

MODEL W<sub>11</sub>G

**POWER 3 ROLLERS SECTION PLATE BENDER SERIES**

W<sub>11</sub>G -1.5X1300

# OPERATION MANUAL

MANUFACTURE DATE \_\_\_\_\_

SERIAL No \_\_\_\_\_

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## 1.INTRODUCE

Dear Customer

Firstly thank you for using JF machine !

The JF company is special manufacture metal machine factory. Main product: Duct Pittsburgh lock machine、Duct flange machine、Notching machine、Folder machine、Shear machine、Tennyng & wiring machine、Grooving bending machine、Three roller bending machine and different roll forming machine and so on.

The operation manual is to instruct you how to install, operate and maintain JF machine file. It is very important to tell operator to maintain and operate machine in right way. The JF company gives your good way to operate machine.

If you need more information or special condition while operate machine, please contract us (Please give us manufacture date, serial №)

In future, if the machine has been changed or its technology improved and be designed, JF company can't apprise you. JF company is very sorry.

2. MACHINE DIAGRAM

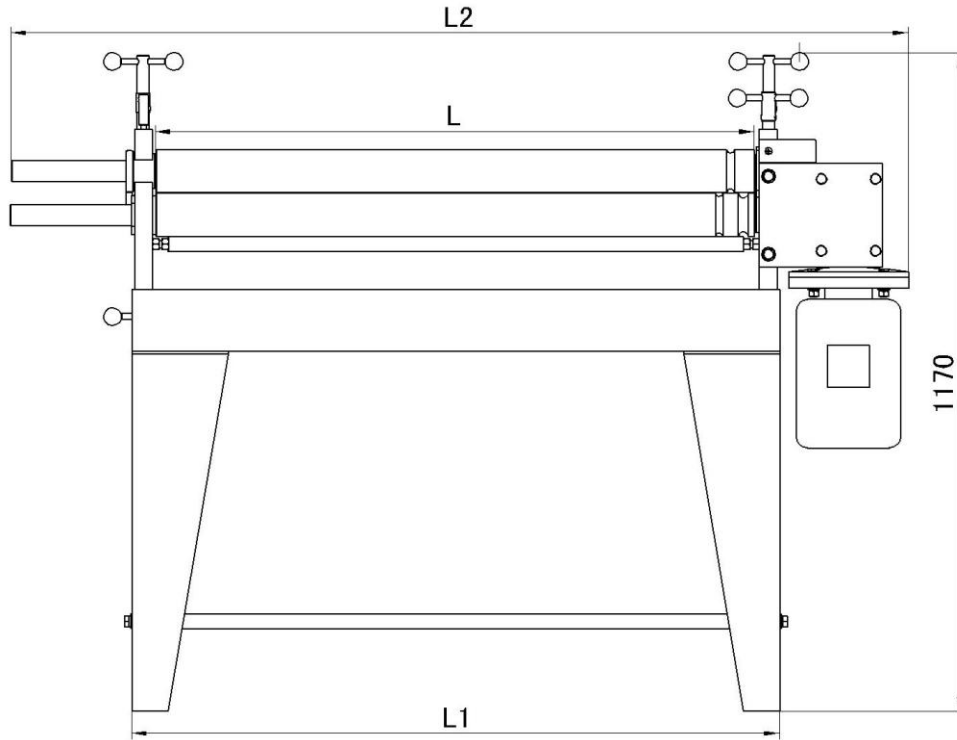


Figure 1. MAIN SIDE DIAGRAM

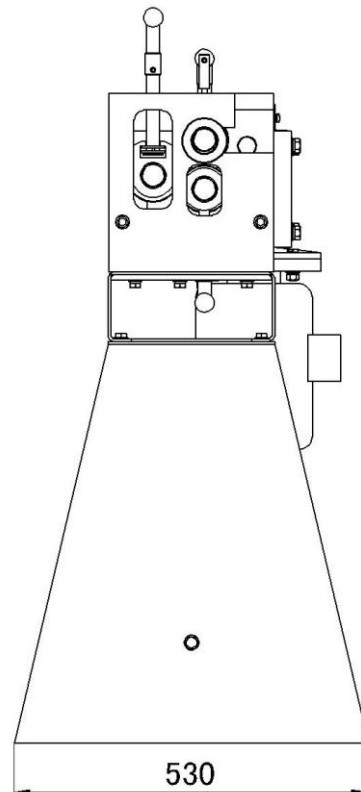


Figure 2. LEFT SIDE DIAGRAM

## 3. MAIN TECHNICAL SPECIFICATION

Model	Size			Max. Bending Thickness (mm)	Max. Bending Width (mm)	Dimension (mm)	Motor (kW)	Motor Speed (r/min)	Reducer Ratio
	L (mm)	L1 (mm)	L2 (mm)						
W11G 2×1000	1000	1081	1500	2	1000	1500×530×1170	1.5	1400	60:1
W11G 1.5×1300	1300	1381	1800	1.5	1300	1800×530×1170			
W11G 1.5×1530	1530	1621	2040	1.5	1530	2040×530×1170			

*Note: a. L, L1, L2, as the figure 1.*

*b. Dimension as L×W×H*

#### 4. CONSTRUCTION AND USE

This machine is small working space, light weight and easy to operate, and easy to move.

