



MAC PLANTMASTER ELECTRIC

ELECTRICALLY HEATED
STATIC PRESSURE WASHER

USER INSTRUCTION MANUAL

CAUTION: Read these instructions before using the machine.

MAC International, Kellaw Road, Yarm Road Industrial Estate,
Darlington, Co Durham, DL1 4YA.

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INTRODUCTION

You have been supplied with a MAC Plantmaster Electric high-pressure washer, an industrial cleaning machine which will allow you to carry out your cleaning operations with versatility, reliability and safety.

This instruction manual covers the 24KW electrically heated static hot water pressure washer manufactured by MAC International under the Plantmaster Electric name and logo. The model this manual covers are detailed in Chapter 2 – Technical Description and Data.

You should ensure that all machine operators have read, or that they know, the contents of this Instruction Manual and furthermore that they follow the directions contained herein.

The manufacturer shall not be held liable for damage caused to persons and/or property or sustained by the machine itself should the instructions set out hereafter not be adhered to.

This Manual and any other supplied technical information must be preserved with care for the entire duration of the life of the machine until it is scrapped. The manufacturer reserves the right to modify their products without notice and without altering the relative technical documentation in the case of minor modifications.

DO NOT TAMPER WITH OR REMOVE THE NAME PLATE FIXED TO THE MACHINE.

1. Field of use

This machine is intended exclusively for washing objects, which are surfaces that have been adapted to be treated by the mechanical and thermal action of the water jet.

The purpose for which the machine is intended to be used must be scrupulously respected and any other use is to be considered as improper.

2. Requisite characteristics of operators

The machine is designed for use by one adult operator. The operator of the machine must have received specific training or have experience of machines of this type. In order to prevent damage to persons or property we advise clients to inform the operators about the possible remaining risks arising from the use of this machine.

The machine operator must always use the personal protective equipment required by law and any other PPE made available to them by their employer.

The personnel assigned to use or maintain the machine must be sufficiently skilled, knowledgeable and trustworthy for the duties described and must be reliable enough to interpret the matters correctly that are described in this manual to guarantee the safe and conscientious operation of the machine.

Legal liability deriving from authorised machine operators is delegated to the client.

Maintenance personnel must have specific characteristics (i.e. maintenance technician) and be capable of the correct interpretation of technical diagrams and instructions.

3. Accident prevention

The indications given in the instruction manual do not substitute the safety measures and technical data for the installation and the functioning directly applicable to the product, nor do they substitute safety regulations in-force in the country of installation.

The person responsible for installation or maintenance is under obligation to notify any possible defects or deterioration that might compromise the original safety of the equipment.

The standard machine is not equipped to work in an environment in which particular flammable or explosive conditions are present.

Do not use the equipment if damaged, or deterioration has been noticed. Disconnect / isolate the equipment from the power supply and inform the appropriate supervisor.

Chemical detergents must be used with care in order not to damage the machine components and the environment (ideally degradability of over 90%). Always check the degradability and the harmfulness of products used by any COSHH sheet supplied. Do not put paints, acids, solvents, oily or very thick liquids, etc. through the machine. Detergents should be introduced to the machine via the chemical pick up pipe and filter. Do not introduce chemical directly into the water tank.

Protect the machine from frost and atmospheric weather conditions.

If the machine is to be taken out of service for a period of time it is advisable to either completely drain the machine of water or introduce an anti-freeze agent to the machine. Failure to do so could result in expensive damage to the pump and heating elements. Also, trying to start the machine when frozen will employ the electrical motor overload switch and the machine will have to be reset to operate. Only a competent electrician or service engineer should gain access to the electric box.

Do not direct the water jet at persons, animals, the machine itself, or any object which has an electrical current.

Never direct the jet at yourself or at other personnel to clean clothing or footwear. Do not touch the water jet with your hands while the machine is in operation; this will result in severe injury.

The machine, if correctly used and in a good state of maintenance, produces a sound pressure level (noise) of 78dBA. Hearing protection is not required but can be provided and worn when operating the machine. Should the environment in which the machine is installed preclude such conditions, the client shall ensure they conform with the laws in force in the country of installation to protect the hearing of their employees.

4. Transportation

Only employ specialist personnel to lift and transport the machine, who are provided with appropriate lifting equipment designed to bear the weight of the machine. The machine is designed to allow the use of a forklift truck (FLT) for this purpose, however the machine may topple off the FLT if not secured prior to moving.

