



VP-RANGE

INSTALLATION AND OPERATING MANUAL

PLEASE LEAVE WITH OPERATOR



VP3.5 & VP7 – SERIES 4

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EC DECLARATION OF CONFORMITY
(Guarantee of Production Quality)



We, Imperial Machine Company Limited of:
Unit 1, Abbey Road, Wrexham Industrial Estate, Wrexham, LL13 9RF
Declare under our sole responsibility that the machine

VP3.5 & VP7 - SERIES 4

As described in the attached technical documentation is in conformity with the Machine Safety Directive 89/392/EEC as amended by 91/368/EEC and 93/44/EEC and is manufactured under a quality system BS EN ISO 9001. It is also in conformity with the protection requirements of the Electro Magnetic Compatibility Directive 89/336/EEC and is manufactured in accordance with harmonised standards EN 55014-1 Emission and EN 55014-2 Immunity (plus product specific standards).

It also satisfies the essential requirements of the Low Voltage Directive 73/23/EEC amended by 93/68/EEC and is manufactured in accordance with standards BS EN 60335-1 and BS EN 60335-2-64.

Approved by S Witt, Product Support Manager

A handwritten signature in black ink, appearing to read 'S Witt', is written over a horizontal line.

Signed at Wrexham, April 2008

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GUARANTEE

This equipment is guaranteed by IMC for 2 years from the date of its purchase from IMC, or from one of its stockists, dealers or distributors. The guarantee is limited to the replacement of faulty parts or products and excludes any consequential loss or expense incurred by purchasers. Defects which arise from faulty installation, inadequate maintenance, incorrect use, connection to the wrong electricity supply or fair wear and tear are not covered by the guarantee.

Please observe these instructions carefully.

The guarantee applies in this form to installations within the United Kingdom only.

DELIVERY

The packaged machine consists of:



Peeler Unit	1
Peeling plate	1
Water supply pipe and 2 hose clips	1
Rubber waste outlet hose	1
Instruction Booklet	1

If any accessories have been ordered they will be supplied in separate packages.

Please notify both the carrier and the supplier within three days of receipt if anything is missing or damaged.

Check that the correct machine has been supplied and that the voltage, marked on the rating plate, is suitable for the supply available. The rating plate is located at the back of the cylinder near the supply cable inlet.

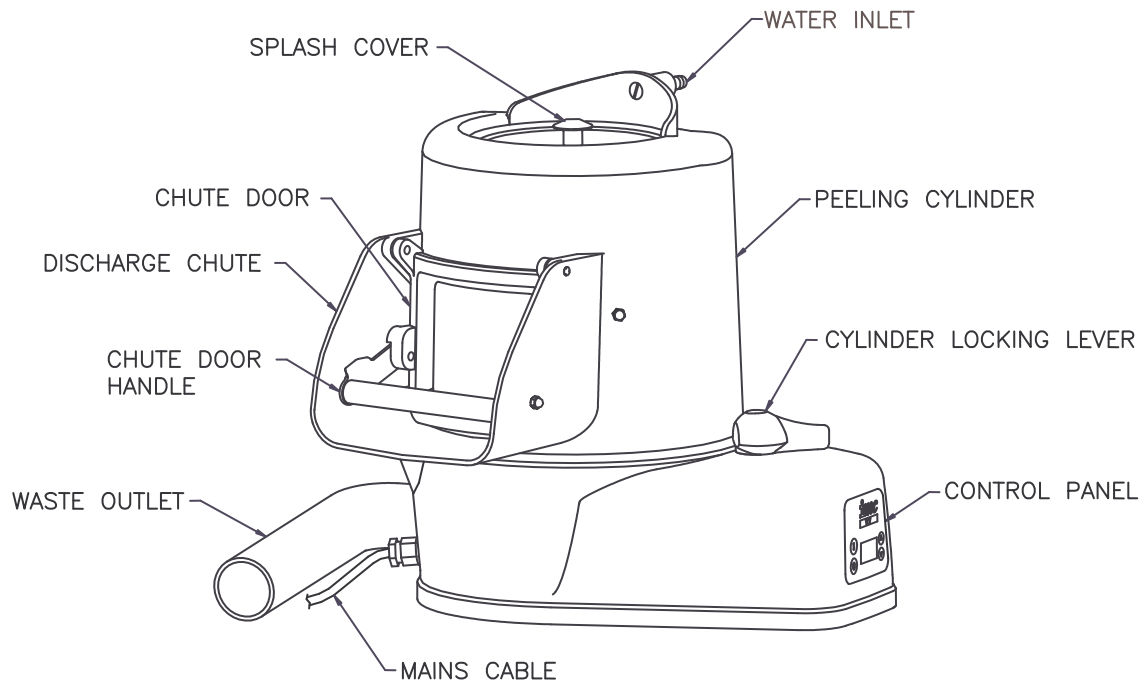
SAMPLE RATING LABEL

 	UNIT 1, ABBEY ROAD WREXHAM INDUSTRIAL ESTATE WREXHAM LL13 9RF, UK TEL 01978 661155 FAX 01978 729990 SERVICE TEL 01978 667741 SERVICE FAX 01978 667766		
	MODEL VP3.5 SERIES 4 SERIAL 4001 dB(A) 73	VOLTAGE 230 PHASE 1 Hz 50/60 FLA 2.3 kW 0.48	1 7 2 8 3 9 4 10 5 11 6 12

