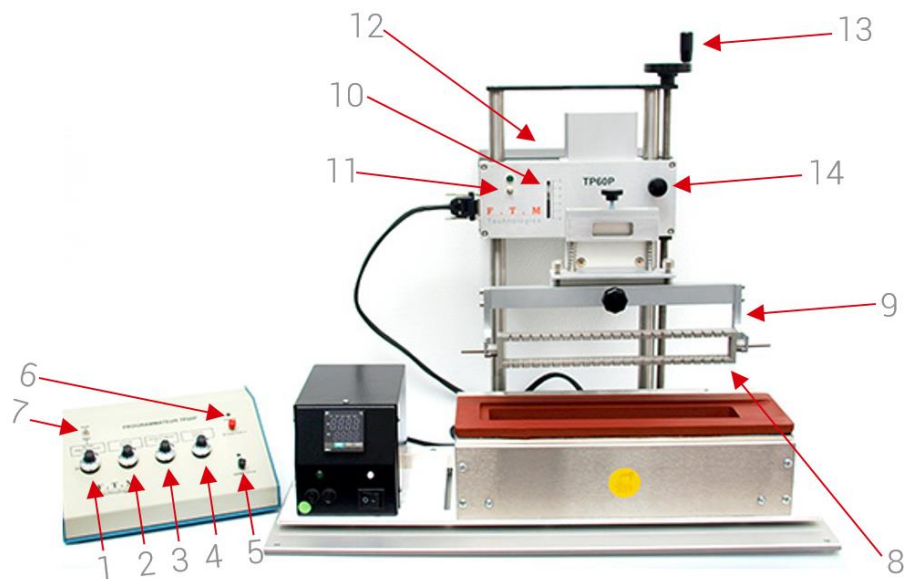


Tinning system



ref. TP60P

The TP60P is a robot for conveying components or copper wires during tinning, degolding or fluxing operations with the following adjustable parameters: Input speed, output speed, preheating time, immersion time.

Thanks to its very precise parameters, it makes it possible to avoid bridging between the component leads at the exit of the tinning.

Robot compliant to NF C 20 720 standard relating to the procedures of the brazability tests.

Technical data	
Dimension of supporting plate	600 mm
Overall height	580 mm
Robot course	60 mm
Mains supply	230 V – 50 Hz
Component holder width	300 mm

Description of the picture:

1. Setting of the preheating time by approaching the tool of the molten tin (from 1 / 10th to 10 min). Allows the preheating of a component for example to avoid thermal shocks
2. Speed adjustment input in the alloy from 0 to 30 mm/s
3. Setting the dipping time in the alloy (0.1 to 10s)
4. Setting the output speed of the alloy from 0 to 30 mm/s
5. Start cycle (also 11)
6. Reset
7. Switch with or without preheating stop
8. Component holder (not included)
9. Barrette holder
10. Preheating pause position indicator
11. Start cycle
12. Adjusting the height of the preheating pause
13. Setting the block to "0" (depending on the bath used)
14. Locking the block assembly

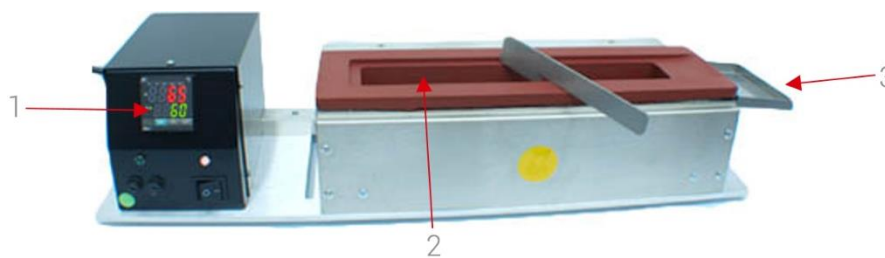
Steps of tinning

1. Putting the components on the support
2. Fluxing of component
3. Setting up the support on the robot
4. Setting the following parameters:
 - Entry speed
 - Output speed
 - Preheating time
 - Dipping time
5. Getting started with the robot