It is suitable roll the plate into canister shape then can be made into the pipe for ventilation, sewerage chimney, exclude air and adorn. Especially for building, environment attires.

The rolling speed is appropriate, the transfiguration of product is well, and the face of the equipment has no hard part by different using of the press. Keep well the origin function of the plate. For all of it is more and more wide.

The structure of this machine is made up of rack-moving system, gap of rolling plate and arc adjustment system.

The rack is the base of the machine, in order to locate the rack, there is a pole to locate on the frame.

The driving system has four parts: motor (Figure3-13), worm reducer (Figure3-12), four gears for driving (Figure3-10, 11, Figure4-1, 2), upper roller (Figure3-5) and downward roller (Figure3-6). The motor is on the reducer. The reducer is located on the downward roller. The gear is located on the outlet axle of the reducer with the key and top bolt. The clearance of the roller can be adjusted and moving. The axle-box is located on the rack. There are driving gears on every roller. There are two inertia wheels (Figure4-1, Figure 4-2) and wheeling bear to avoid the gear not go with.

The adjustment of the clearance for rolling plate and the direction includes

upper roller, downward roller, back roller (Figure4-5). The adjustment is similar, is made up from adjusting bolt and wheeling bear to adjust the bolt and lines of the rack by the joint of the downward flange and wheeling bear. The wheeling bear can slide up and down on the slot of the rack. Because the adjusting figure of upper roller and downward roller are very small, to adjust by one side. The back one is big, so adjust it by two sides (Figure4-3, Figure4-4).