INTRODUCTION

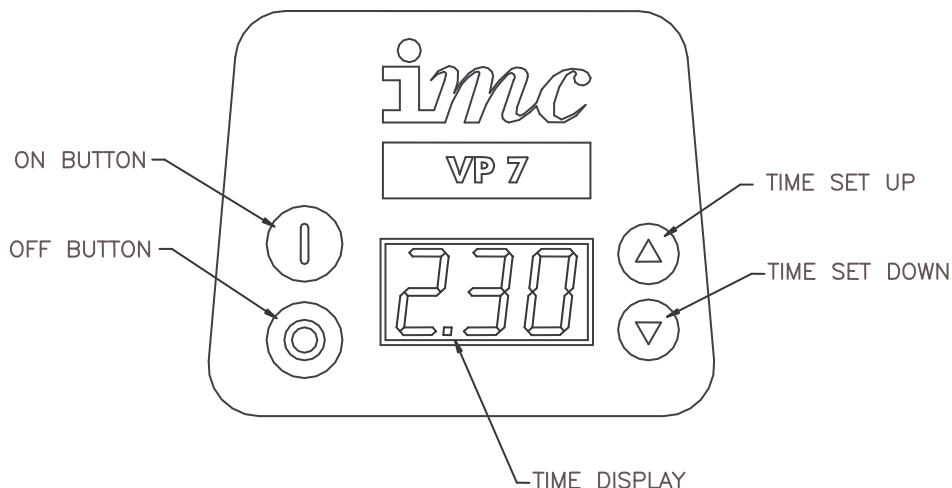
This machine is intended for peeling potatoes. Its use may be extended to other root vegetables. It is not recommended to use this machine for peeling onions.

YOUR PEELER



CONTROLS

The peeler has a control panel mounted on the front of the unit as shown below:



The peeler run time is set by pressing the 'time set up' or 'time set down' buttons until the required time is displayed. The maximum run time is 4 minutes and the minimum is 15 seconds.

To start the machine, press the green 'On' button. The timer will count down during operation and the peeler will stop when the timer reaches zero. At the end of the run the timer will display the run time last used. During a run the peeler can be stopped at any time by pressing the red 'Stop' button.

The control panel is waterproof to IP65 and can be washed down.

INSTALLATION

For the Installer:

These Instructions contain important information designed to help the user obtain the maximum benefit from the investment in an IMC VP Peeler.

Please read them carefully before starting work, and consult with the supplier in the event of any queries.

Be sure to leave this Instruction Manual with the user after the installation of the machine is complete.

Procedure:

Work top models

The VP Range is designed to stand on a bench, table, or on a draining board.

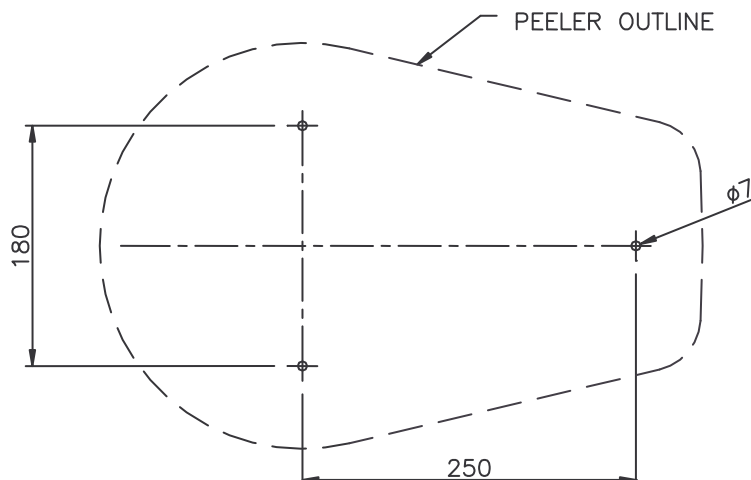
DO NOT mount or operate the unit in a sink.

The peeled potatoes are commonly discharged into a sink and the waste sludge can be piped away separately, possibly using the waste ejector fitting.

Alternatively, with lightly used machines the waste can be directed into the sink skip that acts a strainer in the sink. The peeler is not handed and can be located on a worktop either side of the sink. The discharge cylinder can be rotated to suit the installation. Ensure that the machine is sited so that the control panel is in easy reach of the operator.

