

Polishing and bending machines for plastics and acrylics

## **General catalogue**



## BERMAQ

#### **Experience:**

Bermaq, current leader in the sector of machinery for polishing acrylic and PMMA, was founded in 1982 and marked a starting point being the worldwide pioneer in the manufacture of this type of machinery.

#### Quality and reliability:

This long experience in the market and the aim of continuing our policy of giving priority to the final quality in each of our machine models, it results in the high reliability of our machines, made to last and provide the same productivity for years. Altogether, with the superb finishes offered from day one, make it a safe investment for the customer.





#### A machine for every situation:

We understand that each client is unique, so our diverse catalogue of polishing and bending machines allow each client find the machine that best suits their needs while meeting the perfect balance between price and performance, from our AMT machine—ideal for small jobs— to the innovative AMI-C, through the full range of bending machines.



## **Table of contents**

#### - Polishing machines:



AM2 page 4



**AMI** page 5



**AMI-C** page 6



PF page 7



- Bending machines:



GT1000 page 9



GT1004 page 10



**GT1010** page 11



GT2000 page 12



GT2004 page 13



-Others:

#### **Accessories GTV** page 14



**Tools** page 15

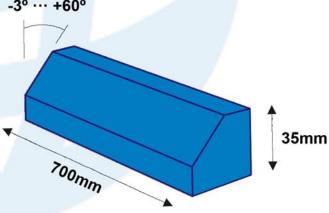


### AMT The ideal machine for a great finish on small jobs



Table-top machine designed for polishing acrylic and methacrylate parts (PMMA) with high quality finishing. On the AMT model, its table can be positioned to obtain bevels or angles up to 60°. It is ideal for the machining of small pieces.

- ·Automatic feeding
- ·Workpiece hold-down system: clamps
- ·Milling angles: 15°, 22,5°, 30°, 45° y 60°
- ·High precision analogic depth regulator
- ·Included tools:
  - EIMQ-131003-LA: Finisher tool (red)
  - EIMQ-131001-LA: Precutter tool (black)



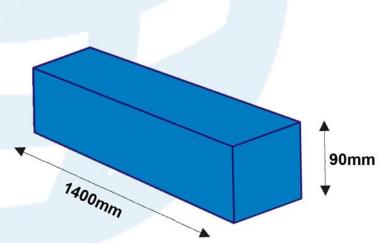
AMT	
700 mm	
35 mm	
1,4 mm	
7000 to 12000 RPM	
0 to 1,5 m/min	
-3º to +60º	
220 V 1PH // 50Hz/60Hz	
792x539x267 mm	
	700 mm 35 mm 1,4 mm 7000 to 12000 RPM 0 to 1,5 m/min -3º to +60º 220 V 1PH // 50Hz/60Hz

AM2 The perfect choice to polish at 90 degrees.



Machine for the machining and polishing of methacrylate parts (PMMA) with a high quality finish. The performances of the AM2 model are mainly focused on polishing straight surfaces at 90º

- ·High precision analogic depth regulator
- ·Workpiece hold-down system: clamps
- · Included tools:
  - EIMQ-131003-LA: Finisher tool (red)
  - EIMQ-131001-LA: Precutter tool (black)



	AM2
Working length	1400 mm
Maximum thickness	90 mm
Cutting depth	2,5mm
Milling motor speed	6600 RPM
Feed speed	0,5 to 3 m/min
Number of clamps	5 units
Power supply	220 V 3PH/380V 3PH+N // 60Hz/50Hz
Outer machine dimensions	2000x1005x1610mm

### AMI

The most consolidated polishing machine in the market.

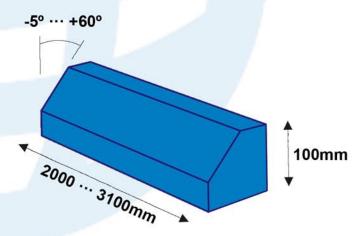


The AMI machine has the support of hundreds of customers who have opted for its reliability and perfect polished finish of any PMMA or acrylic piece. In the AMI model, the head can be positioned to obtain bevels or angles up to 60 degrees inclination.