5. Installation

It is appropriate to carefully evaluate the site of installation, taking into consideration all of the information in this manual and also anything unforeseen. The machine should ideally be installed on a flat, level surface, secured to the floor and have sufficient space around it to allow for safe operation and maintenance.

6. Connection to the electricity supply

The machine is supplied in 415v format and requires a 63amp power source.

NOTE

The machine must be connected to the electrical supply only by a qualified electrician.

Internal electrical protection

The machine is furnished with a thermal overload protection unit for the main motor, which cuts off the electricity supply in the event that the current exceeds the designed amperage.

Warning - The client / installer should take further measures to protect the electricity supply by connecting the machine to an ELCB electrical supply.

7. Warranty

This machine carries a minimum one-year parts warranty, subject to sales and service conditions. See Chapter 7 for additional information on warranty.

CHAPTER 1 - WARNINGS AND CAUTIONS

WARNINGS

MACHINE USE

This machine is not intended for use by persons (including children) with lack of experience and knowledge or reduced physical, sensory or mental capabilities.

This machine shall not be used by children. Children shall be supervised to ensure that they do not play with the machine. Cleaning and user maintenance shall not be carried out by children and must only be carried out by a competent person.

FIRE EXPLOSION HAZARD

The machine must not be operated in potentially flammable or explosive conditions.

PERSONNEL INJURY

The machine must be operated in well-ventilated areas only.

Personnel must hold the lance handgrip firmly when operating the handgrip trigger due to the recoil action of the lance.

Personnel must remain clear of the water jet at all times whilst in operation.

The handgrip trigger safety catch must be applied when the pressure washer is not in use to prevent accidental operation of the jet.

Personnel must wear appropriate personal protective equipment (PPE) when operating the pressure washer.

Appropriate personal protective equipment (PPE) is to be worn by all personnel carrying out maintenance activities involving diesel fuel and chemical detergents.

System pressure must be removed before any maintenance activity is carried out or when not in use.

Never operate the machine with the cover removed or door open.

Caution should be taken at all times due to **hot water** stored in the tank.

PERSONNEL INJURY/EQUIPMENT DAMAGE

The machine should only be connected to an electrical supply protected by an ELCB.

No attempt is to be made to carry out a temporary repair to the pressure washer. Repairs are only to be carried out by authorised personnel in accordance with current service regulations.

Never use the machine to carry out a task for which it is not designed.

Always ensure that the machine power supply is disconnected or isolated when not in use and locked off prior to carrying out any maintenance tasks.

Prior to using chemical detergents, refer to the relevant chemical data sheet.

CAUTIONS

EQUIPMENT DAMAGE

The inlet water supply pressure must be a minimum of 2 bar using sufficiently rated water inlet hose. Insufficient pressure will cause damage to the pump by overheating and vibration.

Damage to the pump and pipe work may result if the machine is used in temperatures below 0°C (32°F).

Damage to the pump will occur if the pressure washer is operated without a water supply connected.

The machine is to be protected from frost and adverse weather conditions where practicable at all times. The machine must not be operated when frozen.

Personnel are to carry out maintenance activities involving chemical detergents and oil with extreme care to prevent damage to the machines components and the environment.

Prior to the cleaning operation, direct the jet spray in a safe direction away from the equipment to be cleaned to allow for the setting of the required working pressure.

CHAPTER 2 – TECHNICAL DESCRIPTION AND DATA

TECHNICAL DATA

	PLANTMASTER ELECTRIC 1	PLANTMASTER ELECTRIC 2
Water flow	13lt per minute	11ltr per minute
Pressure	170Bar, 2500 psi	120 Bar, 1740 psi
Motor specification	5.5hp, 7.5Kw 1450rpm	4hp, 5.5Kw 1450rpm
Immersion element	2 x 12Kw	1 x 12 Kw, 1 x 6Kw
Shutdown system	Timed	Timed
Temperature	0-80 C	0-80 C
Voltage	415v	415
Weight	200kg	200 Kg
Dimensions (h x w x d)	130 x 100 x 80cm	130 x100 x 80 cm
Noise emissions	78dB(A)	78dB(A)
Vibration rating	<2.5m/s	<2.5m/s
Current	36 Amps	32 Amps

TECHNICAL DESCRIPTION

PLANTMASTER ELECTRIC

The MAC Plantmaster Electric, electrically heated static, hot water, pressure washer is designed to deliver up to 13 litres of hot water per minute at a pressure of up to 170 bar through a hose, gun and lance assembly onto an object requiring cleaning. The temperature of the hot water has a maximum of 80 C dependent on the usage of the machine. The machine is designed to deliver a detergent with the water, when required, to assist in the cleaning process.

