

Operating Instructions

1.5 and 3 Drum Fully Electric Heating Agitating Hot Melters



For further information
visit: www.cookerhire.com
or a hire quotation call:

01858 412 100

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About the Hot Melter Agitating machines

- Our fleet of **Hot Melters** offer a 1.5 and 3 drum capacity.
- All machines are fitted with **paddle agitators** that move left to right continually when turned on to prevent separation of hot melt waterproofing materials.
- Plug female 3-pin neutral and earth power lead into the machine control panel. Plug the other end of the lead which is a 3-pin male neutral and earth into your power source.

This must be **within 20 metres** of the machine to power the electric motor.

- Hot Melt machines are only shipped to site after being serviced and PAT tested. If you have any concerns about the Hot Melt Cooker as it has arrived call **01858 412 100**.
- Never attempt to operate the Melter before carefully reading the following operating instructions and having been instructed to do so by a qualified person.
- All machines are serviced on return from hire, and are maintained to the highest possible standards. We also provide a selection of tools and accessories for the installation of the materials.

These operating instructions incorporate guidance for lifting and moving, safe operation, maintaining working parts, and preparing the machine for return to our depot.

The following items are not supplied with the Melter and are essential for its operation and use.

1. PPE: You must have the following items of personal protective equipment:

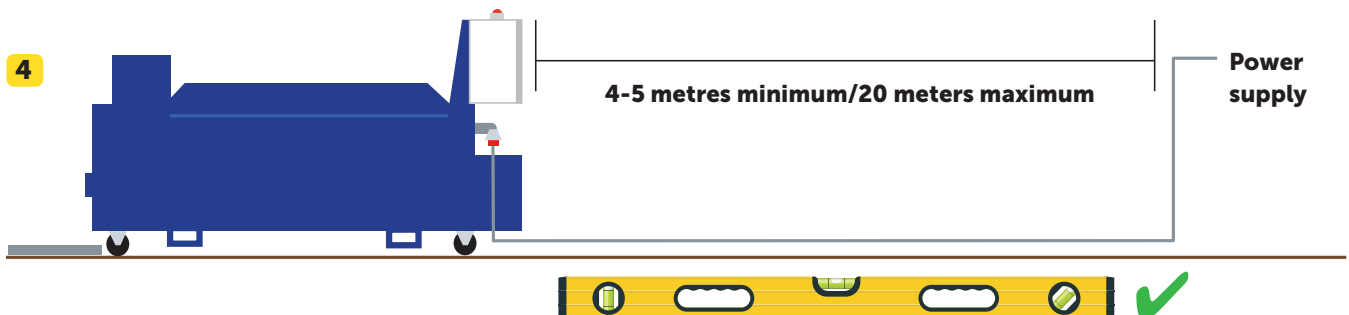
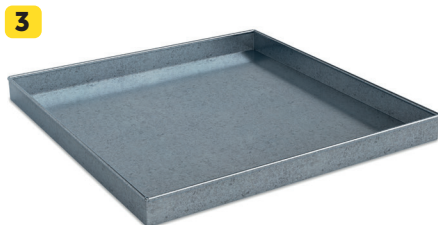
- **Goggles or Full-Face Visor** to BS EN166
- **Suitable Protective Work Gloves** to EN388:2016 and EN ISO 21420 (was EN420:2003)
- **Safety Boots** to EN ISO 20345:2011
- **Kevlar Protection Sleeves** to EN338:2003 and EN407:2004
- **Suitable Protective Clothing** to avoid skin contact from splashes



2. Fire Extinguishers: Blue (Powder) or Cream (Foam)



3. A drip tray



4. Plug the machine into a power source no further than 20 metres (65 feet) of the Melter, and a 20 metre cable fitted with an appropriate female 3-pin neutral and earth power lead into the machine control panel. Plug the other end of the lead which is a 3-pin male neutral and earth into your power source.



**REMEMBER: Health and safety on site is
EVERYONE'S responsibility**



Health & Safety

- Suitable PPE and a full-face mask should always be worn when operating the Hot Melt machine or loading the Hot Melt material.
- The loading hatch doors must be closed at all times whilst the agitating paddle(s) are engaged.
- Never leave equipment unattended when heating element is on or running.
- If a fault occurs, shut down the equipment immediately and report fault to the person directly responsible.
- Always turn off the motor and element before maintenance or repairs are carried out, AND remove external power sources (where applicable).
- If the Hot Melt machine is being used where the general public may come into contact, 'HOT SURFACE' warning signs should be posted around the machine and the Hot Melt machine enclosed with protective fencing.
- Safety is everyone's responsibility, never do anything that is likely to put yourself or anybody else at risk.