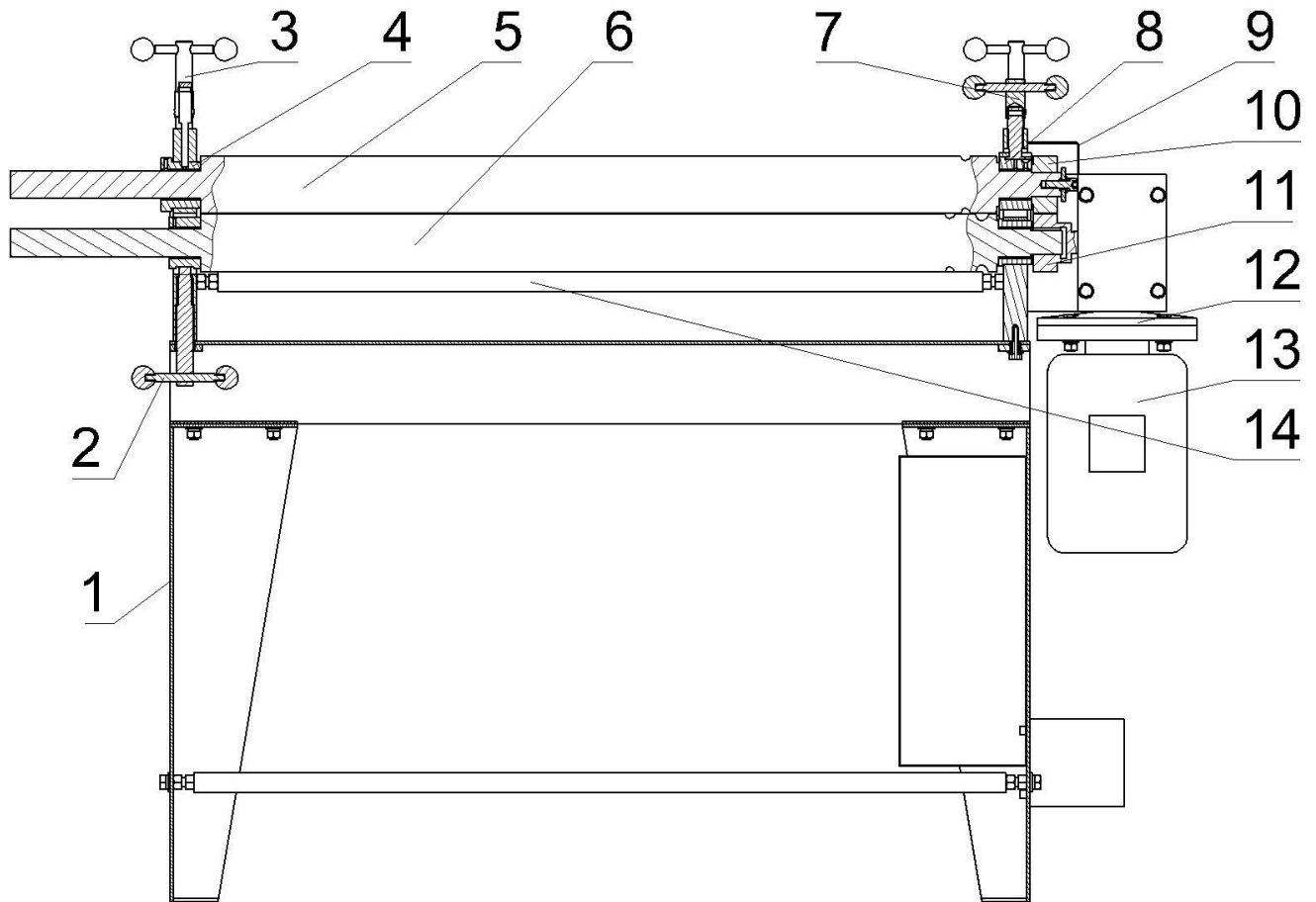


Figure 3. Structure of driving system

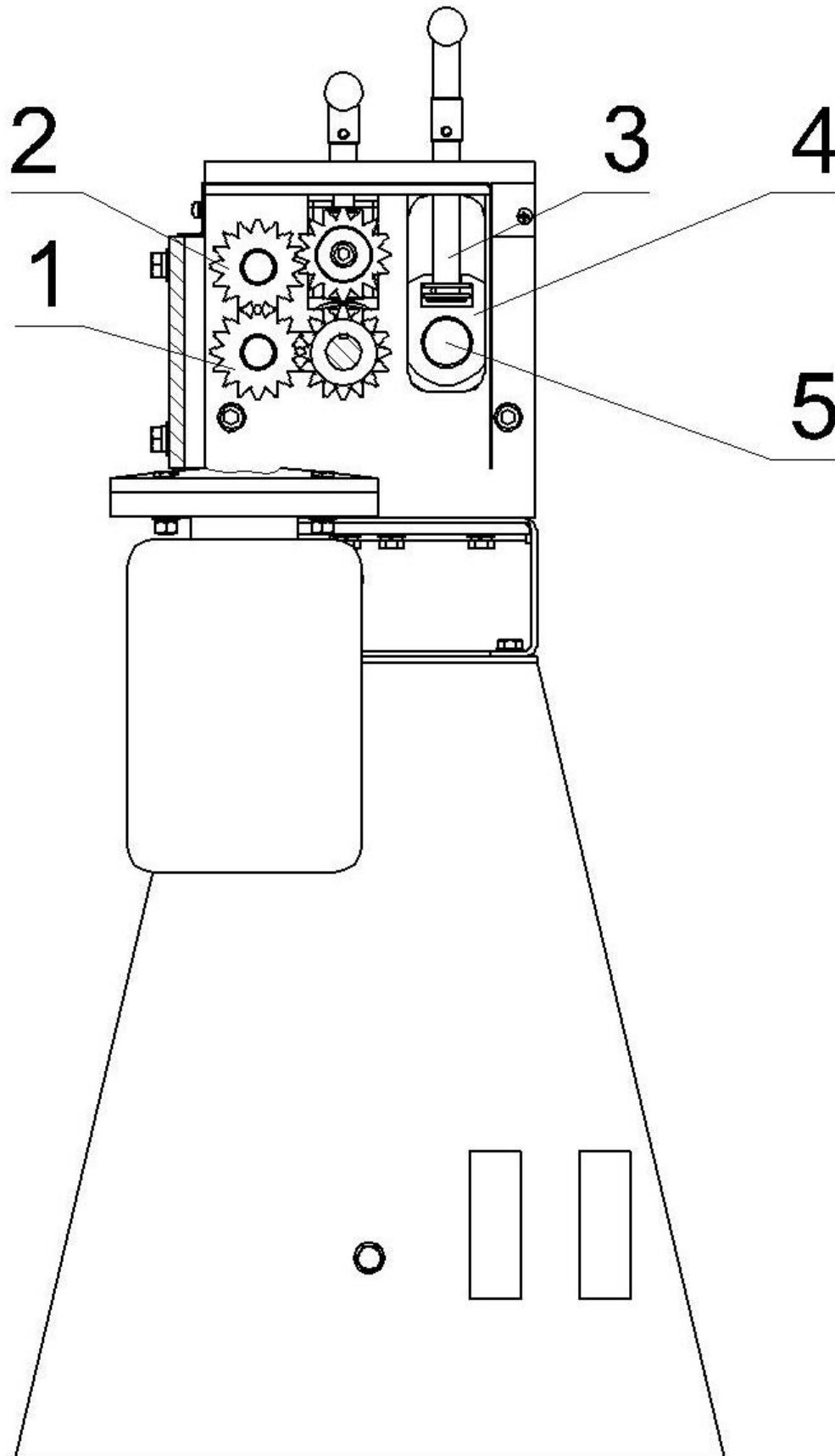
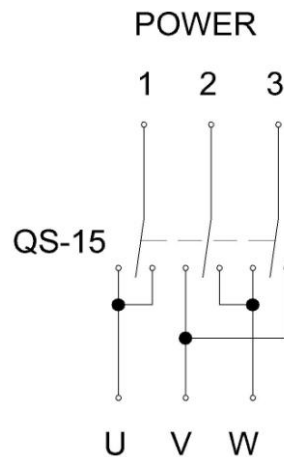


Figure 4. Structure of driving system



## 6. ELECTRIC SYSTEM

The motor is three-phase. The controller is switch QS-15 system. The principle of controlling diagram:



- Point the hand to the “stop”, the motor and the power are not effect.
- Put the hand to “positive”, the point 1. 2. 3 are fit with U, V, W. The motor driven on the positive.
- Put the hand to “appositive”, the point 1. 2. 3 are fit U, W, V. The motor driven on the appositive.

The QS-15 system switch must be located on the inside of be controlling switch and fuse, to avoid damaging itself for strength electric current.

The switch box must be located on the rack, so easily operating.

## 7. LUBRICATION

The machine is lubricated singly, the axle of the roller, worm reducer, and gears are lubricated by the machine 30<sup>#</sup> through the lubricating box.

## 8. ADJUSTMENT AND COMMISSION

In order to fit the different plate, this machine has two equipments, one is to adjust the clearance of the roller, and the other is for adjusting the arc.

The detail for adjusting: in order to adjust the clearance of the different plate, move the roller by turning the upper bolt (Figure3-7) until the back roll to bear the plate. Roll the plate to the ordering arc.

The two points of note:

- a Adjust the clearance between the upper roller and the downward roller, while adjusting the upper bolt and the downward bolt. If the clearance is not well, the canisters are not well, and effect the function of use and the gears to fit.
- b Adjust the back roller with the back bolt together, and the clearance will be well, the canisters are not transfer.

