



**WBM.100VJ** 

MANUAL OPERATION



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2. Preface								
	Firstly.Thank you for choosing our "Wenbach G	SmbH"						

Firstly.Thank you for choosing our "Wenbach GmbH" Brand machine, Hope it helps you on improving efficiency and saving more cost.WBM Series machine mainly for plate edge beveling on weld preparation.

For your benefit, Please read this operation manual and related instructions & symbols carefully before machine operation. We will not take the responsibility while defective

operation. We will not take the responsibility while defective machine or physical Injury caused by any operation under required. If you have any questions or problems on our machine or files, Please do not hesitate to contact us.

We have the right to the final interpretation of this information, We will not give further notice with any alteration.

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		1. Statement	
	<b>\$</b>	Please read this operation manual carefully	before

- Please read this operation manual carefully before operation. We will not bear the lost and responsibility due
- to any unreasonable operation.

  Please use the accessories supplied by our company,
  Without the consent of our company, all the loss cause by
  unauthorized demolition and replace the accessories not
- Don't let the machine work morn than 2 hours continuously in full load, its working time is 8 hours one day(reduce the time to 4 hours one day at 30 °C).

belongs to ours, we will not responsible for it.

- We'll not responsible for any loss and damage cause by overload of machine.
- We'll not responsible for any loss cause by working on the others out of its designed performance.
- Please keep this book properly. In case requested for spare parts replacement.

## 3. After-Sales Service

## Wenbach Industrial Technology Wuxi Co., Ltd

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E-mail: Contact@Wenbach.Com Web: <u>www.Wenbach.com</u>

- We have the copyright for this file, Please do not copy or amend without our approval.
- All the pictures and figures for reference. Detail specification and products photos will be updated as per actual.

Thank You!

## 4. Summary

**Introduction:** WBM.100VJ is an automatic walking type plate beveling machine, and can support plate milling automatically to reduce the operation cost and save labors. It is kind of cold cutting process to avoid any plate surface oxidation during beveling. Surface performance could reach Ra 3.2-6.3 and fully enough for welding requirements in any industry. Direct for welding after beveling no addition burr cleaning required. No pollution and easy operation.

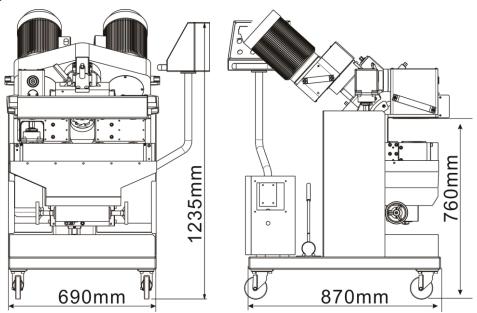
## 4.1 Applications

- ♦ It is widely used on material like steel, Iron, grained steel, alu alloy, copper and so on.
- ♦ It can process "J/U", "K/X", "V/Y" bevel type.
- It is widely used on different field like construction machinery, steel structures, pressure vessels, shipyards, and aerospace industry, etc.

## 4.2 Technical Parameters:

Total Supply: AC 415V 60HZ	Total Power: 6400W
Milling Power: 2 * 3000W	Feeding Power: 400W
Milling Speed: 0~1500mm/min (Adjustable)	Bevel Angle : 0°~ 90 ° (Adjustable)
Single Bevel Width: 0~30mm (Like Q235)	Clamp Thickness: 8~100mm (Customized)
Max. Bevel Width: 100mm	Cutter Diameter. : Ф100mm
Processing Length: >300mm	Support Height: 770~870mm
Clamping Width: >200mm	N.W : 440kg

## 4.3 Machine Diagram



## 4.5 Models Option

Prod	uct Type WBM Series	100VJ	60R	60VJ	60V	80V					
	Working Length L ( mm ) >300										
Plate Size	Working Width W ( mm )		>100								
Flate Size	Clamp Thickness T ( mm )	8~100	6~	-60	6~60	6~80					
	Bevel Angle a (°)	0~90	10~60	0~90	10~60	0~60					
	Bevel Width W ( mm )	0~100	0~55	0∼56	0~45	0~70					
Working	Milling Depth d ( mm )	20		0~15	No	0~15					
Capacity	Milling Width e ( mm )	100	No	0~45	No	No					
	Feeding Depth f ( mm )	30	No	0~15	No	0~15					
	0° Milling Width B mm	100	No	56	No	60					



