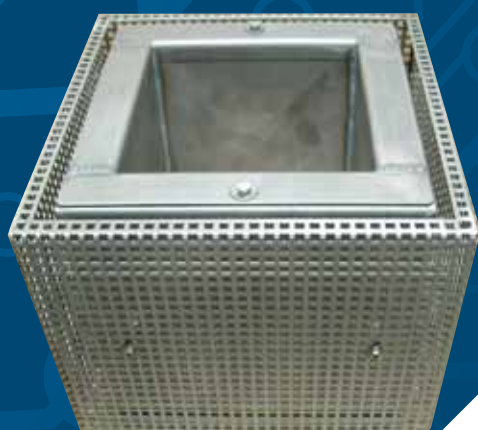


A French manufacturer serving professionals

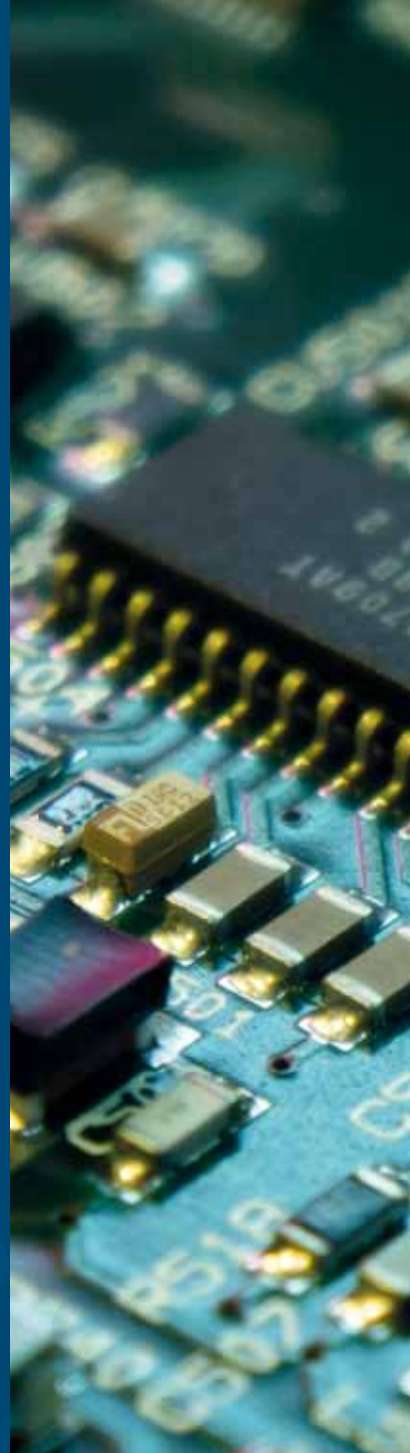
Wire stripper, soldering pliers,
static solder bath,
Mini-Wave Selective,
accessories for solder bath,
hot plate, etc.



Products from stock and
«made-to-measure»,
a full range to equip
your workshop



F . T . M
Technologies



Stripping, sheath stripping, insulation stripping

The thermal stripper is designed for performing wire insulation stripping called **“high temperature”** like kapton or teflon, without damaging the wire core.

With the Power Unit BDT1A

ergonomic

a pleasant grip

rapid temperature rise through advanced electronics

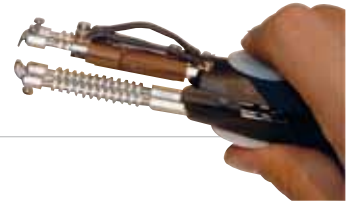
automatic identification by the block BDT1A of the plier model

Pliers and power units are supplied separately, but the pliers cannot function without BDT1A



Power Unit BDT1A
(plier grip heating)

PC3/5: Constant pressure plier for twisted wires, unique process



PC3N: Standard plier

PC3NP: Light and handy for AWG 28 to 36



PC4N: To strip further through its inclination. Ideal for sheath stripping

KIT.REG: Allows direct reading of the stripping length



PC3NEG182022: Defined gauge plier

CCT: Thermal knife (braid cutter, frets, etc.)



