# Standard Engineering Ltd.

10 Garrard Way, Telford Way Industrial Estate South Kettering, Northamptonshire, England, NN16 8TD

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# EC DECLARATION OF CONFORMITY OF MACHINERY / ELECTRICAL APPARATUS TO THE SUPPLY OF MACHINERY (SAFETY) REGULATIONS 2008 AND THE ELECTROMAGNETIC COMPATIBILITY (EMC) REGULATIONS 2006

- 1 Standard Engineering Ltd. of 10 Garrard Way, Telford Way Industrial Estate South, Kettering, NN16 8TD is the manufacturer of the following machine: -
- 2 Model
- This machine complies with the requirements of "The Supply of Machinery (Safety) Regulations 2008" and the Machinery Directive 2006/42/EC.
- This apparatus conforms with the requirements of EN 50081-2 in respect of Electromagnetic Emission.
- 5 This machine complies with the relevant essential Health & Safety requirements
- The person authorised to sign the declaration on behalf of the Company is the Managing Director

Date of Issue: 6.7.18

Keith Malyon Managing Director

## Machine Ortho 75 & 100 Grinding Machines

## <u>Markings</u> <u>The machine is marked with the following: -</u>

Name and address of manufacturer, machine series, serial number and year of manufacture.

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C.E.	Mark: -	
C.E.		

## Markings on the front flap: -

"Switch off and allow tools to stop turning before lifting the flap."

## Marking at the Emergency Stop button: -

"Emergency Stop"

## Electrical Marking at rear of machine: -

"This machine MUST be earthed"

#### Electrical data: -

Phase	1	Phase	3
Volts	230	Volts	400
Amps	4	Amps	4
Load	1.25kw	Load	1.25kw
Hz	50	Hz	50

## Machine Ortho 75 & 100 Grinding Machines

## **Markings - continued**

Marking for the bag shaker activator: -

"Bag shaker operating knob."

Electrical safety marking under front flap: -

"Tested for electrical safety"

Mass of machine - 200 kilos

Dimensions: -

560mm W x 780mm D x 1720mm H

## **Handling**

Push back the front of the machine at a point above the centre of gravity (approx. 840mm high and 415mm in from the left of the machine) to lift the front base, and insert a lifting device under one end of the machine.

Use lifting device to raise one end of the machine and insert roller.

For short distance movement push at end of machine on roller (s). For longer distance movement insert wheeled trolley or set of corner wheels, and remove roller (s)

When in position required, reverse the above procedure.

#### Commission

The machine shall stand firm and level. Use suitable packing material as necessary to level, balance and secure the machine.

Position machine at least 100mm - 150mm from a rear wall to enable the filter bag to remain clear of the wall when inflated.

The machine shall be connected by a competent person to the electrical power supply and earthed through a suitable, lockable isolator conforming to IEC 204/EN 60204. The electrical data are given on a plate attached to the machine, and are as follows: -

## External Electrical Conductors are colour-coded as follows: -

1-phase 3-phase

Earth Green/Yellow Earth Green/Yellow
Neutral Light Blue Neutral Light Blue
Live Brown Live Brown
Live Black

Live

Grev

(Pre - 2008) External Electrical Conductors are colour-coded as follows: -

1-phase 3-phase

Green/Yellow Green/Yellow Earth Earth Light Blue Neutral Light Blue Neutral Brown Red Live Live Yellow Live Live Blue

Internal Electrical Conductors are colour-coded as follows: -

Earth Green/Yellow
Neutral Light Blue
Live Power Circuit Black
Live Control Circuit Red