• • • • • • • • • • • • • • • • • • •	g IIIa	Cillie							
Single Bevel Width (mm)		0~30		20					
Milling Speed (r/min)		750-1050		1050		750-1050			
Feeding Speed (mm/min)		0~1500							
Power Supply		AC 380V, 50Hz (Can be customized)							
Total Power ( w )		6400 3400 4800							
Motor rotation ( r/min )		1450							
Machine Net weight ( kg )		440	225	245					
T L T A A	T		T	Į <sup>T</sup>		T a			

## 5. Safety & Warning

## 5.1 Safety Instruction



The parts of electrical and rotation may cause serious personal injury or property damage.

This machine is powered by 415 Volts.PLEASE carefully read this manual operation to identify the different parts of this machine before installing, wiring, starting up, running or making any adjustments. Electrical wiring installation and maintenance personnel MUST be qualified with regulations and professional skills to ensure to avoid the life of injury and and the loss of property.



**DANGER** Improper operation could cause danger or even death!



**WARNING** Improper operation could cause danger or serious injury!



**CAUTION** Improper operation could cause moderate damage and property loss!

## 5.2 Safety Wear & Protectors:

Please check your wears before operation.





NOTICE

Dangerous for sandal  $\+$  high heel  $\+$  shoes off  $\+$  smooth sole.

Please do wear safety helmet during operation

## 5.3 Protection Device

Please DO NOT remove the protective cover on equipment.

Machine can not be modified without permission.



## 5.4 Machine Run and End Notes:

- ♦ Before operation, Please ensure the safe site around.
- ♦ Before operation, Please do not touch rotation parts of machine by hands.
- ♦ After operation, Please do cut off the power and reset machine.
- Inflammable and explosive articles shall not be placed around the machine.
- ♦ Please operate machine at 0~40°C.



#### 5.5 Safety Caution



**DANGER** 

- $\label{eq:weak_equation} \qquad \qquad \mbox{We have the final right to interpret and modify all relevant information of this machine!}$
- ♦ We DO NOT bear the responsibility for accessories not from our factory used on our machine!
- Please DO cut off the power before maintenance the machine!
- ♦ Do check whether any damages on plug, wire, and machine before use every time!



- DO NOT move the machine by power cord!
- ♦ DO NOT use the machine in humid environment. DO keep the machine in dry environment!
- Please use trip circuit breaker to protect machine when out door operation!
- Please let only skilled person for machine inspection and maintenance!



- ♦ Please do stop machine and wear gloves for iron cleaning to avoid any hurts by hot sharp iron pin.
- Please place the power cord on machine or behind, do not put it on sharp objects.



Please refuse the receipt and obtain the signature of the forwarder if the equipment is damaged, which will facilitate your insurance claim. Our factory will promptly assist you to replace the missing or damaged parts.

#### 5.6 Security Identify



#### Beware of burns

After plate beveling, The Iron pins and Inserts are in hot and sharp, please do not touch by hands.



## **Electric Shock Risk**

It happens on the electric box, Means request professional electrician for inspection and pay attention on the electric shock risk.



#### **Hoisting Prompt**

During hoisting, Please DO NOT stand under machine to avoid any casualties.



## Watch Your Hands

It marks on the plate feeding side, means dangerous for hands and please keep distance with machine.



## Be careful of prick on hands

It markets on the plate feeding side, means dangerous for prick on hands, please do not touch the iron pins or plate by hands after beveling.

## 6. Machine Inspection

#### 6.1 Hoisting



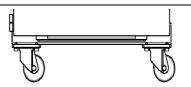
Step 1: The machine adjust the angle to 0 degree( Refer to Item 9)

Step 2: The machine is hoisted slowly based on its hoisting position and the height should not rise more 10cm while hanging up, Except crossing obstacles.

Step 3: The package is non-recyclable and can be disposed of properly.