To equip a full tinning machine you will need :

- Tinning robot TP60P
- Tin bath (300x50 – 300x50D – 300x90)
- Component holder barrettes (to be defined according to the application)
- Fluxing set (flux tank, possibly pantograph)
- Possibly component holder loader

Thermoregulated tin bath BE300X50



Technical data	
Mains supply	230 V / 50-60 Hz
Power	1600 W
Capacity	5 kg
Dimensions	Crucible : 300 x 50 x 45 mm
L x l x H mm	640 x 200 x 150
PID Regulation from 0° to 600°C with aimed temperature	

Description of the picture:

1. Dual display PID controller
2. Machined rails for scraping slag and checking the level of the alloy
3. Slag recovery tank

The bath is compatible with lead-free alloys

In principle, a tinning and component removal station must have two baths, one for the degolding, the other for tinning because there is possibility of pollution if only one bath is used.

Three solutions are possible:

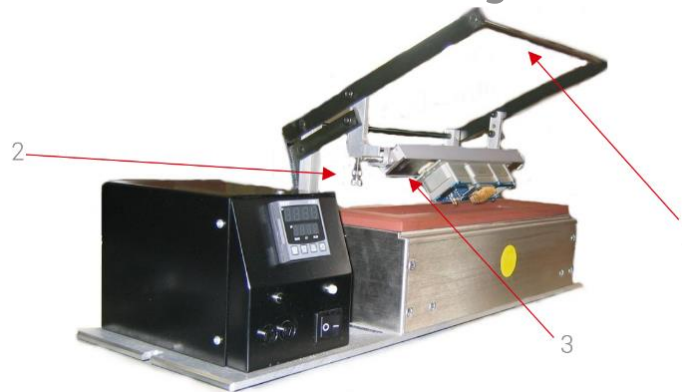
- Use of two complete sets TP60P with a dedicated bath for each operation
- Performing the less precise degolding with a manual pantograph and a dedicated bath (see below)
- Degolding and tinning in half with a single TP60P and a double crucible bath (see below)

Double crucible bath for simultaneous degolding and tinning



Ref. BE300x50D

Manual tinning



Ref. PANTO

This pantograph mounts very easily to the BE300X50 (or BE300X90) tin bath and can be used as the degolding station. Manual pressure on the lever (1) makes it possible to lower the component bar (3) to a depth determined by a stop (2) previously set. The pantograph accommodates the same bars as the robot, but does not have of course the dipping time settings and the bath inlet and outlet speeds which can cause bridging between the legs of the components. This is not important because they will be eliminated during the transition to tinning with the robot.