The working parts of the pressure washer are contained within a powder coated mild steel cabinet. The cabinet dimensions are detailed within the Technical Data. The cabinets have a hinged detachable front panel and top cover for access. The front panel is lockable from the outside and the top cover is bolted down internally. The model weight is detailed in the Technical Data.

The cabinet is lined internally with insulation and hot water tank is lined externally with insulation.

Within the cabinet, the machine components are fitted into a framework. The water tank occupies the full bottom half of the framework and the upper rear half of the framework. The heating elements are fitted into the bottom half of the water tank and at the front to allow for easy access. The water pump and electric motor assembly are mounted on rails in the front centre, and to the right-hand side, of the framework. The electric box is located above the pump motor assembly, in the upper right-hand side of the framework and secured to the framework. The control panel is located on the right-hand side of the cabinet and accessed externally.

WATER PUMP

The water pump has a brass-headed 3-piston assembly and is connected directly to the motor via a drive coupling and bell housing assembly.

SAFETY DEVICE

The machine is fitted with an unloader valve – used to set the maximum pressure the pressure washer will operate at. This is pre-set but can be adjusted by a qualified engineer.

WATER TANK

The water tank is fitted with a low water level switch and float valve assembly.

CONTROL PANEL

The control panel consists of switches and controls as follows:

- Power ON/OFF Switch
- Power on Warning Light (Green)
- Heating elements ON/OFF Switch
- Heating element warning light (Orange)
- Low water warning light (Red)
- Water temperature digital readout display

OPTIONAL EXTRAS

- Stainless steel cabinet
- Frost protection
- High pressure chemical

CHAPTER 3 – OPERATING INSTRUCTIONS

INTRODUCTION

Prior to operation of the MAC Plantmaster Electric it is essential that the machine is correctly assembled and prepared for use. The operator is to carry out the pre-start checks and tests as detailed in Chapter 5 and is to be familiar with the operating procedures detailed in this chapter before the machine is operated.

PRE-START CHECKS AND TESTS

On initial receipt of the equipment, carry out the actions detailed in Chapter 5.

Before operating the machine, carry out the actions detailed in Chapter 5.

DESCRIPTION

415V three phase power is supplied using a rubber coated flexible power input cable which passes through the right-hand side panel of the cabinet into the electric box.

Water is supplied to the machine via an inlet hose fitted with a quick release connector. The hose feeds the water via the inlet connection on the outside of the cabinet, through an inlet water filter into the water tank, which contains a ballcock assembly and the heating elements.

The water is heated by turning the main on/off switch to the on position and then switching on the heaters and allowing approximately 90 minutes for the immersion heaters to heat the water in the tank to the maximum operational temperature. Once the water has been heated fully, the heaters will maintain the water temperature whilst switched on. The actual operational temperature will vary dependent on the usage.

Use of the pressure washer is achieved by turning the main on/off switch to the start position.

The heated water is released from the machine via a hose, lance and nozzle provided by operation of the lance trigger.

Water is supplied on demand however the pump shuts down when the trigger has not been pressed in excess of 3 minutes. Instant pressure is available on subsequent operation of the trigger within the 3 minutes. The machine will need to be reset if the 3 minutes is exceeded.

Chemical detergents used to assist the cleaning operation are added from either a bulk tank supply or a 25lt container located outside of the cabinet. The chemical flows through a non-return filter and plastic feed pipe. The concentration of detergent is varied by adjustment of the Chemical/Detergent Pressure Valve, which is located on the outside of the cabinet.

ASSEMBLY AND PREPARATION

To assemble and prepare the machine for use, proceed as follows:

- 1 - Position the machine on a level surface.
- 2 - Ensure the nozzle is fitted to the lance and is secure.
- 3 - Ensure the lance is fitted to the trigger and is secure.
- 4 - Connect lance hose to the machine outlet connector. Ensure it is secure.
- 5 - Ensure handgrip trigger safety catch is applied.
- 6 - Connect the external water inlet hose (2 bar min pressure) to the machine inlet connection.

7 - Connect the input cable to a power supply. This must be carried out only by a qualified electrician.

NOTE

Points 8 and 9 only apply if a chemical detergent is to be used.

