

# IMPACTOR IP400, IP500 and IP600 WASTE COMPACTORS

## INSTALLATION, OPERATING AND MAINTENANCE MANUAL PLEASE LEAVE WITH OPERATOR



### IP400 - SERIES 5, IP500 - SERIES 3, IP600 - SERIES 2

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A34/024 R3

**ECN 7585 February 2011** 

#### **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 imc (E

IP400 - SERIES 5 IP500 - SERIES 3 IP600 - SERIES 2

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 EN 29001. 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 50-081-2 Generic Emission and EN 50-082-2 Generic Immunity (plus product specific standards).

It also satisfies the essential requirements of the Low Voltage Directive 73/23/EEC amended by 93/68/EEC.

Approved by S Witt, Product Support Manager

Signed at Wrexham, Date

February 2007

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#### INTRODUCTION

IMC Compactors are designed to reduce the bulk of waste by compression into a plastic bag within a purpose-designed trolley. The recommended type of waste is cardboard boxes, plastic containers, bottles, cans and dry food waste. It is important that these recommendations are adhered to. Any other use is against the manufacture's advice and is beyond the design limitations of the unit. No legal liability can be deemed to attach to the manufacturer in respect of such misuse or wrongful application.

#### **GUARANTEE**

Each Impactor is guaranteed by IMC for 1 Year 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 or fair wear and tear are not covered by the guarantee.

#### Please observe these instructions carefully.

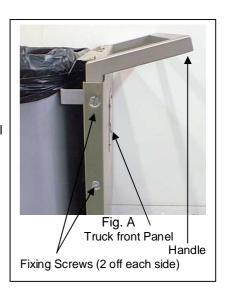
The guarantee applies in this form to installations within the United Kingdom. Contact your Impactor supplier first.

#### **RECEIVING THE UNIT / UNPACKING INSTRUCTIONS**

- Prior to unpacking check that there is no transit damage.
- Stand the carton or crate on the end marked 'bottom'.
- Remove the outer carton or crate panels.
- Knock away the wooden blocks around the machine.
- Lift latch handle on the truck and pull the truck out.
- Remove all the packaging materials from inside the truck and remove the following items:

Set of keys
User manual
Pair of truck liners
100 bags with 100 wire ties(1 box)and tie twisting tool
Truck handle - not fitted

IP500 and IP600 machines are delivered with the truck part-assembled. To assemble the truck handle remove the four fixing screws in the truck front. Slide the handle in place and refit the four fixing screws. (See fig. A)



IP400 machines are delivered assembled with the following loose items inside the truck:
 Set of keys

User manual

Pair of truck liners

100 bags with 100 wire ties (1 box) and tie twisting tool

To manoeuvre the IP400 truck: lift truck latch handle, raise the truck handle to the high position, lift the latch handle and lower the truck handle to fit truck into machine.

- Wheel the machine off its packing base.
- Inspect the machine carefully before disposing of the packing materials, and check that the machine and any accessories have been delivered undamaged.

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



## Warning: This machine has a high centre of gravity, take care when manhandling it

Shipping specifications					
Model	Weiq Gross	ght/kg Net	Dimensions cm	Cube m³	
IP400 IP500 IP600	223 373 474	193 298 377	176x60x73 187x77x90 210x96x110	0.770 1.296 2.218	

#### **PREPARATION**

Strip off the protective vinyl covering from the stainless steel sheeting. If appearance is not an important factor it does no harm to leave this protection in place.

#### SITING AND INSTALLATION

#### For the installer:

These instructions contain important information designed to help the user obtain the maximum benefit from the investment in an IMC Waste Compactor.

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

Please leave this Instruction Manual with the user after installation.

#### **Procedure:**

The Compactor is designed to reduce the volume of rubbish. The maximum advantage is gained if compaction is carried out at the point at which the waste arises. This results in minimum movement, reduced handling, and maximum cost savings. Alternatively, it is possible to order extra trucks for larger establishments or waste segregation.

Ensure that the Compactor is located on a flat and level floor. Ensure that sufficient additional space is available to allow the truck to be withdrawn. The front pair of castors are fitted with brakes, which can be locked into position by depressing the pedal. Push truck into machine, and ensure it is latched in.