Basic Safety Information

- Hot Melters are shipped to site only after being serviced and PAT tested. If you have any concerns about the Melter on arrival call **01858 412 100**.
 - Most operatives recognise the many risks working on a building site. Using this Melter comes with three specific risks:
 - risk of burns from touching either the surface of the Melter when lit
 - having hot molten material on your clothing/skin causing severe burns
 - risk of respiratory irritation from excessive fumes from hot materials used within the Melter.
 - Electric Heated Hot Melters are designed specifically for use with the material specified and should only be used in accordance with the rules and regulations of the site.
 - Under no circumstances should the Melter be used inside any building.
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IN THE EVENT OF A FIRE



Press the **emergency stop button**. Disconnect power supply at source.



Close the loading hatch doors if not already closed and safe to do so.



DO NOT open loading hatch doors for a minimum of **60 minutes** after a fire. This allows the Hot Melt material to cool and temperatures within the drum to drop to safe levels.



Call 01858 412 100 to report the fire and have the Hot Melt machine checked for safety or replaced.

Before use

NEVER:

- Operate the machine before carefully reading and understanding these operating instructions. If you have any questions call **01858 412 100**.
- Operate machine before having been shown to do so by a qualified person.
- Operate machine with safety guards or covers removed.
- Add Hot Melt blocks when the agitating paddle is running. To add Hot Melt blocks, STOP the agitating paddle. ADD the Hot Melt blocks. CLOSE the lid. RESTART the agitating paddle.
- Leave the machine unattended when in use under any circumstances.
- Attempt to carry out any repairs or servicing before Hot Melt Cooker is shut down with the motor stopped and electric supply has been shut down. The Hot Melt Cooker must be allowed to go cold before touching any components.

DO NOT:

- Drop scrapers, trowels and/or scaffold poles into the drum of the Hot Melt machine. If these items are dropped into the Hot Melt machine, IT WILL JAM THE AGITATING PADDLE and burn out the electric motor and gearbox. All damage is chargeable to the hirer.
 - Leave Hot Melt material in the Hot Melt machine at the end of hire. Cleaning the Hot Melt machine is chargeable to the hirer.
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ALWAYS:

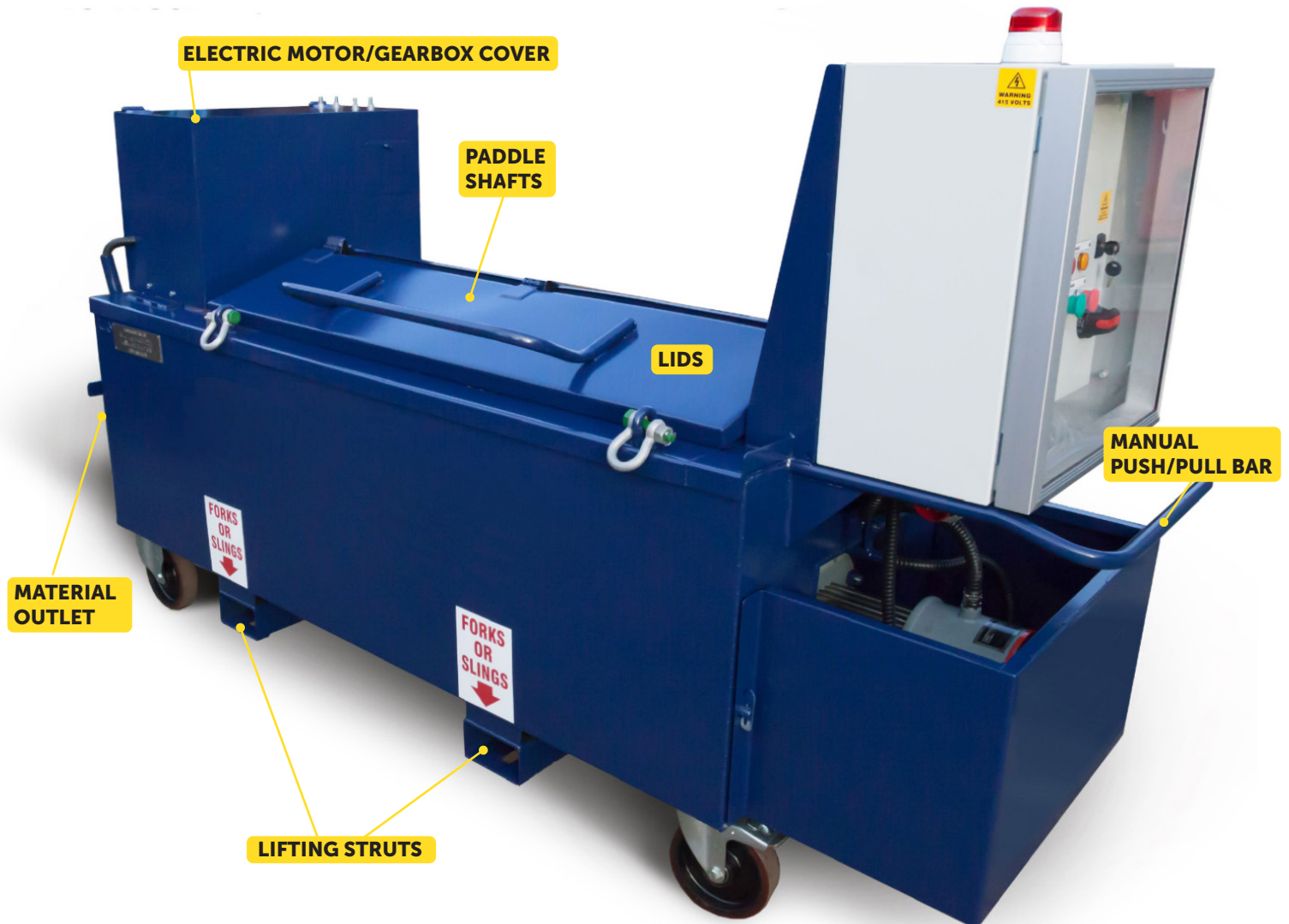
- Secure the outlet and engine cover doors with a suitable padlock when leaving the Hot Melt machine unattended to prevent vandalism.
 - Load the Hot Melt machine only while wearing suitable PPE and a full-face shield to prevent potential splashing.
 - Load the Hot Melt machine equally using both loading hatches. This prevents the uneven loading of the drum.
 - Ensure the mixer contains enough molten Hot Melt material to cover the Thermostat Capillary sensor tube to avoid overheating. Overheating could cause the molten Hot Melt material to flash and catch alight.
 - Shut down the mixer when faults are discovered and report them to the person directly responsible for Hot Melt Cooker operation. DO NOT operate the machine until all faults have been corrected. Call **01858 412 100** for support if required.
 - Leave the agitating paddle in the centre of the drum at the end of each working day.
 - Place the Hot Melt blocks into the Hot Melt Cooker before switching on
 - Keep the Thermostat Capillary sensor tube covered with liquid Hot Melt material. If the Thermostat Capillary sensor tube is exposed, the Cooker will overheat the Hot Melt material, which can cause it to catch fire.
 - When a large volume of Hot Melt material is allowed to go cold, allow more time for the Hot Melt material to re-heat before turning on the agitating paddle. Trying to paddle material too soon can cause damage to the melter's electric motor/gearbox.
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Hot Melt Machine Components (right-hand view)

PLEASE NOTE:

All Hot Melt machines are braced underneath for lifting by forks or slings.

The Hot Melt machines are also fitted with tested lifting eyes; however, this does not mean the machine has been test lifted. If you require your machine to be test lifted prior to delivery, this must be indicated on your paperwork as this constitutes an extra cost. (Many sites require test lift certified documentation).



IMPORTANT: Hire machines must be returned empty of material to avoid a material removal charge, additional to the standard hire rate.

Hot Melt Machine Components (left-hand view)

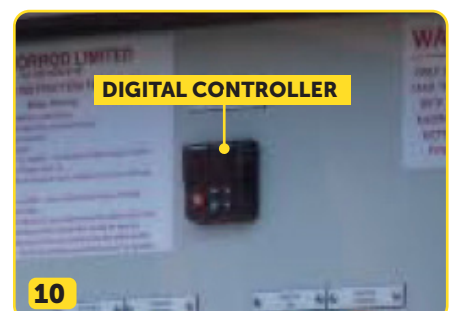
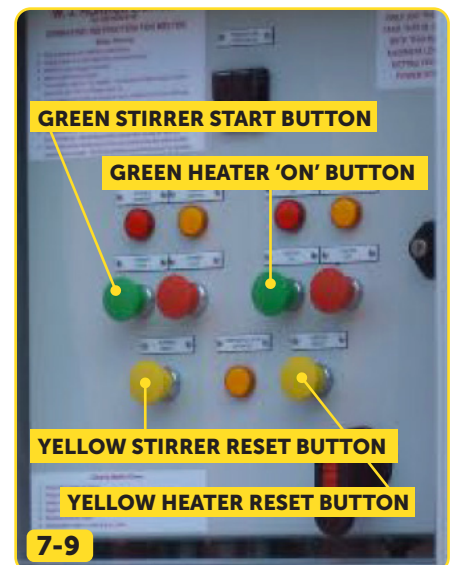
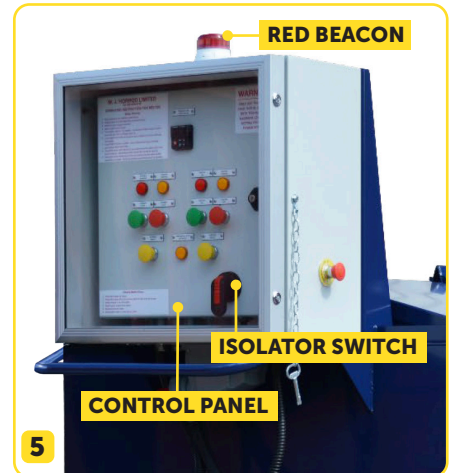


