# **Operating & Maintenance Instructions R30 Schred Press**

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## 1. Introduction

The R30 Schred Press uses heat and pressure to reform plastic granules into usable sheets. The machine can be used on a workbench or freestanding with the optional R30S stand. The machine consists of two high-mass aluminium hotplates, each with temperature control. The upper hotplate is fixed in position, and the lower hotplate can be raised and lowered using a hydraulic pump.

Shredded plastic material is loaded onto a material cassette that is then clamped shut and loaded into the machine. The hydraulic clamp is then used to press the material, forming a usable plastic sheet. After pressing the sheet is allowed to cool and then removed from the cassette.



## 1. Health and Safety Information

#### Hot Surfaces

Surfaces of the R30 Schred Press will become hot in use. Heat resistant gloves must always be used when operating the R30 Press. Do not leave the machine unattended while running.

The R30 Schred Press is intended for the pressing of granulated thermoplastic materials. Do not attempt to press materials which may have a flash point below 250°C. Materials being pressed must be clean and dry. Do not press materials which have been washed with any solvent that may have a flash point below 250°C.

If you are in any doubt as to the source and characteristics of a material that you wish to use in the R30 Schred Press, seek advice before loading it into the machine.

## 2. Upon Receipt

Carefully unpack you R30 Schred Press and check for signs of transit damage. Any damage should be reported to the manufacturer or their local representative within 3 days of receipt.

Position the machine on a suitable workbench, or secure to the optional R30 stand if applicable. The R30 has securing bolt positions, and can be bolted to a workbench if required. This is not essential for safe operation.

Plug the supplied mains lead into the mains inlet on the rear of the machine. Plug the machine into a suitable electrical supply.

#### **3. Control Panel Operation**

Switch on the machine. The display illuminates, and shows the following information:

			Set	Actua	al
	TIME		600	600	
	UPPER	*	200	12	
>	LOWER		200	12	<

Time is the set time for pressing the sheet. UPPER controls the temperature of the upper hotplate of the machine. LOWER controls the temperature of the lower hotplate.

There are two modes of display, in which the buttons perform different operations. Selection Mode is denoted by a cursor (> <) on the selected line. In selection mode, the  $\blacktriangle$  and  $\checkmark$  buttons move the cursor up and down the lines.

Edit mode is entered by pressing the MODE button. The cursor changes to a flashing (\* \*). In edit mode, pressing the  $\blacktriangle$  and  $\checkmark$  buttons increases or decreases the value of the selected line. There are inbuilt limits on values, so if the value stops moving the limit has been reached.

Buttons have a scroll facility in edit mode, so if you press and hold the  $\blacktriangle$  or  $\checkmark$  button, the selected value will continue to increment/decrement.

Press Mode to return to selection mode. The R30 will automatically return to selection mode if no buttons are pressed for 10 seconds.



Control Panel

The front panel of the machine also has the controls for the hydraulic clamp. To clamp material in the press, turn the release knob fully clockwise, then raise and lower the clamping lever repeatedly. To release the clamp, turn the release knob  $\frac{1}{2}$  turn anti-clockwise.



Hydraulic Lever and Release

### 4. Materials and Settings

The R30 Press is capable of pressing a variety of materials. Suitable times and temperatures are listed in the table below. Please note that the R30 will not fully homogenise the material, and therefore the original colours of the granules will be maintained. To produce a single colour sheet, ensure that the granulated material is not contaminated with other colours. Should you wish to produce a multi-coloured sheet or one with a specific effect or pattern, either place a random colour mix or separate colours as required onto the material cassette.

Material	Time (s)	Temperature-Upper (°C)	Temperature-Lower (°C)
LDPE (Milk Bottles)	600	180	180
HIPS (Vacuum	600	200	200
Forming Sheets)			
PS (Drinking Cups)	600	200	200
Polypropylene	600	200	200
(school chair bases)			

#### 5. To prepare for use

Switch on the machine, and set the time and temperatures as described in Section 4 above. Place the material cassette onto a work surface, and sprinkle with suitable thermoplastic granules. The granules should be spread in an even layer of approx 4mm thickness, up to the raised lip at the edge.





Secure the latches at the front of the material cassette.



Load the material cassette into the machine.



Turn the release knob fully clockwise to lock the pump.



Pump the clamp lever to raise the lower hotplate. Stop pumping when firm resistance is felt.



The action of pumping the clamp lever will automatically start the timer. The timer can be manually started at any point by pressing the > button.

Every few minutes, give the clamp lever an additional pump, to ensure that the granules are still under pressure as they soften and fuse.

At the end of the pressing cycle, a short buzzer will indicate that the pressed material is ready to be released. The timer can be cancelled at any point by pressing the < button.