## 9. MAINTENANCE AND SAFETY

### A. Maintenance:

a. Check the lubricating parts, give the grease or lubricating oil in due time. Special for axles, gear, and reducer.

b. Check the vee-belt to avoid of slide and length.

c. Keep the face of roller well.

d. Keep the machine clear.

### B. Safety:

a. All the cover of machine can not unload and don't put the hand in the cover while the machine is working.

b. Check the earth and the freedom of the electric equipment, stop the power when the machine is free.

**POWER 3 ROLLERS SECTION PLATE BENDER SERIES**

W11G-1.5X1300

Model W11G

**Quality Certification**

Model \_\_\_\_\_

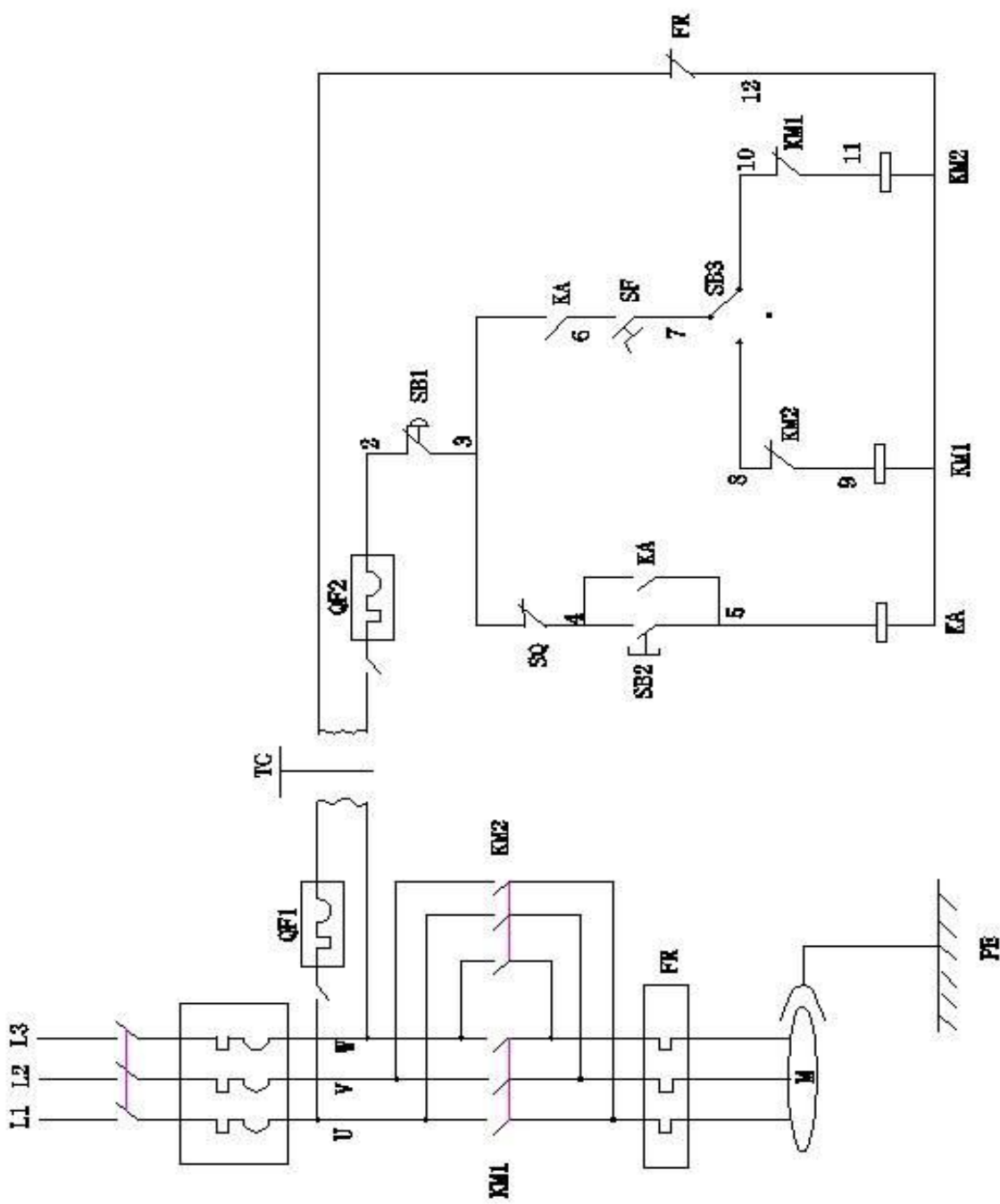
SERIAL № \_\_\_\_\_

MANUFACTURED Date \_\_\_\_\_

THIS MACHINE HAS PASSED ITS FINAL QUALITY AUDIT

Inspector: \_\_\_\_\_

Date: \_\_\_\_\_



Electrical Principal drawing

# WARNING

## General Machinery Safety Instructions

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Machinery House  
requires you to read this entire Manual before using this machine.

- 1. Read the entire Manual before starting machinery.** Machinery may cause serious injury if not correctly used.
- 2. Always use correct hearing protection when operating machinery.** Machinery noise may cause permanent hearing damage.
- 3. Machinery must never be used when tired, or under the influence of drugs or alcohol.** When running machinery you must be alert at all times.
- 4. Wear correct Clothing.** At all times remove all loose clothing, necklaces, rings, jewelry, etc. Long hair must be contained in a hair net. Non-slip protective footwear must be worn.
- 5. Always wear correct respirators around fumes or dust when operating machinery.** Machinery fumes & dust can cause serious respiratory illness. Dust extractors must be used where applicable.
- 6. Always wear correct safety glasses.** When machining you must use the correct eye protection to prevent injuring your eyes.
- 7. Keep work clean and make sure you have good lighting.** Cluttered and dark shadows may cause accidents.
- 8. Personnel must be properly trained or well supervised when operating machinery.** Make sure you have clear and safe understanding of the machine you are operating.
- 9. Keep children and visitors away.** Make sure children and visitors are at a safe distance for you work area.
- 10. Keep your workshop childproof.** Use padlocks, Turn off master power switches and remove start switch keys.