If it is required to secure the peeler to the worktop then the unit can be bolted down using a bench-securing bracket. This is not supplied with the machine, but can be ordered separately. The diagram below shows the holes required in the worktop. Ensure that whatever is used for this purpose is sturdy and rigid and not more than 900 mm high. A higher table makes it difficult to load the machine. Secure the bracket to the worktop using M6 screws that are 20mm longer than the thickness of the worktop. Remove the base cover of the peeler by undoing the three securing screws, which can be found under the base seal on the side of the machine. Remove the earth wire from the base panel. If the benching is metallic drill a hole next to the mounting bracket and secure the earth wire to the bench, otherwise remove the earth wire. Place the peeler over the bracket and secure using screws supplied with the securing bracket.

Bench securing points



Trolley installation

The peeler can be mounted onto a trolley. If ordered, this will be supplied in separate packing. Mounting to the trolley is straightforward as follows:

- Secure the bench mounting bracket, provided with the trolley, onto the trolley using the screws provided.
- Remove the base cover of the peeler by undoing the three securing screws, which can be found under the base seal on the side of the machine.
- Remove the earth wire from the base panel and secure the earth wire to the bracket.
- Place the peeler over the bracket and secure using the countersunk screws supplied with the securing bracket.

Pedestal installation

If the peeler is to be mounted onto a pedestal it must be secured to the floor as follows:

- Remove the base cover of the peeler by undoing the three securing screws, which can be found under the base seal on the side of the machine. Remove the earth wire from the base cover.
- Place the peeler onto the pedestal, move the whole unit into the required peeling location and mark around the outside of the pedestal on the floor.
- Remove the peeler from the top of the pedestal.
- Put the pedestal back into position using the mark previously made.
- Fixing holes are located inside the pedestal; mark though these onto the floor. Drill holes at these marks and secure the pedestal using rawlbolts or other suitable floor fixings. Fasten the pedestal to the floor with these fixings.
- Select the height of the pedestal required and secure with the fasteners provided. Use the rubber plugs supplied to close off the unused holes.
- Finally, attach the earth wire to the earth stud at the top of the pedestal whilst replacing the peeler onto the pedestal assembly. Secure with the three countersunk screws provided.

The discharge chute heights possible with the pedestal are as follows:

Locating hole	Min	2 nd	3 rd	4 th	Max
Chute height (mm)	750	800	850	900	950

ELECTRICITY SUPPLY CONNECTION

Before connecting, examine the rating plate attached to the machine to ensure that the characteristics shown are correct for the supply available. Any changes to the supply or new mains runs should be carried out by a qualified electrician and in accordance with the IEE Codes of Practice.

Single-phase machines come supplied with a three-pin plug. The socket used should be away from any splash area.

Three phase machines should be connected to a 30A isolator providing at least 3mm separation in all poles. The isolator should be fused at 6A.

The supply to the machine must also be protected by a 30mA RCD.

The mains lead fitted to the machine is the minimum required for individual connection to the mains supply. Site conditions may vary with additional length of cable run, encapsulation in trunking, bunched with other cables, etc, being required. Should this apply, the qualified electrician must alter the lead in accordance with the IEE Codes of Practice.

WARNING: This machine must be earthed

The wires in the mains lead for single-phase supply are coloured:

Green and Yellow	Earth
Brown	Live
Blue	Neutral

The wires in the mains lead for three-phase supply are coloured:

Green and Yellow	Earth
Brown	Phase 1
Black	Phase 2
Grey	Phase 3

The three-phase machines do not have a neutral wire; if the supply has a neutral wire isolate it and wire the unit only to the three-phases and earth.

WATER SUPPLY

Connect the water supply pipe to the hose tail located on the top of the cylinder. Fit the other end of the supply pipe to a cold water supply.

PLEASE NOTE: these machines are fitted with an air-break to prevent back syphonage into the mains supply, but some local authorities may nevertheless require connection to a storage cistern rather than direct to the mains supply. This applies to UK installations only. Overseas customers should install the machine in accordance with local regulations.

IF IN DOUBT, CHECK WITH YOUR LOCAL AUTHORITY

WASTE OUTLET CONNECTION

If emptying the waste into a sink is not desired then the peeler can be plumbed into the waste pipes. The waste outlet pipe fits over standard 2" pipe and should be secured by a jubilee clip. The length of the pipe should be kept to a minimum and the size must not be reduced. The pipe must have a fall of at least 1:15 and changes of direction should be made by swept bend rather than elbows and cleaning eyes should be fitted where possible in accordance with standard plumbing practice.