Table of power supply unit / pliers / electrodes matches

PLIERS ELECTRODES	POWER UNIT						
	BLOC BDT1-A						BLOC BDT3-A
	PC3N	PC3NP	PC3/5	PC3NEG18	PC3NEG20	PC4N	PC3NC
FOR AWG GAUGES	From 8 to 28	From 26 to 30	From 8 to 28	From 18 to 22	From 20 to 24	Less than 8	From 8 to 28
Twisted wires			•				
Electrodes EEDT2	•		•			On demand	•
Electrodes TEDT2	•		•				•
Electrodes EPNP		•					
Electrodes EG182022				•			On demand
Electrodes EG202224					•		On demand
Electrodes EDT2PA	•		•			•	•

EEDT2

EDT2PA

EG182022

TEDT2

EPNP



BDT1A Technical Characteristics

Power Supply	230 V / 50 Hz
Variable secondary power	0 to 2.1 VAC
Capacity	80 W
Dimensions L x W x H mm	250 x 95 x 150 mm
Triggering the heating	On gripping of plier

With the Power Unit BDT3A

Heating integrated in the plier

Best possible layout of the work station

Triggering the heating when the pliers are closed



PC3NC

BDT3A Technical Characteristics

Power Supply	230 V / 50 Hz
Variable secondary power	0 to 2.1 VAC
Capacity	80 W
Dimensions	L x W x H mm 250 x 95 x 150 mm
Triggering the heating	On gripping of plier

Other pliers on request

Soldering by Joule effect

Soldering by Joule effect consists of pinching the parts to be assembled together, to bring a tin alloy, then rise instantly to the desired temperature (up to 1,100°C).

With soldering by Joule effect

better heat distribution than a soldering iron

no component overheating

instant **rise to temperature**

mechanical holding of the piece

handling of the piece



Model	SI 1R	SI 2R
Power Supply	230 V / 50-60 Hz	230 V / 50-60 Hz
Capacity	80 W	250 W
Dimensions L x W x H mm	200 x 100 x 100 mm	300 x 190 x 210 mm
Electrodes references	ESI1R - Batch of 5 pairs	ESI2R - Batch of 3 pairs

Static solder bath

All our products are compatible with lead-free alloys

The tinning operation consists of applying a thin layer of tin-based alloy on a metal part. These means allow operations of removing enamel and gold.

Solder Bath BE600N

- check of the alloy level
- adjustable temperature
- cast-iron crucible cylindrical high load resistor
- type J thermocouple (included)



BE 600 N : Large surface 100x150

BE600N Technical Characteristics

Power Supply	230 V / 50-60 Hz
Capacity	1 600 W
Working dimensions L x W x H	Crucible 150 x 100 x 55 mm
Overall dimensions L x W x H	480 x 280 x 155
Weight of solder	About 9 kg
PID adjustment	from 0° to 600°C with adjustable setpoint

Solder Pot PE600NAD

- suitable for tinning or de-enamelling wires and connections of components (manually).
- cast-iron crucible, cylindrical high load resistor,
- type J thermocouple (included).



PE 600NAD : Small capacity quick temperature rise

PE600NAD Technical Characteristics

Power Supply	230 V / 50-60 Hz
Capacity	600 W
Working dimensions L x W x H	Diameter Crucible Ø60mm – Dip Crucible : 60mm
Overall dimensions L x W x H	300 x 140 x 140
Weight of solder	About 1.5 kg
PID adjustment	from 0° to 600°C with adjustable setpoint

Solder Bath BE300x500 / BE 300 x 90

- suitable for tinning or degolding series parts
- can be equipped with a manual pantograph or automatic tinner (TP60P)
- check of the alloy level
- cast-iron crucible cylindrical high load resistor
- type J thermocouple (included).

BE 300X90 : High capacity (idem BE300X50)



BE 300X50 SEP : Example of separation possibility into two of the crucible of a bath of 300x50 or 90

BE300x50 Technical Characteristics

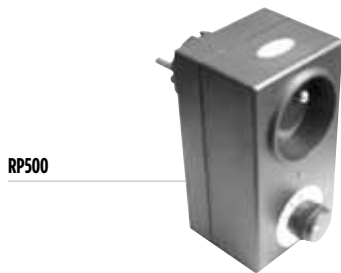
Power Supply	230 V / 50-60 Hz
Capacity	1600 W
Working dimensions L x W x H	Crucible 300 x 50 x 45 mm
Overall dimensions L x W x H	640 x 200 x 150
Weight of solder	About 7 kg
PID adjustment	from 0° to 600°C with adjustable setpoint

BE300x90 Technical Characteristics

Power Supply	230 V / 50-60 Hz
Capacity	2400 W
Working dimensions L x W x H	Crucible 300 x 90 x 55 mm
Overall dimensions L x W x H	640 x 200 x 150
Weight of solder	About 9 kg
PID adjustment	from 0° to 600°C with adjustable setpoint

Solder Pot PE500

- suitable for wire tinning and degidding of component legs and their pre-tinning.
- cast-iron crucible, cylindrical high load resistor,
- **Mandatory use with an RP500 power regulator to adjust the temperature**



PE 500 : Economic solder bath without regulation to use with RP500



PE 500 Technical Characteristics	
Power Supply	230 V / 50-60 Hz
Capacity	500 W
Working dimensions L x W x H	Diameter Crucible Ø60mm – Dip Crucible : 60mm
Overall dimensions L x W x H	140 x 140 x 140 mm
Weight of solder	About 1 kg

Made to measure

Our position as a designer and manufacturer of all our production allows us to offer you all our solder baths made to your requirements, depending on your operating needs.