- 11. Never leave machine unattended.** Turn power off and wait till machine has come to a complete stop before leaving the machine unattended.
- 12. Make a safe working environment.** Do not use machine in a damp, wet area, or where flammable or noxious fumes may exist.
- 13. Disconnect main power before service machine.** Make sure power switch is in the off position before re-connecting.
- 14. Use correct amperage extension cords.** Undersized extension cords overheat and lose power. Replace extension cords if they become damaged.
- 15. Keep machine well maintained.** Keep blades sharp and clean for best and safest performance. Follow instructions when lubricating and changing accessories.
- 16. Keep machine well guarded.** Make sure guards on machine are in place and are all working correctly.
- 17. Do not overreach.** Keep proper footing and balance at all times.
- 18. Secure workpiece.** Use clamps or a vice to hold the workpiece where practical. Keeping the workpiece secure will free up your hand to operate the machine and will protect hand from injury.
- 19. Check machine over before operating.** Check machine for damaged parts, loose bolts, Keys and wrenches left on machine and any other conditions that may effect the machines operation. Repair and replace damaged parts.
- 20. Use recommended accessories.** Refer to instruction manual or ask correct service officer when using accessories. The use of improper accessories may cause the risk of injury.
- 21. Do not force machinery.** Work at the speed and capacity at which the machine or accessory was designed.
- 22. Use correct lifting practice.** Always use the correct lifting methods when using machinery. Incorrect lifting methods can cause serious injury.
- 23. Lock mobile bases.** Make sure any mobile bases are locked before using machine.
- 24. Allergic reactions.** Certain metal shavings and cutting fluids may cause an allergic reaction in people and animals, especially when cutting as the fumes can be inhaled. Make sure you know what type of metal and cutting fluid you will be exposed to and how to avoid contamination.
- 25. Call for help.** If at any time you experience difficulties, stop the machine and call you nearest branch service department for help.

# WARNING

## Motorised Sheetmetal Rolling Machine Safety Instructions

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Machinery House  
requires you to read this entire Manual before using this machine.