Starting the Hot Melter

1. Plug **FEMALE 3-PIN NEUTRAL AND EARTH POWER LEAD** into the machine below control panel, which is a male 3 pin neutral and earth.
2. Plug the other end of the lead which is a 3-pin male neutral and earth into your power source.
3. Switch on the power supply at source.
4. Open the control panel cabinet.
5. Turn **ISOLATOR SWITCH** to 'on' position – **RED BEACON** located on top of control panel will now flash to indicate the power is on.
6. Load the machine with **HOT MELT MATERIAL** while it is switched off, ensure as much material as possible covers the surface of the bottom. Hot Melt material expands by approximately 25% when at working temperature. Never overfill.
7. Press **GREEN HEATER ON BUTTON** – once the material shows signs of melting, press **GREEN STIRRER START** button. If motor or gearbox show signs of stress stop paddle and re-try after 10-15 minutes.
8. Should the stirrer motor trip out for any reason, press the **YELLOW STIRRER RESET BUTTON** to restart. Should this problem persist, the fault should be reported.
9. Should heater element trip out for any reason press the **YELLOW HEATER RESET BUTTON** to restart. Should this problem persist, the fault should be reported. This could be due to lack of power on site. Units are now being fitted with low voltage warning lights, check if your unit has this fitted, it is a yellow light.

10. Temperature Controller

To set the required material temperature, press the '**UP/DOWN**' button on the digital controller, do not press any other buttons as you may de-programme the unit. The controller will only go up to a maximum of 190°C. We recommend a set temperature of **180°C**. Always set temperature below manufacturers laying temperature, must allow for ambient temperature and latent heat contained within the steel. This is based on the information available at the time of writing. However, this may vary depending on the material manufacturer.



11. The temperature of the Hot Melt material is controlled by a **DIGITAL THERMOSTAT** (5a) connected to a thermostat within a capillary sensor tube (5b).

At no time should the molten material be permitted to fall below the end of the **CAPILLARY SENSOR TUBE** which contains the thermostat temperature probe within the drum. The **THERMOSTAT TEMPERATURE PROBE** indicates the temperature to the thermostat unit, and if this is not detected, the **HEATING ELEMENT** will remain **ON** and overheat the Hot Melt material potentially causing it to ignite.



12. AGITATION OF MATERIAL

ONLY agitate once the material starts to **MELT** and the stirrer will operate, be very careful at first, as un-melted material may be present. **NEVER** force the Melter if the stirrer is stuck, this will only result in damage to drive arm etc.

IMPORTANT – when adding material **FULL-FACE VISORS MUST BE WORN**.

When adding additional Hot Melt material **ALWAYS STOP THE AGITATING PADDLE** in the centre of the pan (i.e. vertical to the shaft) by pressing the **RED** button on the **CONTROL PANEL**. Add the Hot Melt material, close the loading hatch doors and start the agitating paddle by pressing the **GREEN STIRRER** on button.



13. EMERGENCY STOP BUTTON stops the power supply to the Melter.
(See further Fire Safety advice on p4-5)

14. ELECTRIC MOTOR/GEARBOX

Power – 3 Phase 415 volts.

NOTE: All illustrations are for information and recognition purposes only and may not always be set up in the same manner on each machine. This is always contingent on the needs of the customer.

If you have any questions then please call us on **01858 412 100**.