Waste ejector

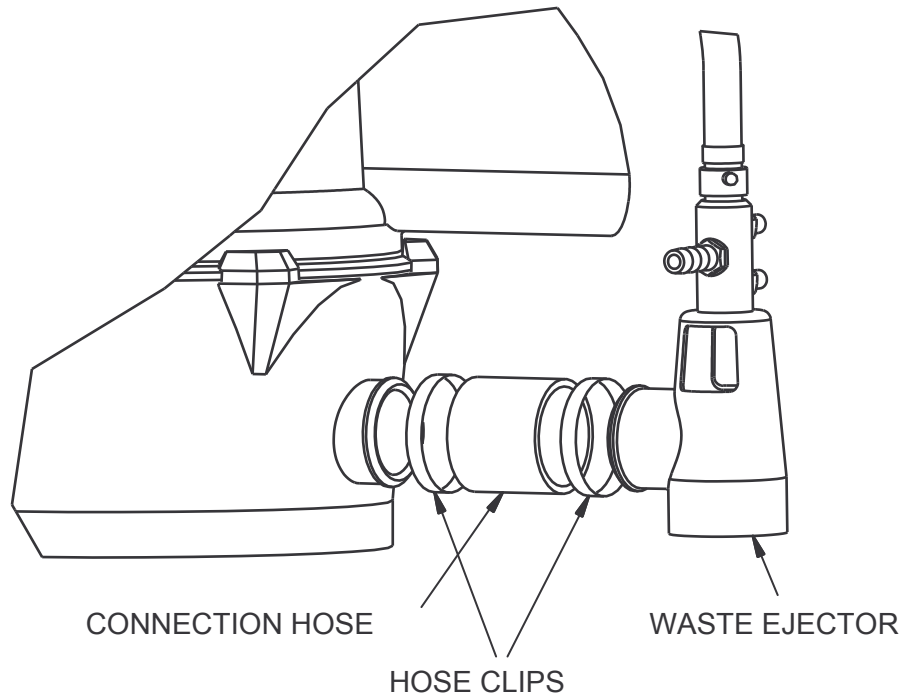
The waste ejector is a fitting that dilutes the waste sludge to enable it to flow easily through the drains.

Waste Ejectors are not recommended in the follow circumstances;

- A pipe run exceeding 15m between the machine and main drain
- When a fall of 1:15 cannot be achieved
- When piping is exceptionally complex

In any of the above cases an interceptor tank is recommended.

The waste ejector fits onto the waste outlet boss in place of the waste outlet hose, as shown below. Ensure that the ejector body is vertical and secure in place with the jubilee clips supplied. The water supply to the ejector is via the hose tail on top of the waste ejector. The ejector unit has a 2" BSP connection for the waste piping.



Waste Ejector adjustments

When the pipe-work is complete set the ejector adjustments to give the correct water flow through the machine. Two adjusting screws and lock nuts are provided for this purpose. The top one controls flow through the peeler and the lower one controls the jet to the waste pipe. Adjust the top screw until the flow through the machine is between 2.25 and 7 litres per minute, and then tighten the lock nut. Set the lower screw to allow a jet of water into the waste pipe of 2.25 to 3.5 litre per minute, and then tighten the lock nut.

COMMISSIONING

After making the electrical connection, switch on the machine, and ensure that the unit will only run with cylinder in position. Then check that the direction of rotation of the shaft is CLOCKWISE when viewed from above.

The direction of rotation of single-phase units is set at the factory. If it is not rotating in the correct direction, contact IMC. To change the direction of rotation of three-phase units, switch off the machine, isolate the supply and interchange any two phase wires.

OPERATION

- 1 Fit the bottom plate, ensuring that it is properly located on the drive shaft.
- 2 Fit the cylinder and rotate into the required position. Lock into position with the locking lever.
- 3 Measure out the potatoes into a container that holds a known measured weight, and check for stones that could damage the abrasive. Should this happen, the noise will indicate the presence of stones. Switch off immediately and remove them.
- 4 Set the run time required on the control panel – two to two and a half minutes is normally more than adequate - and press the green start button. Turn on the water supply.
- 5 Ensure that the chute discharge door is closed. Load the potatoes into the peeler and place the splash cover onto the top of the cylinder.
- 6 The machine is now operating. Remove the splash cover to check the progress of peeling process. The peeler can be stopped before the end of the timed cycle by pressing the Stop button.
- 7 On completion of the cycle the peeler will stop. Turn off the water supply, open the chute door and while keeping the door open, press the Start button to evacuate the potatoes, press the Stop button when the peeler is empty.



ON NO ACCOUNT put a hand or implement into the machine, or wedge the door open while discharging.

SAFETY

All VP-Range machines are fitted with a number of safety features to prevent operator injury.

Interrupt protection: If the electricity supply is interrupted the machine will not restart until the green start button is pressed again.

Cylinder interlock: If the cylinder is removed the motor will not start until it is replaced, and the green start button has been pressed.

CLEANING

It is essential to clean the machine at least once a day, preferably at the end of each period of operation.

- 1 Switch off at the socket or isolator.
- 2 Disconnect the water supply from the tap.
- 3 Remove the peeling cylinder.
- 4 Lift out the peeling plate.
- 5 Clean the peeling plate and cylinder in a sink, potwash or by hosing with a spray.
- 6 Rinse the inside of the base with warm water, using a mild detergent if necessary.
- 7 Wipe the exterior of the machine with a damp cloth, again using a mild detergent if required.