Fluxing

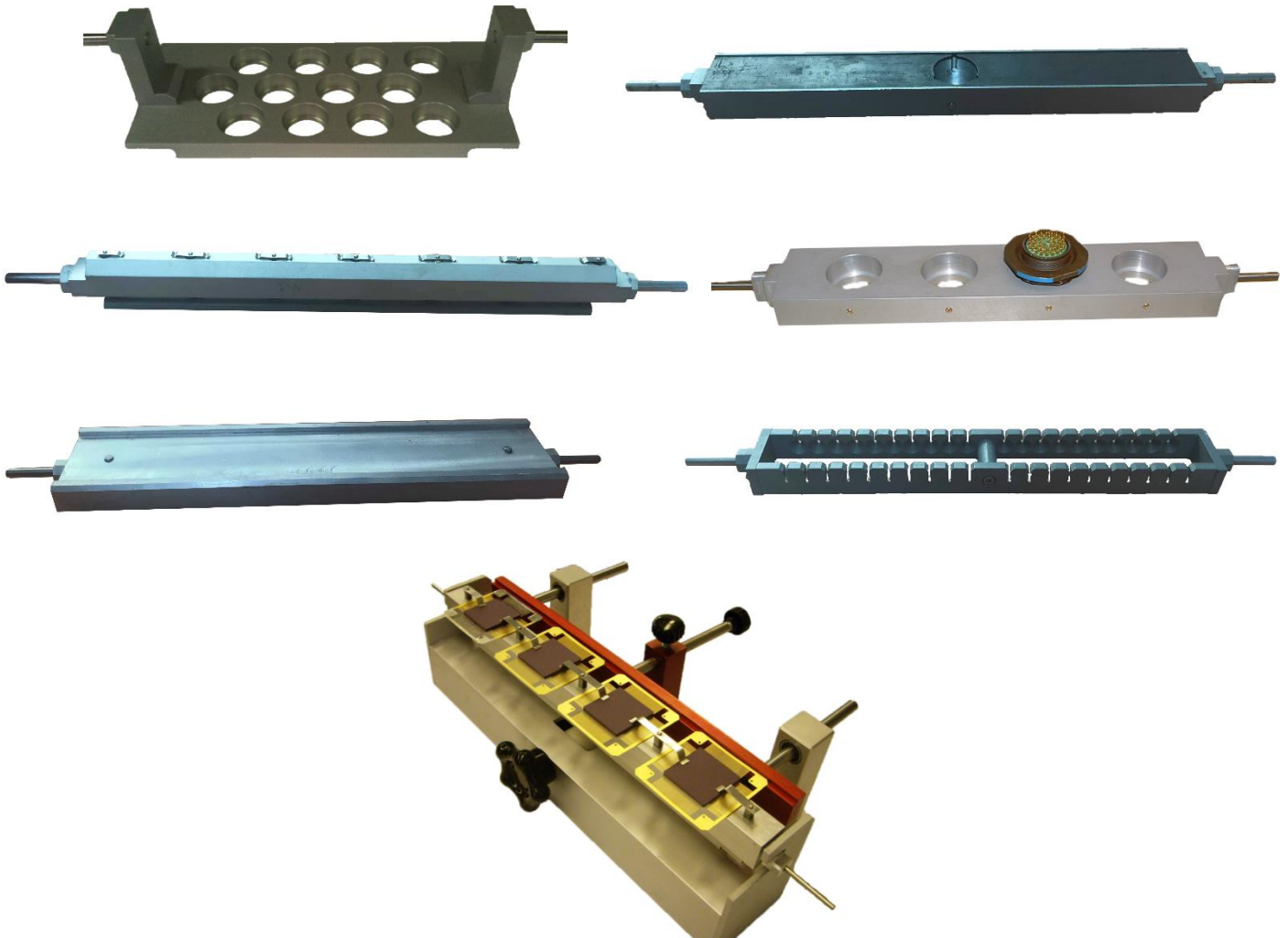


Ref. BAC_A_FLUX+_PANTO

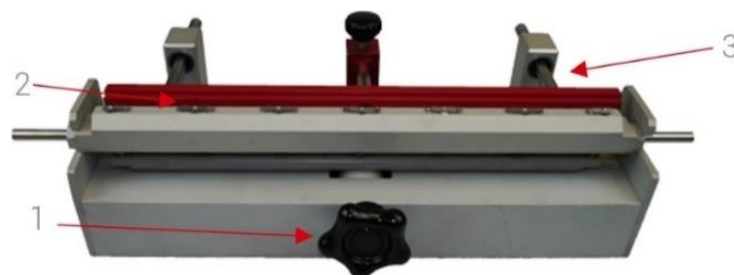
The fluxing can be done in the same way, with a fluxing bin topped with a pantograph.

Component holder barrettes

Examples of tools developed for different tinning applications. Contact us for your projects.



Component holder loader



This device has been designed to facilitate the loading and unloading of components on holders mainly those concerning the hybrid components, Flatpacks, Quad packs etc. A knurled knob (1) lifts the springs (2) to let the components through. In addition, this device allows its adjustable stop (3) to center the component on the bar to be able to tin the two sides by turning it.