- · Fixing part: clamp
- · Precise depth regulator
- · Programmable length of the pieces
- · Tilting head
- · Touch screen
- · Allows to save recipes

#### Tools included:

- EIMQ-131003-LA: finishing tool (red)
- EIMQ-131001-LA: cutting tool (black)



	AMI 2000	AMI 2500	AMI 3100	
Working length	2000 mm	2500 mm	3100 mm	
Maximum thickness	100 mm	100 mm	100 mm	
Cutting depth	4mm	4mm	4mm	
Milling motor speed	6600-7500 RPM	6600-7500 RPM	6600-7500 RPM	
Feed speed	0,5 to 3 m/min	0,5 to 3 m/min	0,5 to 3 m/min	
Number of clamps	5 units	5 units	7 units	
Power supply	220 V 3PH/380V 3PH+N // 60Hz/50Hz			
Outer machine dimensions	2930x1850x1550mm	3430x1850x1550mm	4100x1850x1550mm	
Minimum / maximum inclination	-5º ··· +60°	-5º ··· +60°	-5º ··· +60°	



AMI-C The new generation of polishing machines starts here



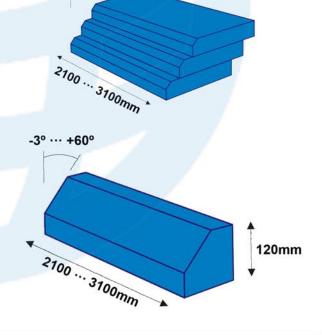
The AMI-C machine represents the next step in innovation of polishing machines. It is the first polishing machine in the market that is fully automated, greatly facilitating its management, increasing productivity and ensuring a perfect finish.

Optionally it can incorporate the tilting screen, increasing its productivity by piling the pieces up.

You can also add the new BERMAQ patented polishing equipment, which allows you to completely finish up the piece with a superb finish touch without the need for subsequent polishing steps on other machines.

#### Tools included:

- EIMQ-131003-LA: finishing tool (red)
- EIMQ-131001-LA: cutting tool (black)



	AMI-C 2100	AMI-C 3100
Working lentgh	2100 mm	3100 mm
Maximum thickness	120 mm	120 mm
Cutting depth	4mm	4mm
Milling motor speed	6600-12.000 RPM	6600-12.000 RPM
Feed speed	0 a 20 m/min	0 a 20 m/min
Number of clamps	5 unidades	7 unidades
Power supply	220 V 3PH/380V 3PH+N // 60	Hz/50Hz
Outer machine dimensions	2100x1005x1610mm	3100x1850x1550mm
Minimum / maximum inclination	-3º ··· +60°	-3º ··· +60°
Min. / max. screen inclination	0º ··· +45°	0 ··· +45°



### PF

### Our solutions for flame polishing



Bermaq has micro-welding machines and flame polishing machines for acrylic pieces. These machines produce a high temperature flame (1200-3300°C) and high precision by reaction of oxygen and hydrogen by electrolysis of distilled water. So it is a safe and clean solution.

	Model 300	Model 500	Model 800	Model 1200
Gas production	50 lt/h	75 lt/h	120 lt/h	240lt/h
Using distilled water (per day)	20 ml	30ml	50ml	100ml
Maximum temperature	3300ºC	3300ºC	3300ºC	3300ºC
Power	0.33kW	0.50kW	0.80kW	1.20kW
Anti-blowback valve	Sí	Sí	Sí	Sí
Nozzles supplied (mm)	21-24	20-24	18-24	17-24
Dimensions	340x155x185mm	400x200x300mm	400x280x380mm	440x320x395mm
Weight	8kg	20kg	30kg	50kg







DA machine, is an automatic bending machine for a wide variety of plastic and acrylic sheets with multiple forms and measureses, like PETG, PVC, styrene, polystyrene, polycarbonate...

The machine is designed for the realisation of large volumes of work, aims to reduce the production time, and facilitate the completion of the work, keeping the final quality