DO NOT USE CLEANING MATERIALS CONTAINING ABRASIVES OR BLEACHES.

DO NOT STEAM CLEAN

MAINTENANCE

Other than regular cleaning the VP-Range of peelers require no maintenance by the end user. It is recommended that an IMC approved engineer services the unit at least once a year.

Details of IMC Service Contracts are available on application.

DO'S AND DON'TS

- Do** Install on a level service.
- Do** Ensure power supply isolator or socket is accessible with the peeler installed.
- Do** Clean the machine after each period of use.
- Don't** Site the peeler in a sink.
- Don't** Sit or stand on top of the peeler.
- Don't** Place hands inside unit while discharging or peeling.
- Don't** Use the unit outside.

TROUBLESHOOTING

Problem	Potential Reason	Solution
Excessive water spillage	Door is not closed	Ensure handle is pushed down firmly and secured at stops
	Splash lid not seated properly	Ensure top of cylinder is clean allowing lid to sit correctly
	Water pressure too high	Reduce water pressure
Display shows 'E1'	Motor has overheated	Isolate power supply and contact IMC immediately
Display shows 'E2'	Cylinder is not fitted correctly	Check cylinder is fitted correctly. 'E1' display will then flash. Press red '0' button to clear error. Restart machine.
No display	PCB requires reset	Isolate power supply. Wait approximately 15 seconds. Reconnect power supply.
	Peeler not connected to mains	Check power supply and fuse

If you experience any problems that cannot be resolved by following these solutions, please contact the IMC Service Department on the number below.

ORDERING SPARE PARTS

In the event that spare parts or accessories need to be ordered, please always quote the SERIES AND SERIAL NUMBER of the machine. This is to be found on the rating plate located near the supply cable.

For installations outside the UK please contact your supplier.

For information on IMC spares and service support (if applicable), please call IMC on +44 (0)1978 661155. Alternatively, contact us via email or fax:

IMC Service Desk

Fax: +44 (0)1978 667766

E-mail: service@imco.co.uk

IMC Spares Desk

Fax: +44 (0)1978 667759

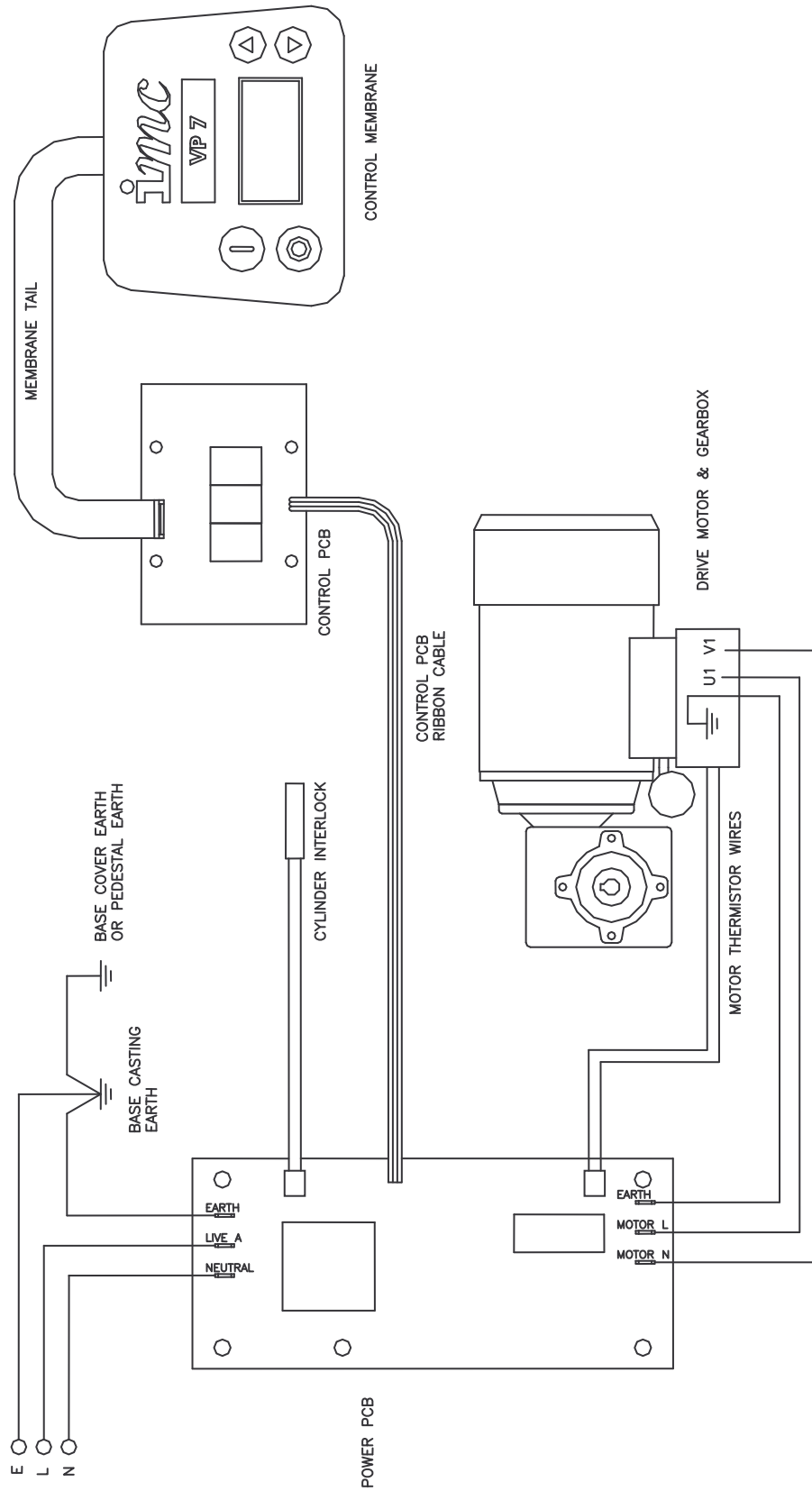
E-mail: spares@imco.co.uk

MATERIAL CONTENT

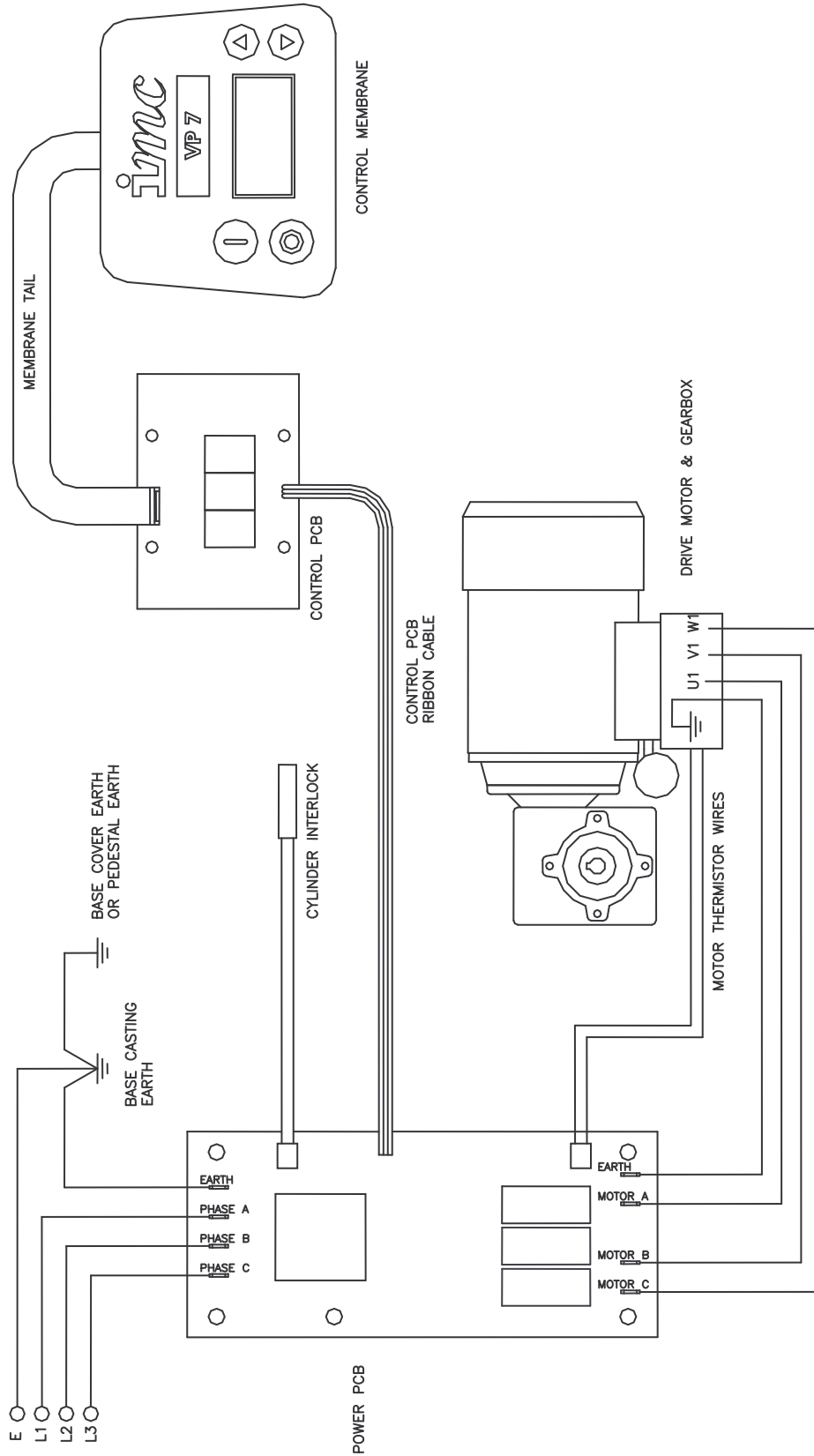
The VP-Range peelers contain the following materials:

Metals	Stainless steel, Mild steel (inc plated), Aluminium and copper.
Plastics and rubber	Polycarbonate, Nylon, Neoprene rubber.
Other	Aluminium oxide, electrical components.