#### **ELECTRICAL CONNECTION**

Standard machines are supplied as single phase units. 3 phase machines are supplied as variation to specification.

Before making the electrical connection check that the voltage of the supply is suitable for the machine. The details of the machine are on a rating label located on the rear panel.

All machines should be connected to a switched outlet.

Machine Type	Machine termination	Supply termination
Single phase machines 230-1-50 220/240-1-60 110-1-60	Mains lead terminated with a moulded plug, fitted with 10 Amp fuse	13 Amp switched socket
3 phase, 4 wire 220-3-60 440-3-60	Mains lead free end, wires marked: L1 (black) L2 (black) L3 (black) E (green / yellow)	Fused isolator switch rated at 10 Amps per phase.
3 phase, 5 wire 415-3-50 220-3-50 360/440-3-50 380/415-3-50	Mains lead free end, wires marked: L1 (black) L2 (black) L3 (black) N (blue) E (green / yellow)	Fused isolator rated at 10 Amps per phase

**Note:** On 3 phase machines to ensure that the Power Pack Motor rotates in the correct direction, connect the leads of the mains cable to the corresponding wires of the mains supply fused isolator switch. After connection to the isolator switch, switch on the isolator and press the green start button on the machine. If the hydraulic power pack runs but the ram does not operate the machine must be stopped immediately. Switch off at the isolator and exchange any two incoming phase wires.



WARNING - THIS MACHINE MUST BE EARTHED

#### **OPERATING:**

#### **Preparing for Use**

- Remove the truck by lifting the truck latch and pulling on the truck handle.
- Place an IMC bag into the truck and arrange for the bottom of the bag to cover the base of the truck. Then fold the top edges of the bag over and around the rim of the truck.
- Position the truck liners inside the bag.
- Push the truck back into the machine.

It is recommended that only IMC Impactor bags are used to achieve best results. Additional bags are available from IMC or its distributors.

#### Operation

- Turn the keyswitch to select the ON position.
- Select NORMAL or CONSTANT operation.

If NORMAL is selected the unit will cycle once only: the ram will move to the down position, pause for four seconds and return to the fully up position where it will stop.

CONSTANT leaves the ram in the down position until released by turning the switch from constant to normal. Use this mode for resilient material which has resistance to compaction.

- Open the flap and place waste material into the truck. Waste may also be
  placed into the truck before is pushed into the machine.
  (A useful tip is to commence with some cardboard which then forms a solid
  base in the bag. There is no need to sort waste, but it is not recommended to
  compact large amounts of glass).
- Close the flap fully and press the START button, the run indicator will light while the ram is moving or in the down position.
- The machine will not operate unless the truck is properly locked into position and the safety flap is closed.
- To stop the machine at any point in its cycle press the STOP button. To restart press the START button the machine will continue its cycle.
- Continue compacting until the bag full light comes on. Bag full levels are dependent on the type of waste being processed. Do not overfill the truck as this makes it difficult to withdraw.

- When the truck is full, lift the truck latch handle and pull the truck out of the machine by its handle.
- Unlock the toggle clips at the front of the truck.
- Withdraw the truck liners by lifting vertically.
- Unfold the rolled over edges of the plastic bag and pull together.
- Twist the neck of the bag and fold a wire tie round the neck of the bag so that
  the two loops on the tie come together. Then insert the hook of the tying tool
  into both loops. Pull the handle and the tool will twist the wire tight, sealing the
  bag.
- Fasten the toggle clips on the truck.
- Wheel the truck to the garbage storage area. Unfasten the toggle clips, open the two truck doors and slide the bag out.
- Take care to re-engage the two doors correctly into the slots, close the toggle clips and return the truck to the machine.
- It is recommended that if the machine is not in use for long periods it is switched off at the keyswitch.

#### **OVERLOAD PROTECTION**

Under extreme load circumstances the Compactor might overheat. The switchgear contains an overload to prevent any damage to the motor. This device will automatically reset itself when cool, and it will only be necessary to wait a few minutes before the machine can be restarted.

Press the START button to reset and start the machine.

If any difficulty is encountered please contact the supplier or the manufacturer.

#### **MAINTENANCE**

Keep the Compactor and the area around it clean at all times.