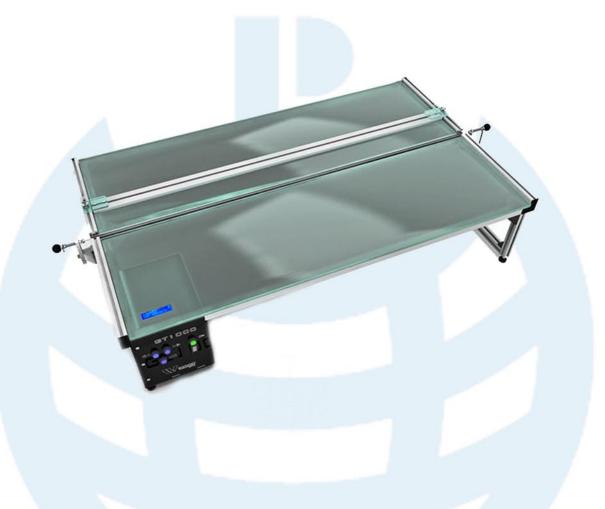
- $\cdot$  2 independent heating resistors, with high precision temperature controls
  - · Feedrate speed digitaly controlled
  - · Automatic sheets supply (60kg capacity) (Optional)
- · Digital counter, with stop function and end of work visual signal (Optional)



В

	DA
Machine dimensions	2600mm x 1100mm x 1600mm
Feed rate	8m/min to 20m/min
Machine total power	900W
Power supply	220V // 50Hz/60Hz
Material thickness	0,3mm to 0,6mm
Material dimensions to fold:	
- Wing part width (A)	20mm to 300mm
- Centre piece width (B)	40mm to 700mm





	GT 1000
Machine dimensions	640mm x 225mm x 240mm
LCD Screen	Yes ( 2 lines)
User parameter library with save and edit function	Yes
Work surface (tempered glass)	1000mm x 625mm
Detachable end (rule)	10 to 270mm
Heating power (1 resistor)	320W
Heating wires regulation	-11 to +14mm
Power regulation of heating wires	10 to 100%
Max. temp. of heating wires	aprox. 500ºC
Programable heating time	10-900s
Unlimited mode heater	Yes
Heating process countdown	Yes
Work executed cycles sum	Yes
Acoustic signal at the end of the process	Yes
Heating power setting during the work	Yes
Electrical supply 230V // 50Hz // 400W	
Material thickness to bend	0,2 to 1,5mm





	GT 1004
Machine dimensions	1177mm x 965mm x 867mm
.CD Screen	Yes (4 lines)
Jser parameter library with save and edit function	Yes
Vork surface (tempered glass)	1000mm x 945mm
etachable end (rule)	10 to 270mm
leating power (4 resistors)	4 x 320W
leating wires regulation	-6 to +5mm
ower regulation of heating wires	10 to 100%
lax. temp. of heating wires	aprox. 500°C
rogramable heating time	0-900s
Inlimited mode heater	Yes
eating process countdown	Yes
Vork executed cycles sum	Yes
coustic signal at the end of the process	Yes
eating power setting during the work	Yes
lectrical supply	230V // 50Hz // 1600W
Material thikness to bend	0,2 to 15mm





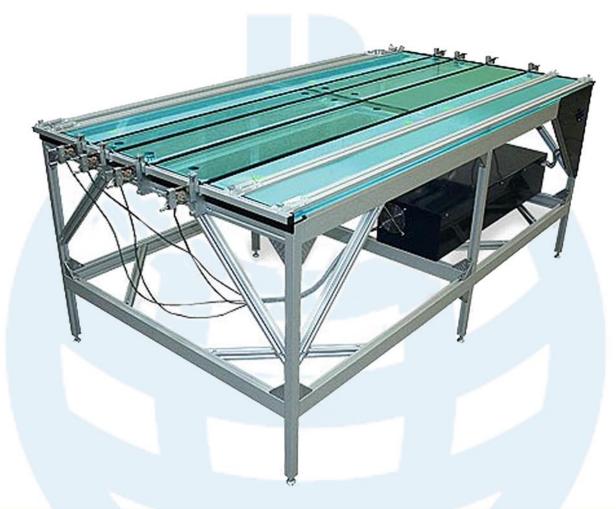
	GT 1010
Machine dimensions	1205mm x 654mm x 706mm
.CD Screen	Yes (4 lines)
User parameter library with save and edit function	Yes
Nork surface (tempered glass)	1000mm x 625mm
Petachable end (rule)	10 to 270mm
leating power (1 upper resistor / 1 lower resistor)	2 x 320W
leating wires regulation	-14 to +10mm
ower regulation of heating wires	10 to 100%
lax. temp. of heating wires	aprox. 500°C
rogramable heating time	10-900s
nlimited mode heater	Yes
leating process countdown	Yes
Vork executed cycles sum	Yes
coustic signal at the end of the process	Yes
eating power setting during the work	Yes
lectrical supply	230V // 50Hz // 800W
Material thikness to bend	0,2 to 15mm