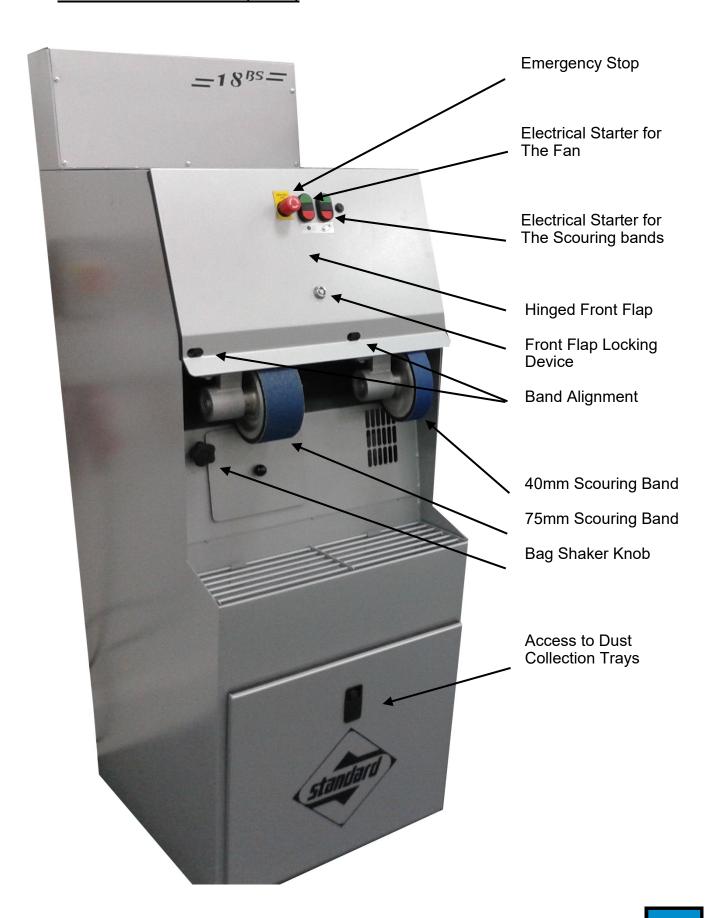
For 3-phase machines only, check for correct mains phase connection by quickly turning the scouring band on and off quickly. The grinding belt should go down, towards the operator, rather than up and away.

#### **Machine Data**

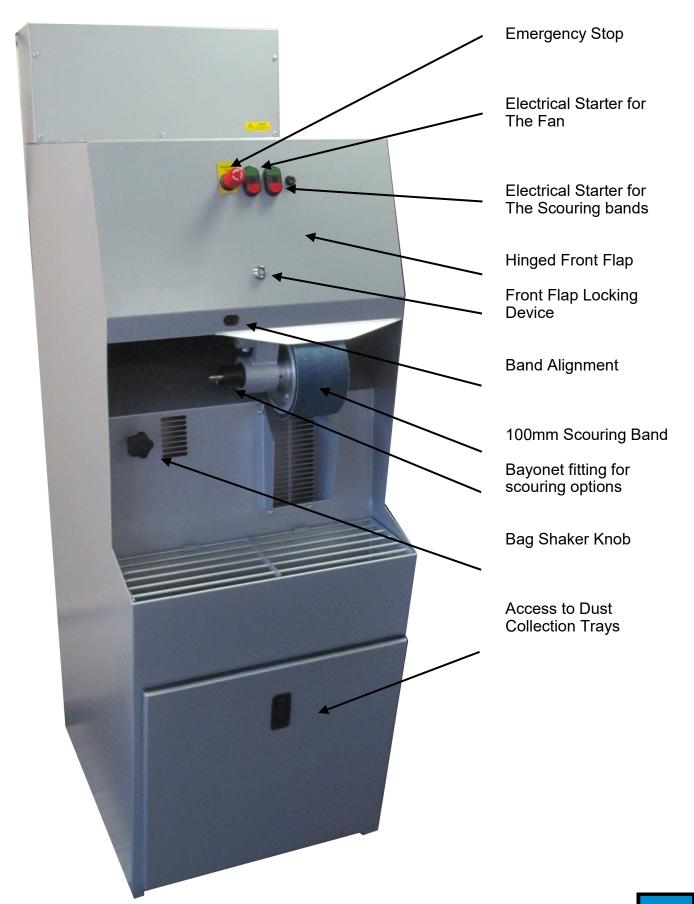
The machine is designed for use in the manufacture and repair of footwear, orthopaedic footwear, leather and imitation leather goods.

The machine shall only be used with all safety devices and guards in place and functioning.