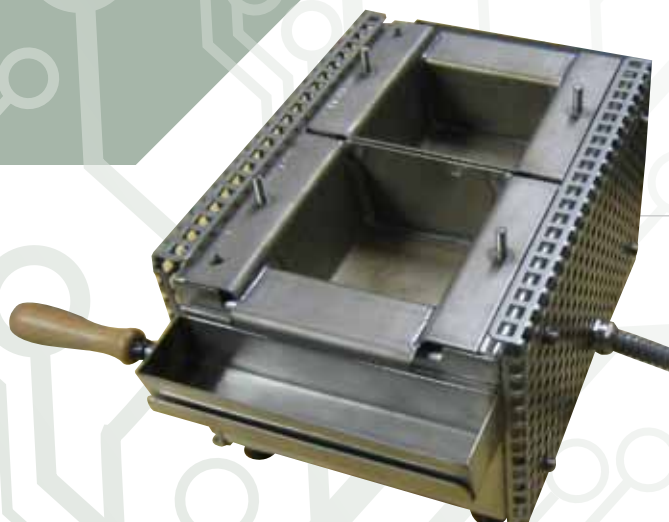
200X200X200 : Solder bath of high capacity, protection from the heat by grid



LONG CRUCIBLE: example of a long solder bath 1.20 m



MOVABLE POT: removable pot in case you cannot bring the piece to tin above the bath



TINNING CRUCIBLE with 2 removable vats

Accessories for solder baths

TP 60P provides quality service by its adjustable parameters.

This is a robot that allows conveying components during tinning, degolding or fluxing operations with the following parameters: input speed, output speed, pre-heating time, plunging time.

TP 60P

- **precise settings** (and stored for subsequent use)
- **avoids bridges** between the legs of the components coming out of the tinning.
- complying with standards NF C 20 720

Pantograph

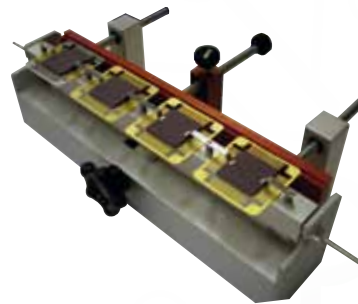
In the case where the constraints do not require strict conditions of input or output speed of the alloy, the pantograph is used for tinning or degolding components in robot series and its solder bath.



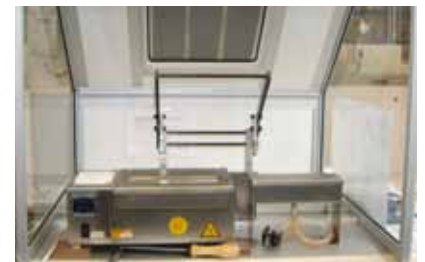
TP60P : Tinning Machine with Solder Bath



FLUX TRAY: fluxing station with pantograph, accepts the same component holder tool as the robot



TOOLS AND CHARGER: example of components load on tool



BATH WITH PANTO TRANSFER: example of a station with a pantograph that ensures transfer between the bath



CONNECTOR BAR: example of tool mounted on the robot (in this case, tools for connector)



Example of a full degolding / fluxing / tinning station with pantograph SOLDER BATH WITH PANTOGRAPH



SOLDER BATH WITH PANTOGRAPH

Production / repair machines

All our products are compatible with lead-free alloys

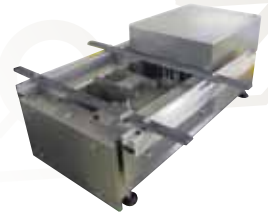
An alloy is introduced into the vat, to fuse and exit through the nozzle and form an extremely smooth wave. This process allows soldering or desoldering of components without affecting or damaging neighbouring components, and makes it possible to have a permanent solder surface without any impurities.

The Mini-Waves are also production machines for brazing complex components requiring suitable multi-jet nozzles.

These selective Mini-Waves

were built of titanium, to reach very high temperatures and allow soldering and desoldering components with precision and cleanliness.