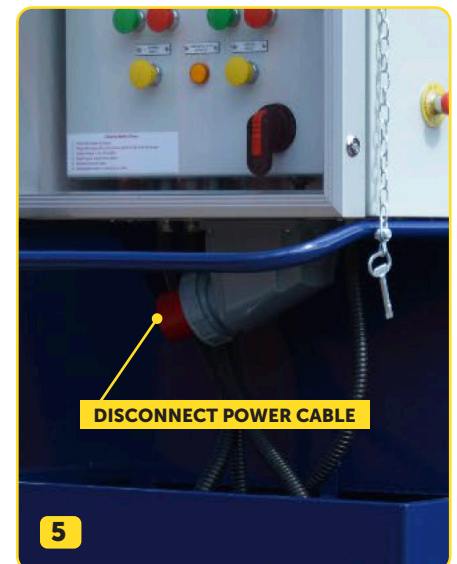
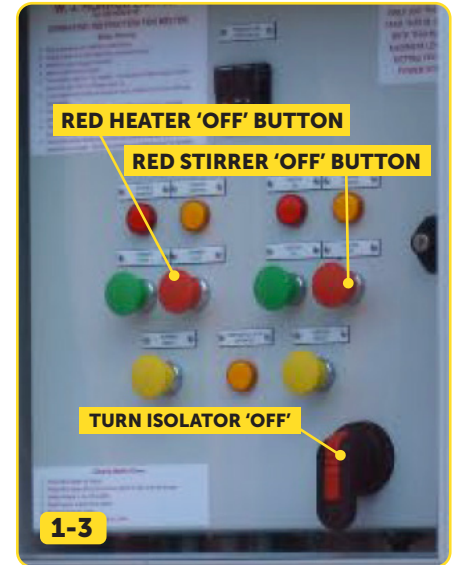


Closing down the Hot Melt machine and leaving it safe/secure

1. Press **RED HEATER 'OFF' BUTTON**.
2. Press **RED STIRRER 'OFF' BUTTON**.
3. Switch **ISOLATOR** to the '**OFF**' position.
4. Switch **POWER SUPPLY** off at source
5. Disconnect **POWER CABLE**.
6. Store power cable in a safe and dry place.

Returning the Hot Melt machine at the end of hire

Carry out the process above AND ensure the Hot Melt machine is emptied. Removing any Hot Melt material left in the machine after hire is chargeable to the hirer.



Fully Electric Heating Agitating Melter 1.5 and 3 Drum Models

General Specifications

	1.5 Drum Model	3 Drum Model
Drive	Fully Electric	Fully Electric
Chassis	Caster Mounted: 2 x 200mm fixed, 2 x 200mm swivel/braked. Load 500kg per Castor	Caster Mounted: 2 x 200mm fixed, 2 x 200mm swivel/braked. Load 500kg per Castor
Power	Power 415 volt 3 phase - 32 amps (load 20kW)	Power 415 volt 3 phase - 63 amps (load 20kW)
Plug	3 pin female neutral & earth into Melter – 3 pin male neutral & earth into power source	3 pin female neutral & earth into Melter – 3 pin male neutral & earth into power source
Power Lead	20 metre 415 volt.	20 metre 415 volt.
Control Panel	Digital Temperature Control	Digital Temperature Control
Burner	Single Electric Heating Element	2 x Electric Heating Elements
Capacity	1.5 Drum (270 Litres approx)	3 Drum (540 Litres approx)
Agitation	Oscillating continuous paddle.	Oscillating continuous paddle.
Main Frame	40 x 40 x 2mm RHS	40 x 40 x 2mm RHS
Pan	5mm plate	5mm plate
End Plates	Profiled 6mm	Profiled 6mm
Outside case sheet	2mm	2mm
Outlet	Profiled 2-piece door and frame.	Profiled 2-piece door and frame.
Forklift Locating Sleeves	Formed section from 3mm mild steel sheet. 160mm x 80mm x 5mm RHS	Formed section from 3mm mild steel sheet. 160mm x 80mm x 5mm RHS
Drive	Drive 415/30/3 phase motor – gearbox	Drive 415/30/3 phase motor – gearbox
Insulation	High temperature Rockwool dense slab	High temperature Rockwool dense slab
Stirrer Shaft	40mm BMS	60mm BMS
Stirrer Shaft Bearings	40mm Pillar Block	60mm pillar blocks
Lifting Eyebolts	4 x M20 Metric Collared	4 x M20 Metric Collared 1.5 ton
D Shackles	4 x 3.25 ton green pin safety	4 x 3.25-ton green pin safety.
Overall Length	2520 mm	2540 mm
Width	870 mm	1250 mm
Overall Height	1520 mm	17000 mm
Weight	687 kg	1063 kg

Operator's personal notes

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