8 - Place an approved detergent container adjacent to the machines detergent tube.

9 - Remove the detergent tube from the stowed position and place in the detergent container. Ensure the detergent tube filter is submerged in the detergent.

SWITCHING ON/SWITCHING OFF PROCEDURES

Control panel

The control panel consists of switches and controls as follows:

- Power ON/OFF Switch
- Power on Warning Light (Green)
- Heating elements ON/OFF Switch
- Heating element warning light (Orange)
- Low water warning light (Red)
- Water temperature digital readout display

SWITCHING ON

To switch the machine on, proceed as follows:

1. Ensure the power ON/OFF switch is set to 'OFF'.
2. Switch on the external water supply to the machine.
3. Switch on the external power supply.
4. Move power switch to the ON position and ensure the power on lamp is illuminated.
5. Switch on the heaters and allow approximately 90 minutes for the immersion heaters to heat the water in the tank to the maximum operational temperature.

CLEANING OPERATION

1. Before using the machine ensure that all hoses, guns and lances are in good condition and are correct for the application.
2. Switch the machine on by moving the main ON/OFF switch on the controls to the START position. The switch is sprung loaded and will return to the ON position. The machine will pressurise once the trigger is operated.
3. On pulling the trigger you should hold the gun and lance with both hands placing one of your hands on top of the lance to hold it steady.
4. Upon releasing the trigger, the machine will enter by-pass mode.
5. Upon re-pulling the trigger the machine will automatically restart and be ready for use. If the trigger is not re-pulled within 3 minutes the machine will shut down and will need to be reset.
6. Once cleaning has been completed switch off the machine using the main ON/OFF switch.

The machine should be turned off after every use and left in a safe condition. Failure to do so may cause unwanted damage and breakdowns of the machine.

CHEMICAL / SOAP VALVE CONTROL (Optional Extra)

The machine can be fitted with high pressure inline chemical injection. We recommend a bulk chemical supply outside of the machine.

Before starting the machine, check the soap tank level. If it is empty do not use as this could pull air into the pump and damage the pump seals. Top up the tank as chemical is required.

1. After starting the machine, turn the chemical valve knob anti-clockwise. After a short period of time the chemical will filter through the machine. The amount of chemical can be adjusted by turning the valve knob clock-wise for less or anti-clockwise for more.
2. Always turn off the chemical prior to switching off the machine.

SWITCHING OFF

To switch the machine OFF, proceed as follows:

1. Release the handgrip trigger.
2. Set the heating elements switch to the OFF position. The orange warning light will go out.
3. Set the power ON/OFF switch to 'OFF'. The green warning lamp will go out.
4. Switch OFF the external water supply.
5. Apply the trigger safety catch.

WARNING

Should the electrical power supply to the machine be interrupted during operation this can cause the machine to stop working. If this happens then release the handgrip trigger and switch off the power control switches immediately before investigating the cause.

CHAPTER 4 – FAULT DIAGNOSIS

INTRODUCTION

This chapter details the failure diagnosis procedures for the Plantmaster Electric to be carried out at user level.

Before attempting to fault find on the equipment, it is essential to have a sound knowledge of the equipment and its various components. Construction and operation details are contained in Chapters 2 and 3 of this User Instruction Manual.

To maintain product safety and reliability, repairs must be carried out by an authorised service engineer. Refer to the following table for standard failure diagnosis.

TABLE 1 - FAULT DIAGNOSIS

Serial (1)	Symptom (2)	Possible cause (3)	Action (4)
1	Machine will not run	No electrical supply Electrical supply incorrect Mains power cable is damaged	Check supply is available Check plug is fitted correctly Check supply switch is on Check suitability of supply Check cable. If damaged, contact service engineer
2	Water fails to flow from lance	Empty water tank Water filter blocked Lance nozzle blocked	Check supply Clean or replace as required Clean or replace as required
3	Pressure too low	Dirty water filters Detergent valve open Lance nozzle missing or worn	Clean or replace as required Close valve Replace
4	Pressure is too high	Lance nozzle is restricted	Clean or replace as required
5	Water drips from under the body of the machine	Leak from water tank Faulty float valve	Contact service engineer
6	Machine not sucking detergent	Detergent filter blocked	Clean or replace as required
7	Pump noisier than usual	Lack of lubrication Pump loose on motor shaft Mechanical fault	Repair or replace Contact service engineer Contact service engineer

CHAPTER 5 – USER MAINTENANCE

The competent person in the company with delegated responsibility for the machine is responsible for ensuring that the operations detailed in this chapter are carried out properly.