NOTE : Please use good quality hoisting belt and available lifting weight should be > 500KGS.

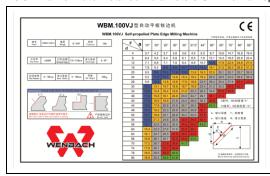
## 6.2 Wheel Installation:



Someone must support the machine while installing the wheels after the machine is hoisted 200-250mm from the ground.

NOTE: Please do not touch the lifting device while lifting and keep hoisting safety for machine stable to ensure person safety.

#### 6.3 Name Plate: Detailed Parameters On The Nameplate



**6.4 Packaging Checking :** Please check the packaging as per the list on operation manual

## 7. Installation & Diagram

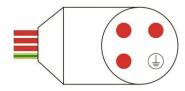


**CE Certified Requirements** 

External Ground Wire request
wire size(Copper Conductor)

Phase Line Diameter S (mm²)	Ground Wire Diameter Sd (mm²)
S≤16	S
16 <s≤35< td=""><td>16</td></s≤35<>	16
S>35	S/2

## 7.1 Electrical Installation:







## Wire Installation

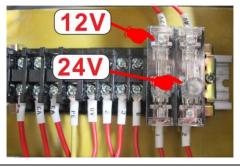
- For safety, This machine is using 3 fire wire and 1 ground wire (Null line will affect the inverter)
- ♦ Electric wire size should be diameter 1.5mm² for 3 phase.

Power AC380V 50HZ, electric connection should follow local rules.



#### **Cutter Head Rotation**

Check the cutter head rotation if it is correct direction, if not, can change the rotation by changing any 2 of the fire wire location.



## No data on digital display

If no power in electric box when power is on, Check the 24V fuse if blowout.

NOTE :This operation is ONLY available when the troubleshooting not solved.

If no data on digital display when power is on, Check the 12V fuse if blowout, or contact with us directly.

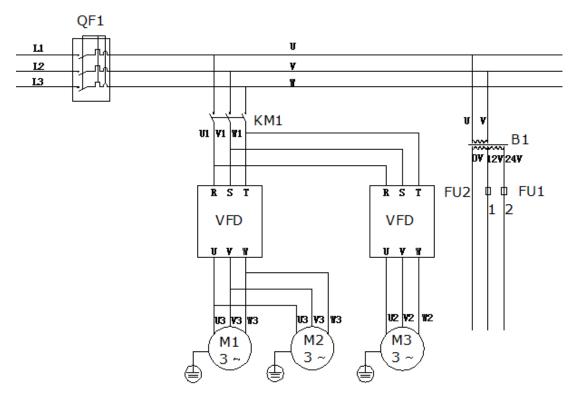
NOTE :This operation is ONLY available when the troubleshooting not solved.

#### 7.2 Electrical Symbols

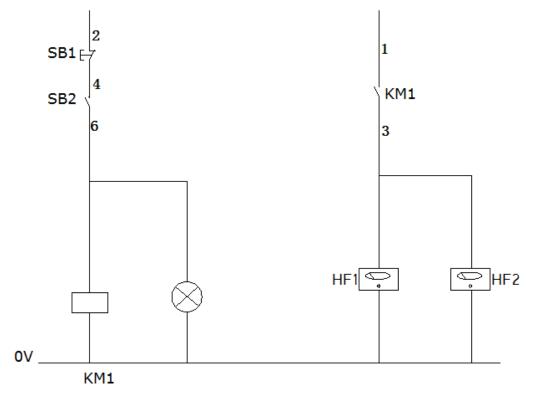
QF : Power Switch SB1 : Emergency Stop KM : AC Contractor VFD : Converter B : Transformer SB2 : Power Switch FU : Fuse HF : Tachometer



7.3 Electric Box Diagram: Converter and digital parameters already settled, Please do not change anyhow to avoid any equipment troubles.



## 7.4 Control Box Diagram



## 7.5 Common Protection Measure:

- 1) Electric connection and protection should follow the local regulations;
- 2) Cable side for connecting aviation plug, another side for power;
- 3) DO NOT use the machine in humid environment to avoid causing danger.
- 4) Feeding plate as per instruction, Inserts touch the plate only after cutter rotating.