Turn the release knob anti-clockwise by 1/2 turn to lower the hotplate.



Slide the material cassette out of the machine.



Either place on a flat surface to cool, or slide into the location on the R30S stand (if applicable).



Once cooled, release the clamps and remove the pressed sheet of material.

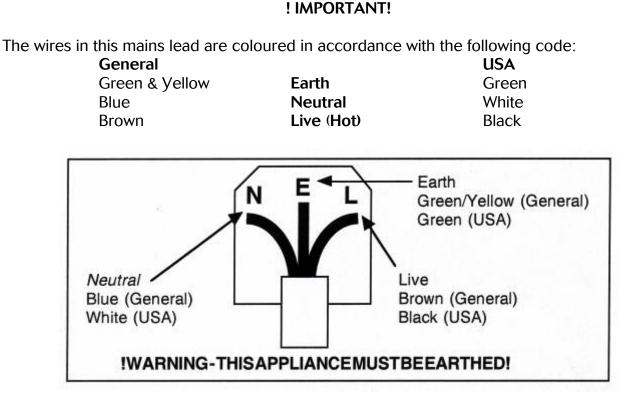


#### 6. Material Cassette Care Instructions

The material cassette is coated with a high-temperature, non-stick coating. This coating should only be cleaned when cold using a soft cloth. Surplus material will not stick to the cassette, and can be wiped off when it has cooled down.

The handles of the material cassette are designed to slide in when not in use, to avoid protruding from the machine. To lift the material cassette, pull the handles out to their extended position. They will lock as the cassette is lifted.

#### 7. Electrical Supply and Connection



#### General

The green and yellow wire must be connected to the terminal marked with the letter E, or the earth symbol, or coloured green and yellow or green.

The blue wire must be connected to the terminal marked with the letter N, or coloured blue or white.

The brown wire must be connected to the terminal marked with the letter L, or coloured brown or red.

#### USA (115V)

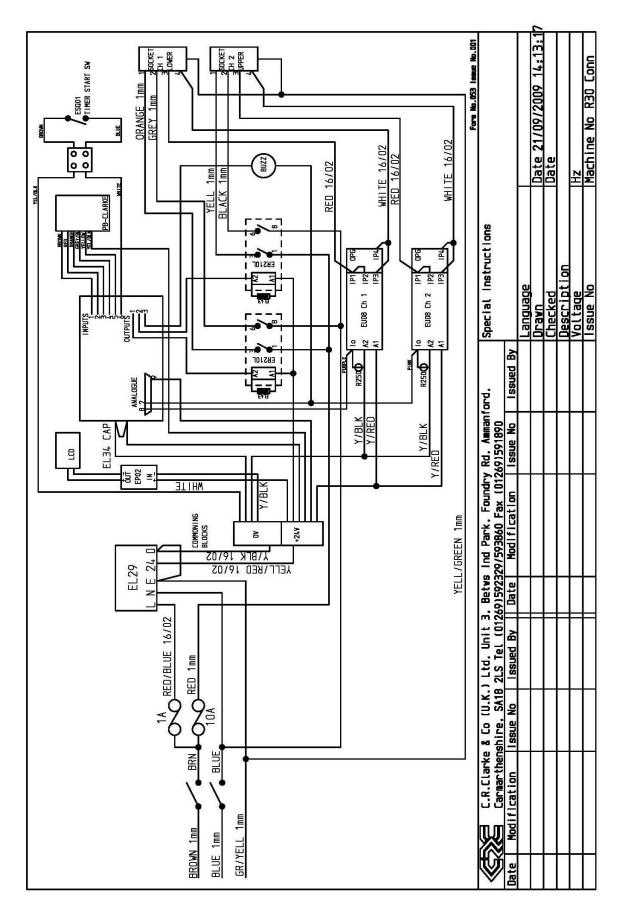
The green wire must be connected to the green pin (the largest). The white wire must be connected to the silver pin. The black wire must be connected to the brass pin.



Warning - read instructions before installation and use.

If in doubt about electrical supply or connection refer to your supplier or consult a qualified electrician.

#### 8. Connection Diagram



6×HEATING ELEMENT HV150/10		
	THERMAL CUTOUT SWITCH 250 DEG C	JEG C EL33
	A DE	E
		Fires in 653 (and 10)
C.R.Clarke & Co (U.K.) Ltd. Unit 3, Betws Ind Park, Foundry Rd, Ammanford, Carmarthenshire, SA18 2LS Tel (01269)592329/593860 Fax (01269)591890 Modification Lissue No Lissued By [[Date] Modification Lissue No   Issued By	Special Instructions Bv	
	Language	
	MIC	Date 29/04/2010 10:30:01
	Voltage 230 Hz	50-60
		Machine No R30T