Remove the truck and then, by releasing the castor brakes, the unit may easily be moved to clean the floor beneath and behind it. (NB. Switch off the electricity supply at the isolator or unplug the unit before moving or cleaning).

It is advisable to clean the exterior stainless steel finish periodically with a stainless steel cleaning agent or a soapy cloth.

Once a year the hydraulic oil level must be checked by a Service Technician. This is done by removing the top and back panel, and checking the hydraulic oil level in the Power Pack reservoir. The Power Pack reservoir has a label showing maximum and minimum oil levels. These should be adhered to when checking levels. Replace with Derwent 68 oil, or equivalent.

A Service Contract for regular maintenance is recommended. Please contact IMC Service Desk (01978 667743) for information.

#### **FAULT FINDING**

#### 1 Pressing the green START button has no effect:

- Check that the key switch is switched on.
- Check the NORMAL/CONSTANT switch is set on normal.
- Check flap is fully closed.
- Check the truck is in the machine and fully latched in.
- Check electricity supply is on.
- · Check the fuse in the plug.
- Check the electrical socket is functional.

## 2 The machine stops with the ram in the down position and RUN indicator light on.

- Check that the machine NORMAL/CONSTANT switch is set on normal.
- 3 The machine stops during its cycle and RUN indicator light is not lit:
- Check flap is fully closed.
- Check that the truck is fully home and latched in.
- Under extreme load condition the compactor might overheat. The switchgear contains an overload to prevent damage to the motor, this device will automatically reset when cool. Wait a few minutes then press the START button to reset and start the machine.
- Check electricity supply is on.
- Check the fuse in the plug.
- Check the electrical socket is functional.

- Check that the flap interlock switch is functioning by metering to check that with the flap closed, the switch contacts are made.
- Check that the truck switch is functioning by metering to check that with the truck latched in, the contacts are made.

If difficulty persists contact the supplier or IMC Service Desk (01978 667743).

#### **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:

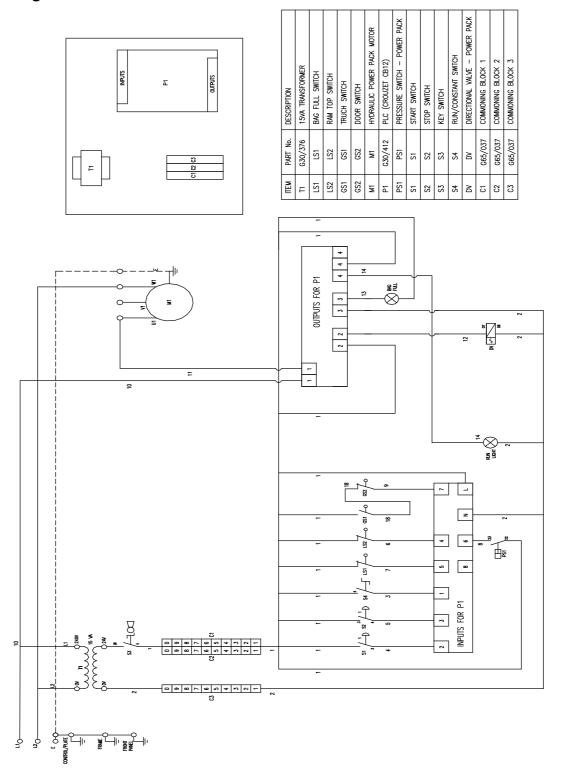
IMC Service Desk Fax: +44 (0)1978 667766