- 1. Maintenance.** Make sure the Rolling machine is turned off and disconnect from the main power supply and make sure all moving parts have come to a complete stop before any inspection, adjustment or maintenance is carried out.
- 2. Rolling machine Condition.** Rolling machine must be maintained for a proper working condition. Never operate a Rolling machine that has damaged or worn parts. Scheduled routine maintenance should be performed on a scheduled basis.
- 3. Roll Condition.** Never operate a Rolling machine with a damaged or badly worn Rolls. Replace if required. Rolls should never be greased or lubricated as rolls will slip the material and will not bend.
- 4. Roll Direction.** Be aware of the correct Rotational axis of the motor when a qualified electrician connects the machine.
- 5. Hand Hazard.** Keep hands and fingers clear from moving parts. Serious injury can occur if hand or finger tips get pinched by rolls and can be dragged into machine.
- 6. Personal Protection.** Gloves, safety glasses and safety hat are recommended during operation.
- 7. Avoiding Entanglement.** Rolling machine guards must be used at all times. Tie up long hair and use the correct hair nets to avoid any entanglement with the Rolling machine moving parts.
- 8. Understand the machines controls.** Make sure you understand the use and operation of all controls.
- 9. Trained Operator.** This machine must be operated by authorized and trained personnel.
- 10. Power outage.** In the event of a power failure during use of the machine, turn off all switches to avoid possible sudden start up once power is restored.
- 11. Work area hazards.** Keep the area around the Rolling machine clean from oil, tools, chips. Pay attention to other persons in the area and know what is going on around the area to ensure unintended accidents.
- 12. Guards.** Do not operate Rolling machine without the correct guards in place. Necessary guards protect you from injuries by worm-type gearbox and other gears. The only other area which needs to be carefully monitored during use is the rotational area of the rolls.
- 13. Material condition.** Material must be clean out of oil and dry. Oily material can slip and will not bend.
- 14. Material hardness.** Make sure your hardness is the same throughout the material, we recommend that you use certified material. Never bend hard steel, glass or fragile material on this machine.
- 15. Feeding material.** Making a tight bend in one pass is not possible. So you need several passes before you can achieve a certain radius. Tighter curves and full radius always need more passes.
- 16. Stopping the Rolls.** Do not stop or slow the rolls with your hand or workpiece. Allow the Rolling machine to stop on its own.
- 17. Emergency stop.** Use the emergency stop button in case of any emergency.
- 18. Hearing protection and hazards.** Always wear hearing protection as noise generated from machine and workpiece can cause permanent hearing loss over time.
- 19. Call for help.** If at any time you experience difficulties, stop the machine and call your nearest branch service department for help.

# PLANT SAFETY PROGRAM

## NEW MACHINERY HAZARD IDENTIFICATION, ASSESSMENT & CONTROL

### Motorised Sheetmetal Rolling Machine

Developed in Co-operation Between A.W.I.S.A and Australia Chamber of Manufactures  
This program is based upon the Safe Work Australia, Code of Practice - Managing Risks of Plant in the Workplace ( WHSA 2011 No10 )

Item No.	Hazard Identification	Hazard Assessment	Risk Control Strategies (Recommended for Purchase / Buyer / User)
A	ENTANGLEMENT	HIGH	Eliminate, avoid loose clothing / Long hair etc.
B	CRUSHING	LOW	Secure & support work material. Ensure machine is bolted down.
C	CUTTING, STABBING, PUNCTURING.	MEDIUM	Isolate power to machine prior to any checks or maintenance being carried out. Do not adjust or clean until the machine has fully stopped. Wear gloves to prevent cuts from material.
D	SHEARING	MEDIUM	Isolate power to machine when checks or maintenance is being carried out. Make sure all guards are secured shut when machine is on. Hands should be kept clear of moving parts such as rolls etc.
F	STRIKING	MEDIUM	Ensure area is kept clear of material being rolled.
H	ELECTRICAL	MEDIUM	All electrical enclosures should only be opened with a tool that is not to be kept with the machine. Machine should be installed & checked by a Licensed Electrician.
O	OTHER HAZARDS, NOISE.	LOW	Wear hearing protection as required.
Plant Safety Program to be read in conjunction with manufactures instructions			



[www.machineryhouse.com.au](http://www.machineryhouse.com.au)



[www.machineryhouse.co.nz](http://www.machineryhouse.co.nz)

Authorised and signed by:   
Safety officer: .....  
Manager: .....

Revised Date: 12th March 2012