## Machine Data - Ortho 75 (No.18)



## **Machine Data - Ortho 100**



#### **Machine Data**

Noise measurements carried out in accordance with ISO 3744, in an essentially free field over a reflecting lane, with all tools operating and the dust extraction system operating. Without an operator. Following noise value: -

At a point 1.6 metres high and 1 metre from the centre line of the machine - 76 - 80dB(A).

The dust extraction system provides an air flow velocity a the face of each dust capturing duct, with all ducts fully open, and all tools operating as follows: -

## Ortho 75 (No.18)

LH Scouring Band 11 - 14 mps RH Scouring Band 12 -15 mps

#### Ortho 100

RH Scouring Band 12 -15 mps

The machine has been electrically tested for: -

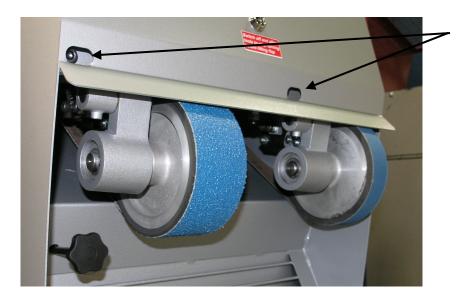
- (A) Continuity of protective bonding circuit
- (B) Insulation resistance
- (C) Function

# Machine Usage

# **Manual Controls**

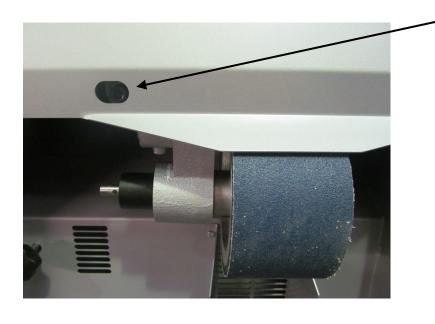
Mechanical adjustments which can be made when mechanism is running .

# <u>Ortho 75</u>



**Band Alignment Screw** 

# <u>Ortho 100</u>

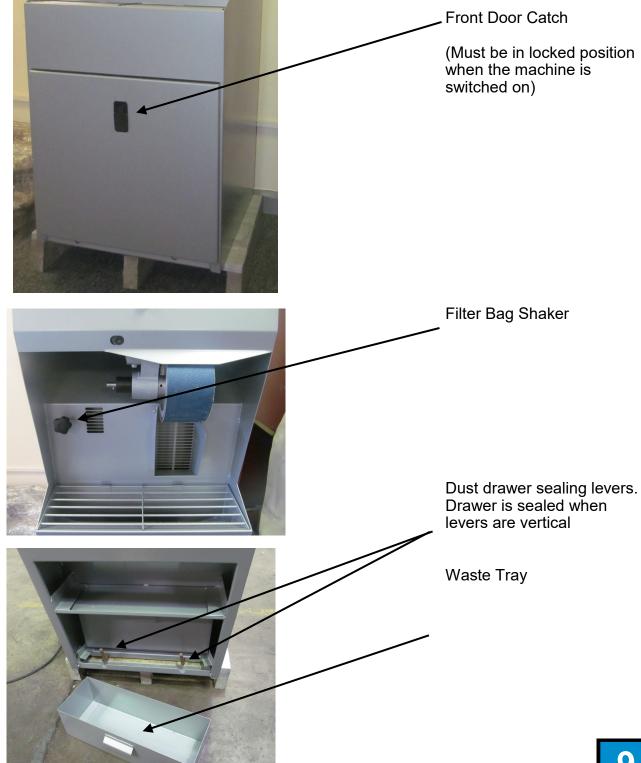


**Band Alignment Screw** 

## **Machine Usage**

## **Manual Controls**

Mechanical adjustments should ONLY BE MADE WHEN THE MECHANISM HAS BEEN SWITCHED OFF AND IS AT REST.