E-mail: service@imco.co.uk

IMC Spares Desk Fax: +44 (0)1978 667759

E-mail: spares@imco.co.uk

Wiring Diagram – 400, IP500 & IP600 110 - 240V – 1 phase, 50/60Hz Fig. 1



Parts Illustration – IP400 Fig.2



	PARTS LIST IMPACTOR IP400, JANUARY 2002  To be read in conjunction with Figs 1-4. NB Before ordering please read the note on page 9					
Item	Part No.	Description	Item	Part No.	Description Description	
1	E56/030 A19/007 E56/002 L56/007 E56/110 E56/067 A19/008 E56/069 K11/015	Frame Welded Assy Fixed Castors Bracket (Stop) Stop Bracket Bracket C/B Swivel Castors Plate locking Patio slab	7	E56/164 K08/186 K03/005B E56/136 E56/051 E56/093 E56/096	Latch Arm Carton wire ties, bags Bag tying tool Lever arm, RH Front panel top Hinge bracket upper Hinge bracket lower	
	E56/114 E56/158 L56/027 L56/028 L56/029 A18/012	Strut (ballast) Switch Bracket/guide Plunger, male Plunger, female Guide Spring, compression	8	A10/224 G80/029 E56/174 G227A G30/376 G30/412 M1	M20 Gland Locknut M20 Cable Gland Enclosure backing plate Key Switch (head only) Transformer 15VA 24VAC CD12 PLC 24VAC	
2	A16/025 A16/026 C56/001M L56/009 L56/011 E56/044 E56/165 E56/045 J06/055 J08/010 J08/022 K08/057	Hydraulic Ram Hydraulic Power Pack Ram Plate Machining Ram Guide Bearing Guide Rod Bracket L/S Bracket Bracket L/S Hydraulic Hose Assy Sealing Washer 3/8" BSP Male/Male Fitting Lts Derwent 68 Oil		G65/037 G76/030 M1 G45/015 G45/033 G45/056 G45/057 G45/059 G50/044 G50/046 G50/051 G60/101 M14	Terminal block Control box enclosure Pushbutton green flush Pushbutton red Lever roller limit switch Push roller limit switch Selector switch 2-position Bulb holder Bulb 28V A16-24 Green Lens Mains Cable assy	
3	E56/049 E56/039 E56/050 E56/151 E56/058 A21/012	Inner side L/H Inner side R/H Inner back Inner top front Inner back Upper Catch		G30/376 G45/056	Wiring Diagram reference T1	
4	E56/043 L56/018 L56/017 L56/016	Access flap Spacer Spacer shouldered Nylon Modified screw		G45/056 G45/057 G45/056 A16/026 G30/412 G45/015 and	LS1 and LS2 GS1 GS2 M1 and PS1 P1 S1	
5	E56/047 E56/048 E56/038 E56/041 A27/189	Side Panel R/H Back Panel Side Panel L/H Top Cap Sound barrier mat		G45/016 G45/016 and G45/033 G227A G45/016 and	S2 S3 S4	
6	S56/049 E56/034 E56/036 A21/022 S56/069 A21/023 E56/084 E56/057 D12/074	Truck Assy Front panel Handle End latch Truck Castor Assembly Paddle latch – 2 way Latch arm, LH Truck liner 3/32"x ½" Split Pin		G45/059 G65/037	C1, C2 and C3	

Parts Illustration – IP500 Fig.3



## PARTS LIST IMPACTOR IP500, JANUARY 2002

Item	Part No.	tion with Figs 1-4. NB Befor	Item	Part No.	Description
iteili	Fait NO.	บ <sub></sub> ธอบาทเบบ	ILEIII	Fait NO.	Description
1	E56/119 A19/007 E56/002	Frame Welded Assy Fixed Castors Bracket (Stop)		S56/055 K03/005B	Carton wire ties, bags Bag tying tool
	L56/007 E56/009 E56/067 A19/008	Stop Bracket Bracket C/B Swivel Castors	7	E56/127 E56/094 E56/095	Front panel top Hinge bracket upper Hinge bracket lower
	E56/069 E56/158 L56/027 L56/028 L56/029 A18/012	Plate locking Bracket, switch/guide Plunger, male Plunger, female Guide Spring, compression	8	A10/224 G80/029 E56/174 G227A G30/376 G30/412 M1 G65/037	M20 Gland Locknut M20 Cable Gland Enclosure backing plate Key Switch (head only) Transformer 15VA 24VAC CD12 PLC 24VAC Terminal block
2	A16/027 A16/026 C56/003M L56/009 L56/011 E56/044 E56/165 E56/045 J06/055 J08/010 J08/022 K08/057	Hydraulic Ram Hydraulic Power Pack Ram Plate Machining Ram Guide Bearing Guide Rod Bracket L/S Bracket Bracket L/S Hydraulic Hose Assy Sealing Washer 3/8" BSP Male/Male Fitting Lts Derwent 68 Oil		G76/030 M1 G45/015 G45/033 G45/056 G45/057 G45/059 G50/044 G50/046 G50/051 G60/101 M14	Control box enclosure Pushbutton green flush Pushbutton red Lever roller limit switch Push roller limit switch Selector switch 2-position Bulb holder Bulb 28V A16-24 Green Lens Mains Cable assy
3	E56/120 E56/121 E56/122 E56/156 E56/124 A21/012	Inner side L/H Inner side R/H Inner back Inner top front Inner back Upper Catch		G30/376 G45/056 G45/057	Wiring Diagram reference T1 LS1 and LS2 GS1
4	E56/128 L56/018 L56/017 L56/016	Access flap Spacer Spacer shouldered Nylon Modified screw		G45/057 G45/056 A16/026 G30/412 G45/015 and G45/016	GS1 GS2 M1 and PS1 P1 S1
5	E56/126 E56/132 E56/125 E56/133 A27/189	Side Panel R/H Back Panel Side Panel L/H Top Cap Sound barrier mat		G45/016 and G45/033 G227A G45/016 and G45/059 G65/037	S2 S3 S4 C1, C2 and C3
6	S56/054 E56/130 E56/135 A21/022 S56/069 A21/023 E56/164 E56/145 E56/148	Truck Assy Front panel Handle End latch Truck Castor Assembly Paddle latch – 2 way Latch arm Truck liner Cover plate		J03/03/	01, 02 and 03