The operations are only to be carried out by personnel who are appropriately qualified, through either professional training or an equipment-specific formal training course. This competent person may also order any operation to be carried out more frequently than specified, if conditions under which the equipment is operated render it necessary.

DEFINITIONS

As far as this document is concerned, the following definitions apply:

1. **Examine.** Carry out a survey of the condition of an item without dismantling, unless specifically instructed to do so in the relevant task requirement. The condition of an item may be impaired by the following:
 - Insecurity of attachment.
 - Cracks or fractures.
 - Corrosion, contamination or deterioration.
 - Distortion.
 - Loose or missing fasteners.
 - Chafing, fraying, scoring or wear.
 - Faulty or broken locking devices.
 - Loose clips or packing, obstruction of, or leakage from pipelines.
 - Discolouration due to overheating or leakage of fluids.
 - Damage due to external sources.
2. **Check.** Make a comparison of measurement of time, pressure, temperature, resistance, dimension or other quantity, with a known figure.
3. **Operate.** As far as possible, ascertain that a component or system functions correctly without the use of test equipment or reference to measurement.

USER/OPERATOR MAINTENANCE

The maintenance tasks are detailed in the following table; maintenance intervals A, B and C are to be carried out by appropriately trained personnel, as detailed above, as follows:

A - Daily before use (only on days used).

B - Daily in use (while the equipment is being operated).

C - Daily after use (after the equipment has been operated).

USER MAINTENANCE INTERVALS

Serial	Task	Maintenance interval		
		A	B	C
1	Examine the power supply for the machine	X		
2	Examine the power lead and electrical connector	X		
3	Examine the machine body and fixings	X		
4	Examine the lance	X		
5	Examine the nozzle (replace if required)	X		X
6	Examine the control panel	X		
7	Operate handgrip trigger and ensure freedom of movement over full range. Ensure trigger returns to neutral position on release	X		
8	Apply handgrip trigger safety catch. Ensure unable to operate handgrip trigger	X		X
9	Examine chemical detergent tube and filter. Clean or replace filter as required	X		

MAINTENANCE TASKS

a) Oil pump level check and replenishment (weekly)

1. Allow sufficient time to allow the pump oil to settle.
2. Remove the cabinet front door.
3. Check the oil level in the sight glass.
4. If replenishment is required, or where no sight glass is fitted, unscrew and withdraw the oil pump dipstick from the oil pump.
5. Using a clean lint free cloth, remove the oil from the dipstick.
6. Re-insert the dipstick into the oil pump, hold momentarily, then withdraw and determine oil level.

NOTE: If the oil level is within the max and min marks, proceed from Para 9.

7. Using approved oil, carefully fill the oil pump until a satisfactory level is achieved via the dipstick hole.
8. Using a clean cloth remove any excess oil from around the oil pump.
9. Refit the dipstick.
10. Replace the cabinet front door.

CHAPTER 6 – WARRANTY

1. The warranty period shall be for one year from the date of purchase. The warranty is 12 months providing the machine is only used on an average of one working shift per day. If the machine is used in excess of this, the warranty period could be invalidated subject to the distributors agreement.

This machine has been constructed to a high specification from quality materials and components. The warranty covers against mechanical or electrical defects in materials and workmanship and in the event of a breakdown within the warranty period contact the authorised dealer from whom it was purchased, where, subject to compliance with the following conditions, the defective part will be repaired or exchanged free of charge.



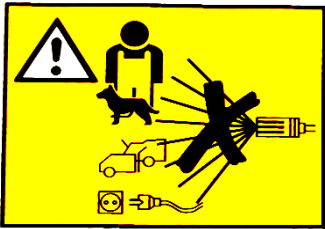
2. The machine shall be installed and operated in accordance with the instruction book and manual at all times.
3. The warranty will not apply to any failure resulting from misuse, damage, abuse or negligence on the part of the user.
4. No liability will be accepted under this warranty for damage caused by the fitting or use of other non-genuine parts or where any person other than a recommended and authorised service engineer has carried out repair work.
5. This warranty does not apply to hoses, cables or wires nor to replacement of normal service, consumable or wearing items.
6. Liability under the warranty is limited to the replacement value of the machine or part and liability for any consequential loss suffered or caused is hereby excluded.
7. The warranty shall not be applicable until the machine has been paid for in accordance with the terms of payment agreed at the time of sale.
8. This warranty is applicable only to the original purchaser and is not assignable or transferable.
9. No warranty repairs will be undertaken without proof of purchase.
10. This warranty applies only to the machines purchased and operated in the United Kingdom.