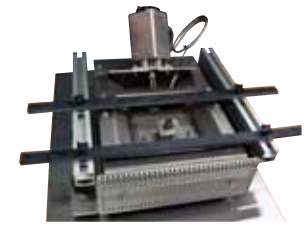
- **compact**
- **many applications** (lead-free soldering, repair work, production lines.)
- **safe** (adjustment of the bath temperature with a digital display, the power and height of the wave, the immersion time in the wave.)
- **possible addition of additional accessories** (constant level fluxing, nitrogen or inerting cover)



MV550 Mini Wave



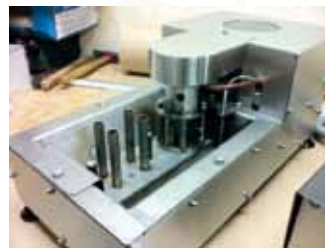
MV500 Mini Wave With up / down and x, y translation table system



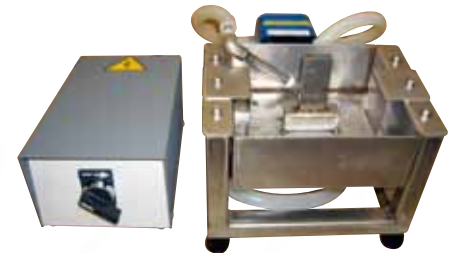
MV100 Mini Wave With PCB jig



Examples of custom nozzle



Mini-wave MV400 with a multi-jet nozzle



Fluxer: constant level fluxing station with custom multi-jet nozzle

	MV 100 Technical Characteristics	MV 400 Technical Characteristics	MV 500 Technical Characteristics	MV 550 Technical Characteristics
Power Supply	230 V / 50-60 Hz	230 V / 50-60 Hz	230 V / 50-60 Hz	230 V / 50-60 Hz
Capacity	900 W	1 800 W	2 700 W	3 000 W
Total Dimensions	370 x 240 x 280 mm	570 x 250 x 200 mm	700 x 300 x 170 mm	750 x 260 x 290 mm
Alloy's Capacity	12 Kg	20 Kg	45 Kg	55 Kg
Accepts a maximum dimension nozzle *	70 x 70 mm	125 x 30 mm	200 x 20 mm	250 x 30 mm
PCB maximum dimensions	160 x 500 mm	160 x 500 mm	400 x 600 mm	300 x 500 mm
Maximum temperature	400 °C	500 °C	300 °C	400 °C
Heating time	45 minutes	1 hour	1 hour	1 hour

*The dimensions may be different. For example, if the length of the nozzle is reduced, it is possible to increase the width. It is simply a matter of best respecting the surface of the nozzle.

OPTIONS	MV 100	MV 400	MV 500	MV 550
Heating clock	●	●	●	●
Swivelling laser pointer			●	
Arm rest support	●	●	●	●
Pneumatic rise and fall with end of height adjustment		●	●	
Pneumatic rise and fall without end of height adjustment	●	●	●	●
X-Y table system			●	
PCB support (adjustable)	●	●	●	●
Start of cycle with pedal. (only available with dual display control box)	●	●	●	●
Nitrogen cover with 1 pressure reducer gauge, 1 flow meter, 1 titanium cover equipped with a diffuser (porous stainless steel)	●	●	●	●
Maintenance	This equipment needs no particular maintenance			

Heating plates with thermal belt

Compact or with separate control unit

Compact or with separate control unit.

To meet the constraints linked with the environment of the production station.

2 versions are available: compact or with separate unit.

They are mainly designed for heating applications, preheating, repairing of CMS technology or traditional circuits, drying glues, etc.

- Quick temperature rise

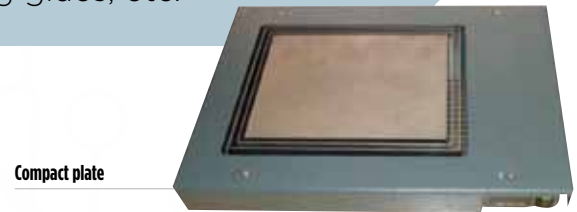
- performance for re-welding with lead-free alloy
- high temperatures for some models

- low profile, maximum 65 mm

- height **adjustable top cover** (for lifting the PCB with respect to the heating plate, no need for additional tools, etc.)

- thermal safety

- **custom products** to the colours of your choice.