Parts Illustration – IP600 Fig. 4



#### PARTS LIST IMPACTOR IP600, JANUARY 2002 To be read in conjunction with Figs 1-4. NB Before ordering please read the note on page 9 Item Part No. Description Item Part No. Description Frame Welded Assy 1 E56/070 S56/052 Carton wire ties, bags K03/005B A19/007 **Fixed Castors** Bag tying tool E56/002 Bracket (Stop) 7 L56/007 E56/090 Front panel top Stop **Bracket** Hinge bracket upper E56/110 E56/094 E56/067 Bracket C/B E56/095 Hinge bracket lower A19/008 **Swivel Castors** E56/112 Latch Plate E56/100 Switch Bracket 8 A10/224 M20 Gland Locknut E56/069 Plate Locking G80/029 M20 Cable Gland E56/174 Enclosure backing plate 2 A16/027 Hydraulic Ram G227A Key Switch (head only) A16/026 Hydraulic Power Pack G30/376 Transformer 15VA 24VAC C56/002M Ram Plate Machining G30/412 M1 CD12 PLC 24VAC L56/009 Ram Guide Bearing G65/037 Terminal block L56/011 Guide Rod G76/030 M1 Control box enclosure E56/044 Bracket L/S G45/015 Pushbutton green flush E56/165 Bracket G45/033 Pushbutton red E56/045 Bracket L/S G45/056 Lever roller limit switch J06/055 Hydraulic Hose Assy G45/057 Push roller limit switch J08/010 Sealing Washer G45/059 Selector switch 2-position 3/8" BSP Male/Male Fitting J08/022 G50/044 Bulb holder Lts Derwent 68 Oil K07/057 G50/046 Bulb 28V A16-24 G50/051 Green Lens 3 Inner side L/H E56/079 G60/101 M14 Mains Cable assy Inner side R/H E56/080 Inner back E56/081 Inner top front E56/077 Inner back Upper E56/082 Catch A21/012 Wiring Diagram Access flap 4 E56/075 reference Spacer G30/376 L56/018 T1 Spacer shouldered Nylon L56/017 G45/056 LS1 and LS2 Modified screw L56/016 G45/057 GS1 G45/056 GS2 Side Panel R/H 5 E56/071 A16/026 M1 and PS1 **Back Panel** E56/074 G30/412 P1 Side Panel L/H E56/072 G45/015 and S1 Top Cap E56/073 G45/016 Sound barrier mat A27/189 G45/016 and S2 G45/033

G227A

G45/059

G65/037

G45/016 and

S3

**S4** 

C1, C2 and C3

Truck Assy

Front panel

Truck Castor Assembly

Paddle latch - 2 way

Handle

End latch

Latch arm

Truck liner

Switch bracket

6

S56/051

E56/086

E56/109

A21/022

S56/069

A21/023

E56/164

E56/099

E56/137