CHAPTER 7 – HEALTH & SAFETY INFORMATION

BASIC RULES

- Never point the gun at anyone even if machine is switched off.
 - Never work from a ladder.
 - Never use the gun with the trigger tied open e.g. use of a cable tie.
 - Always ensure your equipment is in first class condition.
 - Always wear the correct protective equipment.
1. High-pressure jets are **DANGEROUS** and can be subject to misuse. The jet must not be directed at persons, animals, electrical equipment or the machine itself under any circumstances.
 2. Operators should wear the necessary protective clothing to protect them from the particular liquid and material being treated.
 3. Operators should be trained to follow a safe system of work and informed about potential hazards. Supervisors should ensure that operators follow the safe system of work.
 4. The electrical supply should be protected by an ELCB and hard wired.
 5. All repairs are to be carried out only by Your Local Dealer. No modifications or changes to specification of this machine are allowed.
 6. No machine shall be run without its guards, covers and safety equipment in place and in full working order. The machine should be used on level ground wherever possible.
 7. Drainage of the working area should be good and care should be taken to avoid spillages.
 8. Cables should be inspected regularly. Where cables are trailing on the ground extra care should be taken to prevent damage. Cables should be properly stored when not in use.
 9. The pressure washer operating instructions should be followed at all times to ensure satisfactory results and prevent unnecessary damage/injury.
 10. Users should be aware of the provisions of the Health and safety at Work Act and the Electricity at Work Regulations.
 11. This machine has been designed for use with cleaning agents supplied or recommended by the manufacturer/supplier. The use of other cleaning agents or chemicals may affect its safety.
 12. Any electrical connections must be the responsibility of a qualified electrician and comply with the latest edition of the current wiring regulations.
 13. A documented routine maintenance system consisting of regular inspection testing and repair by a competent person should be established.
 14. Additional information relating to electrical risks associated with pressure washers can be found in Guidance Note PM29. This can be sourced on the HSE website at www.hse.gov.uk.

CHAPTER 9 – VISUAL WARNING LABELS

 A yellow square label with a black border containing the black letters 'CE'.	<p>CE DECLARATION LABEL</p>
 A yellow triangular warning label with a black border. It features a black lightning bolt symbol, the text '415V' in large black letters, and the word 'CAUTION' in bold black letters. Below 'CAUTION' is the text 'SWITCH OFF BEFORE OPENING' in smaller black letters.	<p>Warning label 415V ELECTRICS CAUTION</p>
 A yellow rectangular warning label with a black border. It features a black silhouette of a person, a black lightning bolt symbol, and a black 'X' over a spray nozzle. Below the 'X' is a small black icon of a water spray nozzle.	<p>Warning label. DO NOT DIRECT THE JET OF WATER TOWARDS PEOPLE, ANIMALS OR THE MACHINE ITSELF.</p>

CHAPTER 9 – CERTIFICATE OF CONFORMITY

Company Name: MAC International

Company Address: Kellaw Road, Yarm Road Industrial Estate, Darlington,
Co. Durham, DL1 4YA, England

As manufacturer the company declares that the following machinery conforms to the essential health and safety requirements of the Directives listed below:

Designation: HIGH PRESSURE WASHER

Model: PLANTMASTER ELECTRIC

Specification Type: 13/170, 11/120

Directive Code	Directive Description
2006/42/EC	Machinery Directive and its amending directives
2014/30/EU	Electromagnetic Compatibility Directive and its amending directives
2000/14/CE	Noise Emissions Directive
2002/44/CE	Vibrations Directive

And have been designed and manufactured to the relevant parts of the following standards:

EN ISO 12100: 2010, EN 60204-1: 2006 + A1:2009, EN 60335-1:2012 + A11:2014,
EN 60336-2-79:2012

Representative for documentation:

I hereby declare that the equipment named above has been tested and found to comply with the relevant sections of the above referenced specifications. The unit complies with all essential requirements of the Directives. The Technical Documentation has been drawn up and is held at our Head Office in Darlington.

Signed by:



Name: S Ruck

Position: Managing Director

Place: Darlington

Date: 30 April 2018

