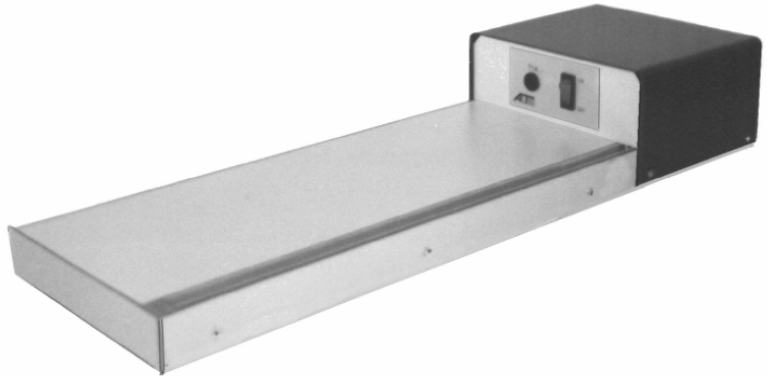
THERMOFORM
400

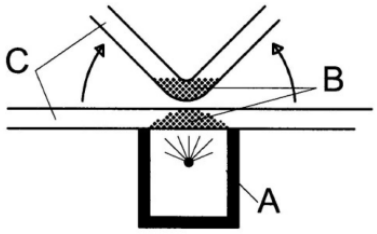


English

GENERAL INFORMATION

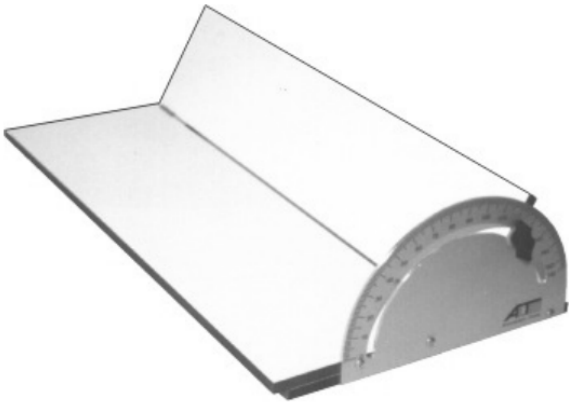
Your THERMOFORM is an extremely effective and handy device. It is fitted with a low-voltage current heating element and a ring centred transformer.
It is suitable for bending different types of synthetic materials, such as Acryl (plexiglass, Perspex), policarbonates (Lexan, Makralon) and PVC.
It is possible to bend sheets with a maximum thickness of 6 millimetres.
The king sized top enables accurate placement of your work.
It is possible to bend very complicated shapes because the element is not placed in the centre.
To prevent heat spreading to other parts of the device, a multiplex base with a hard synthetic top was chosen. By applying a hollow cavity around the heating element it is not likely that heat passes through to other parts.

THE BENDING



A. Heating element
B. Plastic area
C. Synthetic sheet

By heating an area of the synthetic sheet just above the heating element this area will become plastic which enables you to bend the sheet. It is important to bend the sheet by stretching the plastic area and not by pressing it together.
Pressing causes a nasty rib in the created angle.
After heating the sheet it should be taken off the device and bended in such a manner that the heated part is the outside bend. (illustration).



Please make sure that the bended sheet is left to cool in the requested angle. To make accurate angles you can use the specially designed bending mould 500, completed with a division into degrees.
For the bending of thick sheets (6 millimetres) it is advisible to heat the sheets on both sides alternatively.

TECHNICAL INFORMATION		
Glass fuse	1 Ampere (time-lag)	5 x 20 mm
Ring centred transformer	5 Volt	120 VA
Resistance wire	Ø 1,5 mm	0,636 Ω/ mm^1

SAFETY MEASURES

- Prolonged use may cause heating of certain parts of this device. Accidental touching can easily cause a panic reaction.
- The wire can get extremely hot and will cause burns when touched.
- It is advisable to disconnect the device when it is not in use.
- Do not use near inflamable materials or gases.
- Keep this device away from liquids.
- When replacing fuse or wire, always use correct materials. Wrong materials can cause severe faults.

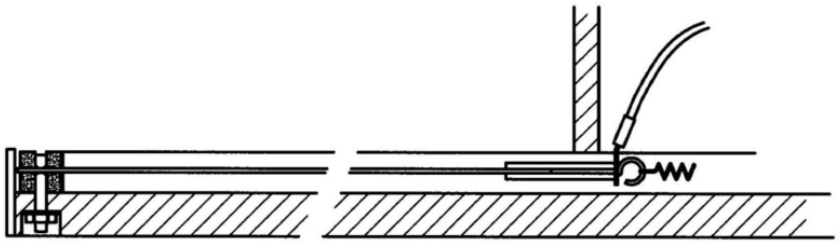
MAINTENANCE

Fuse|:

The Thermoform 400 is fitted with a 1 A slow glass fuse. The U-profile in which the element is mounted has a non-conductive coating. In case of accidental short circuiting between the resistance wire and the aluminium the safety fuse will blow before damage is done to the transformer.

Heating element:

A 1.5 mm thick wire with the correct resistance is used. The wire will wear gradually and eventually it will break. Then it should be replaced.
Using a different type of wire may cause irreparable damage.
Replacement heating elements are obtainable at your supplier.



REPLACING THE HEATING ELEMENT

- Remove the hood and the synthetic strip at the head
- Remove the old heating element by unscrewing the connection wire in the transformer unit, releasing the spring and unscrewing the opposite end with a 2 mm key.
- Neatly mount the new heating element in the U-profile. Slide home the end of the wire into the brass cube. (Do not bend the wire!)
- Secure the spring
- Tighten the wire by pulling the end and securing it.
- Cut off the surplus.
- Reattach the connection wire.
- Replace the hood and the synthetic strip.

CONTAMINATION

Contamination can cause technical malfunctioning. When using the Thermoform 400 prevent contact of the hot wire with synthetic materials. Contact will cause immediate contamination of the wire, as a result of which the temperature can rise and eventually the wire can break.

Because you are working with relatively high voltage electricity (20 A), it is a matter of major concern that all connections are correct. Burning or contamination can cause decreasing contacts and lower wire temperatures. Malfunctioning contacts can cause electric sparks and locally very high temperatures as a result of which the surrounding materials can burn.
When bending temperatures decrease check all electric contacts and clean where necessary or replace.