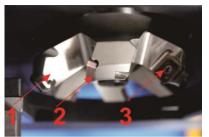
## 7.6 Cutter & Insert Replacement:



## Ensure power off before replacing Cutter head or Inserts

1)Please pay attention on the sharp edge of inserts and high temperature when replacing Inserts or cutters to avoid any dangers.

2)Suggest to do cleaning before replacement and wear gauntlet.



## Insert Replacement

1.Adjust the cutter head angle to a suitable one for replacing Inserts (Like photo "1" is cutter head, "2" is Inserts, "3" is Screws.



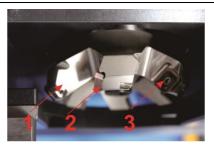
## Insert Replacement

2.Using Tool "T15" screwdriver, Take off screws"3" to replace the Inserts



## **Cutter Head Replacement**

1.Adjust the cutter head angle to a suitable one, Stable cutter head "1" by stick to ensure it will not rotate.



## **Cutter Head Replacement**

2.Use the Hex screwdriver to turn the screw "4" in the direction of the arrow to remove the screw. Then cutter head is taken out. (it not taken out, you can use sticker to tap the cutter head gently and then take out the cutter head by hands)

## 8. Cooling system

## 8.1 Cooling system:

**OPTIONAL PART** 

## 9. Bevel Preparation



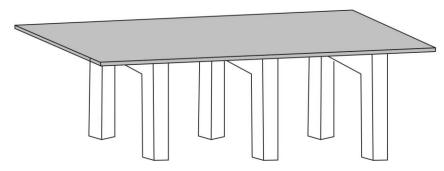


During operation, We must set up the first feeding depth as per different plate material, Coz any operation beyond the scope of native performance will lead to some series equipment troubles like gear wear, inserts collapse, main shaft break off and so on.

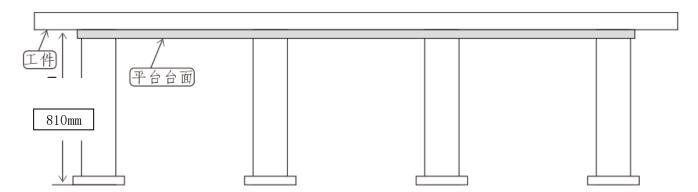
Request to considered with full plate factors when setting up the bevel parameters specially plate hardness will be increase after oxygen cutting.

#### 9.1 Placement

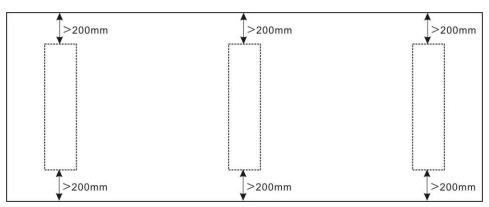
1) make a simple plate support as below picture. (Picture for reference only)



2) Support Height: Suggest to make 810mm when plate thickness in 20mm. Can adjust the table height as per your plate thickness. Max height should be 765mm for this machine.



3) Workpiece placement, Put the metal plate on support showed as below, make the beveling edge about 200-250mm.



**9.2** Plate Clearance:Clear up the plate surface to avoid any welding tumor and crater (Burrs,tumor and crater will affect the Inserts and machine life time)

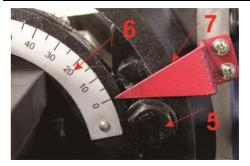
## 9.3 Bevel Angle & Bevel Depth Adjustment:





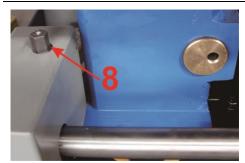
## Bevel Angle Adjustment

1.Loose bolt "5"



## Bevel Angle Adjustment

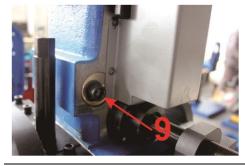
"6" -Angle Ruler、 "7" -Angle Indicator Arrow



## Bevel Angle Adjustment

2.Rotate the Ratchet Wrench "8" and adjust required angle. After that tighten the bolt "5"

NOTE: Adjusting the "b" on the ratchet wrench can change the rotate direction of angle.