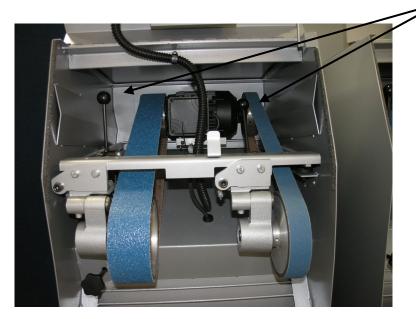


## **Machine Usage**

## **Manual Controls**

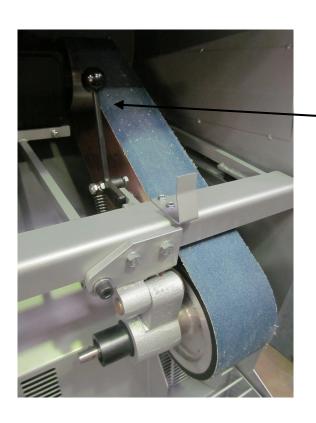
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## <u>Ortho 75</u>

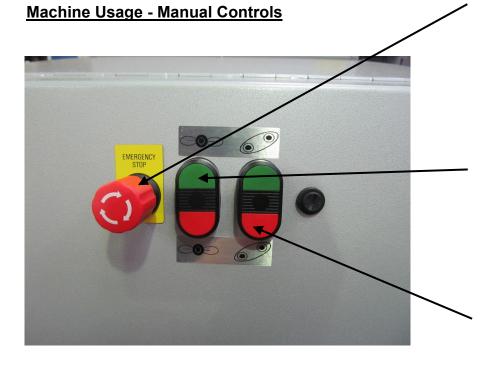


Band Tension Release Levers

# <u>Ortho 100</u>



Band Tension Release Lever



## Machine Usage, Risks and PPE

Risks not eliminated by the safety devices provided: -

Injury from exposed parts of abrasive bands, while in motion due to friction, abrasion, drawing-in, entanglement, trapping, cutting, severing, crushing and shearing.

**NOTE THAT** the wearing of loose clothing including sleeves and ties should be avoided. Long hair should be controlled.

**FIRE** - due to incandescent particles or molten materials igniting dust within the dust extraction system. Care should still be taken not to scour metal into the extraction chamber.

**EYE** - injury from particle ejection from abrasive tools, etc.

**NOTE** - the wearing of suitable eye protection is recommended.

<u>NOISE</u> - Although we do not believe ear defenders are necessary, and shouldn't be provided the machine is well maintained, operators may decide to use same. Particularly if the device is used for a prolonged period, or is located in an already noisy environment.

Ensure the machine is switched off at the mains isolator when not in use. Failure to do this may result in damage to the machine control circuit.

## **Emergency Stop**

In case of emergency push the emergency stop button which immediately cuts off electrical power to all tool drives and fan

#### Fan motor

(Green to activate the tool. Lower red push button stops the electric power to the tool. Use this rather than the E/Stop)

## **Scouring Motor**

(Green to activate the tool. Lower red push button stops the electric power to the tool) Use this rather than the E/Stop)

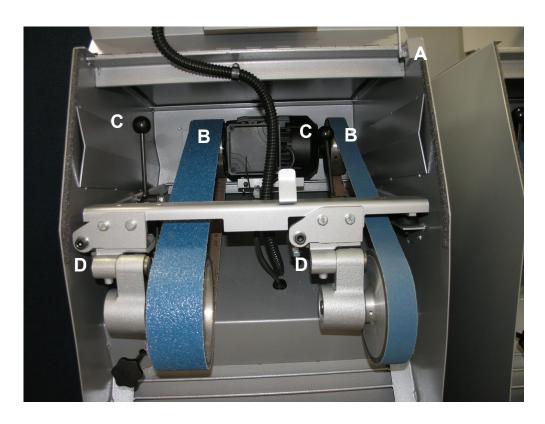
## **Adjustment and Maintenance**

Always ensure the machine is switched off and isolated before carrying out any work: -