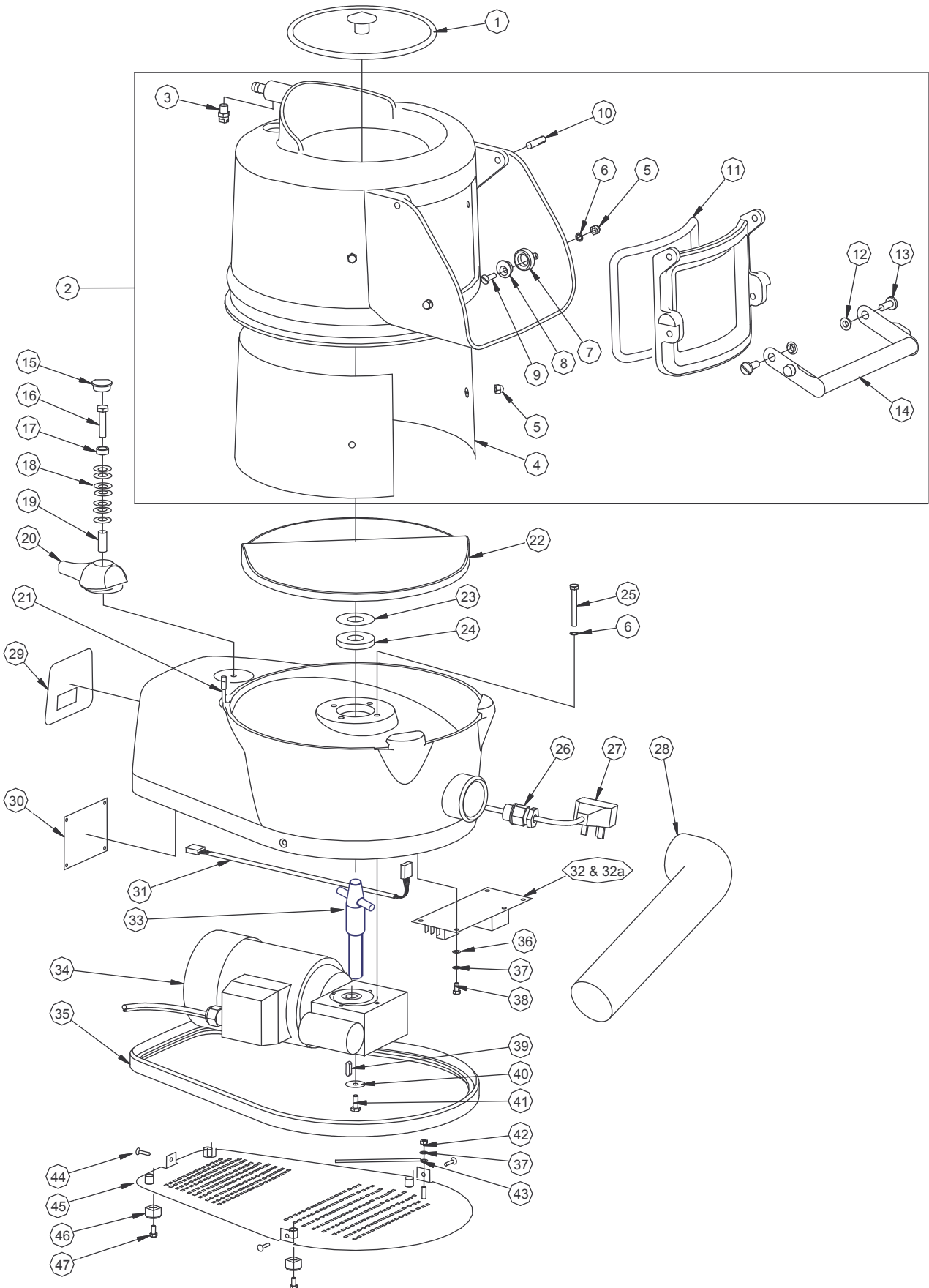
WIRING DIAGRAM - 1 PHASE



WIRING DIAGRAM - 3 PHASE



PARTS ILLUSTRATION



SPARES PART LIST

	VP3.5		VP7	
Item	Part No	Description	Part No	Description
1	S72/012	VP Splash Cover	S72/012	VP Splash Cover
2	S72/010	VP3.5 Cylinder Assembly	S72/011	VP7 Cylinder Assembly
3	J04/322	Spray Nozzle	J04/322	Spray Nozzle
4	E72/009 Z1	VP3.5 Cylinder Liner	E72/010 Z1	VP7 Cylinder Liner
5	D20/031	M6 Dome Head Nut	D20/031	M6 Dome Head Nut
6	D25/005	M6 Shakeproof Washer SS	D25/005	M6 Shakeproof Washer SS
7	M79	Door Roller	M79	Door Roller
8	L21/048	Eccentric	L21/048	Eccentric
9	D18/051	Screw M6 x 20 CSK SS	D18/051	Screw M6 x 20 CSK SS
10	D26/037	Grooved Pin 8 Dia x 30	D26/037	Grooved Pin 8 Dia x 30
11	A13/078 M5	Neoprene Door Gasket	A13/078 M5	Neoprene Door Gasket
12	A00/058	Nylon Shoulder Washer	A00/058	Nylon Shoulder Washer
13	D21/057	Screw M8 x 20 Pan SS	D21/057	Screw M8 x 20 Pan SS
14	S59/253	Door Handle	S59/253	Door Handle
15	M72/004	Locking Lever Cap	M72/004	Locking Lever Cap
16	D19/077	Screw M8 x 35 Hex	D19/077	Screw M8 x 35 Hex
17	L72/005	Spacer – Locking Lever	L72/005	Spacer – Locking Lever
18	A18/015	Disc Spring	A18/015	Disc Spring
19	A22/003	Spirol Spacer	A22/003	Spirol Spacer
20	M72/002	Locking Lever	M72/002	Locking Lever
21	G60/396	Proximity Switch	G60/396	Proximity Switch
22	S72/013	VP Peeling Plate	S72/013	VP Peeling Plate
	L72/006	Drive Boss	L72/006	Drive Boss
	D20/042	M5 Nyloc Nut	D20/042	M5 Nyloc Nut
23	E59/149	Seal Protector	E59/149	Seal Protector
24	A02/037A	Oil Seal	A02/037A	Oil Seal
25	D19/108	Screw M6 x 50 Hex	D19/108	Screw M6 x 50 Hex
26	G80/029	Cable Gland	G80/029	Cable Gland
27	G60/101 M6	Mains Cable UK	G60/101 M6	Mains Cable UK
28	M72/001	Waste Outlet Hose	M72/001	Waste Outlet Hose
29	A08/626	VP3.5 Membrane	A08/625	VP7 Membrane