Compact plate



Separate box plate



Turning hotplate



Plate with PCB support

Technical characteristics of our standard hot plates

Model, C = compact	Dimensions of the plates (L*W) mm	Overall Dimensions (L*W*H) mm	Power/ Power supply	Regulation	Heating time	Maximal Temperature	Separate case
PC1	300 x 300	420 x 420 x 65	2700 W / 230 V 50/60 Hz	PID 1 or 2 displays	0 à 400° / 30'	400°C	Yes
PC1C	300 x 300	480 x 420 x 55	2700 W / 230 V 50/60 Hz	PID 1 or 2 displays	0 à 300° / 15'	300°C	No
PC2	200 x 150	320 x 270 x 65	1500 W / 230 V 50/60 Hz	PID 1 or 2 displays	0 à 400° / 30'	400°C	Yes
PC2C	200 x 150	380 x 270 x 55	1500 W / 230 V 50/60 Hz	PID 1 or 2 displays	0 à 300° / 15'	300°C	No
PC3	150 x 100	270 x 220 x 65	500 W / 230 V 50/60 Hz	PID 1 or 2 displays	0 à 400° / 30'	400°C	Yes
PC3C	150 x 100	330 x 220 x 55	500 W / 230 V 50/60 Hz	PID 1 or 2 displays	0 à 300° / 15'	300°C	No
PC 300x150	300 x 150	420 x 270 x 65	1500 W / 230 V 50/60 Hz	PID 1 or 2 displays	0 à 400° / 30'	400°C	Yes
PC 300x150C	300 x 150	480 x 270 x 55	1500 W / 230 V 50/60 Hz	PID 1 or 2 displays	0 à 300° / 15'	300°C	No
PC 300x200	300 x 200	420 x 320 x 65	2000 W / 230 V 50/60 Hz	PID 1 or 2 displays	0 à 400° / 30'	400°C	Yes
PC 300x200C	300 x 200	480 x 320 x 55	2000 W / 230 V 50/60 Hz	PID 1 or 2 displays	0 à 300° / 15'	300°C	No
PC 300x350	300 x 350	470 x 420 x 65	3000 W / 230 V 50/60 Hz	PID 1 or 2 displays	0 à 400° / 30'	400°C	Yes
PC 300x350C	300 x 350	530 x 420 x 55	3000 W / 230 V 50/60 Hz	PID 1 or 2 displays	0 à 300° / 15'	300°C	No
PCM 450	450 x 150	570 x 270 x 65	2200 W / 230 V 50/60 Hz	PID 1 or 2 displays	0 à 400° / 30'	400°C	Yes
PCM 450C	450 x 150	630 x 270 x 55	2200 W / 230 V 50/60 Hz	PID 1 or 2 displays	0 à 300° / 15'	300°C	No
PCM 500x400	500 x 400	620 x 520 x 65	3200 W / 230 V 50/60 Hz	PID 1 or 2 displays	0 à 400° / 30'	400°C	Yes
PCM 500x400C	500 x 400	680 x 520 x 55	3200 W / 230 V 50/60 Hz	PID 1 or 2 displays	0 à 300° / 15'	300°C	No

Rotary solder pots



A wide range of Rotadips is available, with various sizes of pots and heating capacities.

The rotary solder pots are part of a dynamic range deed for tinning operations.

The Rotadip is often used for tinning, degolding or enamel removal for wires, copper cables, legs of components etc...

This process is perfect for long operations, as it automatically cleans the surface of the tin.

These pots can be used with lead free alloys.

Principle:

The rotation of the circular pot against the dross blade allows the automatic scraping of the dross, which falls in the retrieval ring while maintaining the tin's surface clean and free from impurities.

Advantages:

The operator benefits permanently from a clean surface of tin, which allows to avoid the risks of imperfections and of dross during the tinning, degolding or other applications. Thanks to its rotating movement, the Rotadip allows the enamel particle to be kept during the tinning on enameled wires.

All Rotadips come with precise temperature control, with digital controller, that are capable of controlling temperature within ± 2 °C.



- Precise solder height and deep tinning
- Reduce the contamination with oxydes
- Reduce the stops times and the maintenance costs
- Lessen the functioning costs

Our different models of rotating solder

Model	Pot size (diameter x depth mm)	Alloy capacity (kg)	Maximum Tempera- ture (°C)	Power sup- ply (W)	<u>Options</u>
RD3D	77 X 45	2,5	420	450	Digital controller
RD3VS	78 X 45	2,5	420	450	Digital controller and variable speed motor
RD3HT	79 X 45	2,5	550	800	Digital controller and high temperature
RD3HTV S	80 X 45	2,5	550	800	Digital controller, variable speed motor and high temperature
RD6D	153 X 86	12	450	1600	Digital controller
RD6VS	154 X 86	12	450	1600	Digital controller and variable speed motor
RD6HT	155 X 86	12	550	2050	Digital controller and high temperature
RD6HTV S	156 X 86	12	550	2050	Digital controller, variable speed motor and high temperature