## Bevel Depth Adjustment

1. Loose bolt "9"



## Bevel Depth Adjustment

2. Rotate hand wheel "10", and adjust to required bevel depth according to the scale parameter table and required bevel width.

NOTE: Parameters for reference, Please refer to the actual bevel size after first testing.

## 9.4 Plate Processing Setting:



## Feeding Depth [d] Adjustment

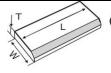
1. Please adjust the bevel angle to 90 degree of that machine( See the photo)

NOTE: This operation is applicable with beveling of "0" degree.



## Feeding Depth [d] Adjustment

2.Adjust the feeding of 1-3mm by hand wheel(Stainless is 1-1.5mm).The feeding scale



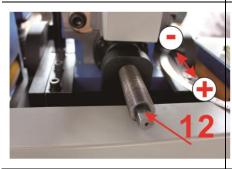


value of hand wheel to 19 for d=0(FOR REFERENCE ONLY, Subject to actual testing data.)



## Feeding Width [e] Adjustment

3. Loose four bolts fixed between spindle and literal adjustment plate [11]



## Feeding Width [e] Adjustment

4. Rotate Bolt [12], [e] is becoming smaller when the scale is turned to "-" direction. While turned to "+", become bigger.

## 9.5 Processing Bevel Type Of "0" Degree & "U"Type Adjustment:

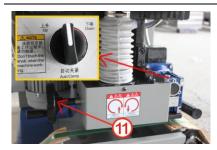


- 1.Adjust required bevel angle "a" of U type (Refer to 9.3 Bevel Angle Adjustment
- 2.Adjust width [e] (Refer to 9.4)
- 3.Adjust feeding depth [d] (Refer to 9.3)