	GT 2000	
Machine dimensions	2230mm x 625mm x 885mm	
LCD Screen	Yes (4 lines)	
User parameter library with save and edit function	Yes	
Work surface (tempered glass)	2000mm x 625mm	
Detachable end (rule)	10 to 270mm	
Heating power (1 resistor)	780W	
Heating wires regulation	-10 to +15mm	
Power regulation of heating wires	10 to 100%	
Max. temp. of heating wires	aprox. 500°C	
Programable heating time	10-1200s	
Unlimited mode heater	Yes	
Heating process countdown	Yes	
Work executed cycles sum	Yes	
Acoustic signal at the end of the process	Yes	
Heating power setting during the work	Yes	
Electrical supply 230V // 50Hz // 800W		
Material thikness to bend	0,2 to 15mm	





	CT 2004		
	GT 2004		
Machine dimensions	2230mm x 1140mm x 905mm		
LCD Screen	Yes (4 lines)		
User parameter library with save and edit function	Yes		
Work surface (tempered glass)	2000mm x 1130mm		
Detachable end (rule)	10 to 270mm		
Heating power (4 resistors)	4x800W		
Heating wires regulation	-15 to +1mm		
Power regulation of heating wires	10 to 100%		
Max. temp. of heating wires	aprox. 500ºC		
Programable heating time	10-1200s		
Unlimited mode heater	Yes		
Heating process countdown	Yes		
Work executed cycles sum	Yes		
Acoustic signal at the end of the process	Yes		
Heating power setting during the work	Yes		
Electrical supply	230V // 50Hz // 3600W		
Material thikness to bend	0,2 to 15mm		

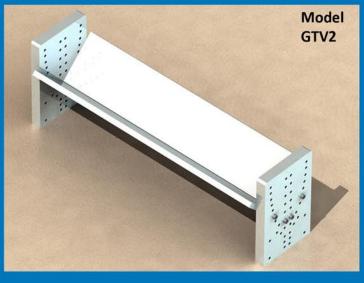


### **GTV** Accessories





Our accessories for bending machines are perfect for serial production. Using these elements ensures that all parts have the same shape once cooled. Its wide range of positions and modularity allow each client to adapt the tool to their needs, allowing them to cover all forms required by the market..







### **Polishing tools**



#### ·Stationary tools plate

#### -Available with:

- 138mm with 2 fixed tools: Ref. S-138-2 - 138mm with 4 fixed tools: Ref. S-138-4



#### ·Toolholder plate

#### -Available with:

- 35mm (Working height) with 2 replaceable tools: Ref. I-35-2
- 100mm (Working height) with 2 replaceable tools Ref. I-100-2
- 100mm (Working height) with 4 replaceable tools: Ref. I-100-4
- 120mm (Working height) with 4 replaceable tools: Ref. I-120-4

#### · Diamond tools:

For Bermaq, facilitating customers' lives is one of our goals, so we have redesigned and simplified the range of tools. Several tools were previously required to perform the work with different materials, we have reduced to five the number of pencils to perform the same jobs as before, with the same results, allowing significant savings to the user. All tools are valid to work different materials: PET, WFP, PC, PS, POM, light metals...

The brown tool allows working with different materials: colour PMMA, extruded PMMA, minerals...

The number of cutting tools has been reduced from 4 to 1, thus if you have a plate with 4 holders for pencils, instead of using three cutting tools (1 white, 1 yellow, 1 black) and one for the finish, now it is possible to combine two black tools (cutting) and two finishing tools which yields a result a considerable increase in the production rate.

This table shows –beneath the tool– the colours that were used before and now are replaced by the new tool. For instance, the black tool substitutes the pink, the yellow, the grey and the white ones.

Code: Replaces:	EIMQ-131001-LA	EIMQ-131002-LA	EIMQ-131003-LA	EIMQ-131004-LA	EIMQ-131023-EU	EIMQ-131001-EU
Tool function:						
Precutter	1	24			170	
High gloss						
Gloss			1			
Matt / Satin				$\checkmark$	100	
Policarbonate						
Counterweight						





Ctra. Molí del Castell S/N Avià 08610 (Barcelona) SPAIN Tel. +34 93 823 10 60 bermaq@bermaq.com GPS N 42º 5' 15" E 1º 49' 45"

### www.BERMAQ.com