30	G55/014	Display PCB	G55/014	Display PCB
31	G55/017	PCB Link Cable	G55/017	PCB Link Cable
32	G55/015	3ph Power PCB	G55/015	3ph Power PCB
	G55/016	1ph Power PCB	G55/016	1ph Power PCB
32a	G55/018	Membrane Ext Ribbon Cable	G55/018	Membrane Ext Ribbon Cable
33	L72/001	VP Drive Shaft	L72/001	VP Drive Shaft
	D28/019	Grooved Pin	D28/019	Grooved Pin
34	S72/002	1ph Motor Gearbox Assembly	S72/002	1ph Motor Gearbox Assembly
35	S72/003	3ph Motor Gearbox Assembly	S72/003	3ph Motor Gearbox Assembly
36	D25/021	M5 Plain Washer	D25/021	M5 Plain Washer
37	D25/004	M5 Shakeproof Washer	D25/004	M5 Shakeproof Washer
38	D19/032	Screw M5 x 12 Hex	D19/032	Screw M5 x 12 Hex
39	D27/033	Drive key	D27/033	Drive key
40	D25/019	M6 Oversize Washer	D25/019	M6 Oversize Washer
41	D19/039	Screw M6 x 16 Hex	D19/039	Screw M6 x 16 Hex
42	D20/038	M5 Full Nut	D20/038	M5 Full Nut
	G60/363	Earth Cable, Base to Cover	G60/363	Earth Cable, Base to Cover
43	G60/362	Earth cable, Base to PCB	G60/362	Earth cable, Base to PCB
44	D22/061	Screw No 8 x 0.75"	D22/061	Screw No 8 x 0.75"
45	E72/004	Base Cover	E72/004	Base Cover
46	A13/048	Rubber Foot	A13/048	Rubber Foot
47	D21/050	Screw M6 X 12 Pan SS	D21/050	Screw M6 X 12 Pan SS
	VP3.5 ACCESSORIES		VP7 ACCESSORIES	
	A29/003	Splash Cover Retaining Strap	A29/003	Splash Cover Retaining Strap
	S58/569	Floor Standing Interceptor Tank	S58/569	Floor Standing Interceptor Tank
	S72/023	Waste ejector	S72/023	Waste ejector
	S72/020	Wheeled Trolley	S72/020	Wheeled Trolley
	S72/021	Adjustable Pedestal	S72/021	Adjustable Pedestal
	E72/014	Bench Mounting Bracket	E72/014	Bench Mounting Bracket
	E72/011	Stainless Steel Sink Skip	E72/011	Stainless Steel Sink Skip

When ordering spare parts or accessories always quote the SERIES AND SERIAL NUMBER of the machine, found on the rating label.