



ARTISANAL REFINER/ CONCHE

20 - 45 kg Batch Capacity



MACINTYRE 45 - ARTISANAL CHOCOLATE REFINER/CONCHE



Features

- Electric Immersion Heating
- Electric Main Drive Motor
- Electric Extraction Fan
- Auto Temperature Control
- PLC Control Panel - used to monitor system parameters and alerts the operator when to adjust system parameters in order to obtain optimum refining. Will alert operator to any potential issues arising with pressure of machine and temperature of product based on correct set up of high / low alarms by operator and will stop the machine in event of a breach. Can be linked to an iPad to allow operator to monitor remotely.
- Hand Control for increasing and decreasing pressure
- Hinged Delivery End for easy cleaning
- Hard Wearing D Section lining bars
- Fitted on its own base plate
- Sound Reduction Blanket – is a combination of rigid urethane board and shrouding, it is fitted round the cylinder of the Refiner/Conche to reduce the noise level
- Anti Vibration Pads - reduces vibration and therefore transmitted noise. We recommend using it in conjunction with our Sound Reduction Blanket

Benefits

- Cost effective system for the production of pure chocolate, compound, couverture, cream fillings, tree nut butter, etc.
- Grinds cocoa nibs into fine cocoa liquor
- Requires the minimum of floor space as this universal system performs the function of a sugar mill, cocoa mill, pre-mixer, refiner and conche, all in the one machine
- Low energy consumption
- Minimal labor requirements
- Moisture content achievable as low as 0.3%
- Low metal count (approximately 23 added parts per million)
- Fat contents of 25% to 70% can be handled
- Long wearing grinding section made from specially developed alloy steel gives years of life.



Technical Data

Machine Capacity (kg)	Main Drive Motor (kw)	Electric Immersion (kw)	Length (mm)	Width (mm)	Height (mm)	Net Weight (kg)
20 – 45	1.5	1 x 3kw	1361	1028	929	T.B.C.

MacIntyre reserves the right to change specifications.

Legacy Range

In order to offer the shortest possible lead time on our most popular models, from 2016 our traditional style 45kg Model has become part of our Legacy Range. The 20kg batch capacity model is still available as part of the Legacy Range for a limited time only

- 20kg Refiner/Conche Mark 10
- 45kg Refiner/Conche, Mark 10

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Installation

- Ideally 1 meter clearance is required around the equipment's perimeter. The area should be adequately ventilated to prevent overheating of the motors and gearboxes.
- The machine is best installed on a flat reinforced concrete foundation floor– minimum thickness 230mm (9”) of 30 Newton grade concrete. The machine does not have to be bolted to the floor.
- It is advisable that the machine be mounted on anti-vibration pads or strips mounted under the channel sections that form the machine plinth. These pads also allow the machine to sit stably on slightly uneven floors and slightly reduces noise levels.
- Control Panel mounted on machine base and pre-wired, ready to connect to 3 phase supply.
- Consideration of service provision to and from the machine should also be made. Electrical supplies should be carried to the equipment using cable trays or trunking
- Water feed and return lines will need to be connected to the machine to provide cooling taking into consideration the following cooling requirements
- Three phase electrical supply is required

Ambient Temperature	25°C
Cooling Water Temperature	12 - 16°C

Machine Capacity (kg)	Machine Style	Cylinder Capacity (Litres)	Consumption (Litres per Hour)	Water Cooling Capacity (kW)
20 – 45	Laboratory	13	100 - 140	2.9

Notes

- Values are for guidance only and will vary depending upon the ambient temperature, the cooling water temperature, the product being manufactured and the machine's settings
- If the ambient temperature in the room where the machine operates is between 35 – 40°C then the above water consumption values should be increased by 40%
- When cooling water temperature is 25 – 30°C and ambient temperature is 25°C then the above water consumption values should be increased by 60%
- Maximum pressure permitted in the cylinder water cooling jacket is 1.5 bar (21.5 psi)
- Cooling capacity based upon 6.5 kW/m² transferred to cooling water over effective area of internal cylinder wall giving a 5°C temperature gradient through the wall and 0.2 kW/m² lost to ambient atmosphere through cylinder jacket giving a 1°C temperature gradient through the jacket wall

Cycle Times

- Cycle times are dependant on recipe, quality of raw materials, fineness required and model of Refiner/Conche being used. Please contact the sales office for a cycle time estimation





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