Changing the grinding band Dust removal Filter bag change

## **Changing the Scouring Bands**

- 1 To change the bands lift the front flap and secure by the means of the flap prop (A).
- 2 Pull tension levers forward (C).
- 3 Slip the bands off the driving pulley and contact wheel (B).
- 4 Replace the bands ensuring it will run in the same direction as arrow printed on the inside of the band.
- 5 Re-tension the band by releasing the tension levers (C).
- 6 Lower the front cover and spin bands by hand to ensure that there is approximate band alignment.
- 7 Restore power to the machine.
- Start the machine and adjust the band alignment by means of adjusting the screws (D) using the "T" Bar supplied



NB Ortho 100 has only the RH band, and corresponding lever

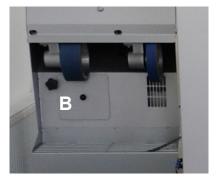
#### **Dust Extraction - Filter System**

- (A) Access Door opened and closed by hand lever front door catch
- **(B)** <u>The Filter Bag Shaker</u> situated to the left of the wide scouring band (Ortho 75) or near the optional tooling bayonet (Ortho 100).

To operate, first switch OFF the machine, then pull vigorously the knob a few times. This will encourage dust to fall from the filter bag into the dust collection box and will have an influence on the dust extraction. USE REGULARLY DURING EACH DAY.

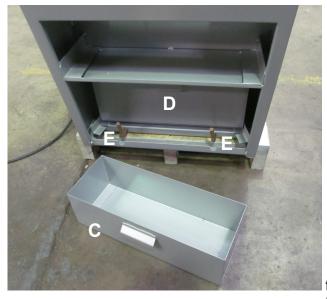






<u>The Dust Collection Trays</u> are situated behind the access door in the base of the machine. THESE MUST BE EMPTIED DAILY OR REPEATEDLY DURING THE DAY IF MACHINE IN CONSTANT USE.

Remove the front access door and remove the waste tray (C) which is for larger waste pieces which fall through the upper grille. Empty and replace.



To remove the waste levers (E) by moving

tray (D) release the sealing through 90° to the horizontal

position. This will release the tray from the rubber seal and allows it to be withdrawn. Empty and replace by the same procedure, returning the levers to vertical to seal the drawer.

#### The Filter Bag System

The Filter Bag System is located at the back of the machine and is arranged so that dust from the extraction system blows into the bag and falls into the lower dust collection tray. When it becomes necessary to replace the filter bag, access to the back of the machine will be required.

Remove the bag shaker mechanism, and remove the filter bag inlet from the exhaust out let of the machine. Remove the filter bag from the waste collection frame by loosening and removing the nuts.

Withdraw bag and wooden frame complete. Remove wooden frame from the old bag and staple or glue to the new bag. Replace by the same procedure.

Standard recommend a service visit every 1-2 years to ensure the machine is running as best it can, and the replacing of the filter bag approximately 24 months (or less if the machine is in a particularly busy environment) to give optimum performance.

#### <u>Fire Prevention - Methods of reducing fire risk includes: -</u>

- Clear all scraps of leather and rubber from both machine waste trays every evening.
- Machine not to be used to scour metal!

#### **Nomex Filter Bags**

We can offer an optional Nomex material filter bag. This material will resist burning for many hours, and even, then is likely to "scorch" or melt rather than catch fire. This will give the operator far more time to remove himself and his customers from the shop, and advise the relevant authorities. However the effectiveness of the extraction system will be reduced.

## Ortho 75 and Ortho 100 series - Common Consumables and Parts

## **Scouring**

WA14758 1500mm x 75mm x 24Grit Scouring Band WA14749 1500mm x 40mm x 80Grit Scouring Band

## Filter Bags

WA09121 Dustbag – Fire Retardant

WA09111 Dustbag – Fire Retardant (old style)

WBFM2855 Bag Frame

## **Contact Wheels & Pullies**

WA06200 100mm Contact Wheel WA06153 75mm Contact Wheel WA06152 40mm Contact Wheel

WBFM5006 100mm Rear Pulley WBFM2850+ 75mm Rear Pulley WBFM3767+ 40mm Rear Pulley

#### **Motors**

WBED407 3-phase Fan Motor
WBED408 3-phase Scouring Motor
WBED410 1-phase Fan Motor
WBED409F 1-phase Scouring Motor