F a	5°	10°	15°	20°	22.5*	25*	30°	35°	37.5°	40°	45°	50°	55*	60°	65°	70°	75°	80°	85°
4	6.3	5.7	4.8	4.2	3.7	3.7	3.8	3.8	4.0	4.4	5.0	6.1	7.3	8.7	10.6	12.6	14.7	16.9	19.4
6	6.5	6.0	5.4	4.9	4.5	4.5	4.8	4.9	5.3	5.7	6.4	7.6	8.9	10.4	12.4	14.4	16.6	18.9	21.4
8	6.7	6.4	5.9	5.5	5.3	5.4	5.8	6.1	6.5	6.9	7.9	9.1	10.5	12.1	14.3	16.3	18.5	20.9	23.4
10	6.9	6.7	6.4	6.2	6.0	6.2	6.8	7.2	7.7	8.2	9.3	10.7	12.2	13.9	16.1	18.2	20.5	22.8	25.4
12	7.0	7.1	6.9	6.9	6.8	7.1	7.8	8.4	8.9	9.5	10.7	12.2	13.8	15.6	17.9	20.1	22.4	24.8	27.4
14	7.2	7.4	7.4	7.6	7.6	7.9	8.8	9.5	10.1	10.8	12.1	13.7	15.5	17.3	19.7	22.0	24.3	26.8	29.3
16	7.4	7.8	7.9	8.3	8.3	8.8	9.8	10.7	11.3	12.1	13.5	15.3	17.1	19.1	21.5	23.8	26.3	28.8	31.3
18	7.6	8.1	8.5	9.0	9.1	9.6	10.8	11.8	12.6	13.4	14.9	16.8	18.7	20.8	23.3	25.7	28.2	30.7	33.3
20	7.7	8.5	9.0	9.6	9.9	10.5	11.8	13.0	13.8	14.7	16.3	18.3	20.4	22.5	25.1	27.6	30.1	32.7	35.3
24	8.1	9.2	10.0	11.0	11.4	12.1	13.8	15.3	16.2	17.2	19.2	21.4	23.7	26.0	28.8	31.4	34.0	36.6	39.3
28	8.4	9.9	11.0	12.4	12.9	13.8	15.8	17.6	18.6	19.8	22.0	24.4	25.9	29.4	32.4	35.1	37.8	40.5	43.3
30	8.6	10.2	11.6	13.1	13.7	14.7	16.8	18.7	19.9	21.1	23.4	26.0	28.6	31.2	34.2	37.0	39.8	42.5	
34	9.0	10.9	12.6	14.4	15.2	16.4	18.8	21.0	22.3	23.7	26.2	29.0	31.9	34.6	37.8	40.7	43.6		
38	9.3	11.5	13.6	15.8	16.7	18.1	20.8	23.3	24.7	26.2	29.1	32.1	35.1	38.1	41.4	E.			
40	9.5	11.9	14.2	16.5	17.5	18.9	21.8	24.A	26.0	27.5	30.5	33.6	36.8	39.8		VDBA	400		
44	9.8	12.5	15.2	17.8	19.0	20.5	23.8	26.7	28.4	30.1	33.3	36.7	40.0	43.3	V	VBM	.100	VJ	
48	10.2	13.3	16.2	19.2	20.6	22.3	25.8	29.0	30.8	32.7	36.1	39.8	43.3		d:加	工坡口物	₩ <b>度</b> e	過度值	
50	10.4	13.7	16.7	19.9	21.3	23.1	26.8	30.2	32.0	33.9	37.8	41.3		15	ar填	口角度	W	<b>坡口第</b>	度
54	10.7	14.4	17.8	21.3	22.9	24.8	28.8	32.5	34.5	36.5	40.4			<b>1</b> 770 170	е		10		
58	11.1	15.1	18.8	22.6	24.4	25.5	30.8	34.8	38.9	39.1	43.2			<		-	1		-
60	11.2	15.4	19.3	23.3	25.2	27.4	31.8	35.9	38.1	40.4	0度的	t: 0位刻	度值8	] ↑	Ę	/	7	1	
64	11.6	16.1	20.4	24.7	26.7	29.0	33.8	38.2	40.6	42.9	90度的	1,0位刻	度值18	_   _	a	//			
68	11.9	16.8	21.4	26.1	28.2	30.7	35.8	40.5	43.0	注:	7.## <del>***</del>	以实际	for T'#	O	/	d			
70	12.1	17.2	21.9	26.7	29.0	31.8	36.8	41.7		值为准:		多头师	<i>I</i> /H.——3 <b>/</b> I.		//	7	H	-	
74	12.4	17.8	23.0	28.1	30.5	33.3	38.8			2.不同篇	<b>西色代表</b>	分次进始		<b>+</b> /	/				
78	12.8	18.5	24.0	28.5	32.0	35.0	40.8			3.材质不同适当减少进给量,本表格适用低碳钢和铝合金。									
80	13.0	18.9	24.5	30.2	32.8	35.8	41.8			(1111年)	DIM SECTION	4 <b>4 1 1 1</b> 2						*	

## 9.6 Clamp Thickness & Machine Height Adjustment:



## Clamp Thickness Adjustment

Rotate control box switch can be clamping the plate.

Rotate hand wheel "11" to clamp the work piece



## Machine Height Adjustment

1.Lifting: Rotate bolt "12" clockwise and repeatedly press handle "13".

2.Lower: Rotate bolt "12" counterclockwise to adjust required height and then rotate to the cut off position.

## 9.7 Speed Adjustment:

## Spindle Speed and Feeding Speed Adjustment

- "1"-Spindle speed adjustment control knob
- "2"-Feeding Speed control knob

NOTE:Spindle speed and feeding speed can be adjusted on panel as per different material during beveling.

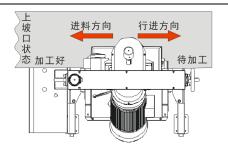


## 9.6 Feeding Route:

- 1.Request flat floor, If not, can have a metal plate on floor for machine walking.
- 2. Make Sure feeding in correct feeding direction.

Note: Please ensure the right cutter rotate direction before feeding. Inserts can not touch the plate before feeding.

\*Machine beveling direction should walk along with the red direction.\*





## 10. Basic Operation



- After period working, Reducer temperature will increase, Boiling will helps on the machine heat dissipation to ensure the mechanism in thermal balance.
- ♦ If over loaded, the thermal element in electric box will start and cut off power supply. Reset thermal element when it cold enough, otherwise the machine will be stopped again.

## 10.1 Machine Parts Introduction

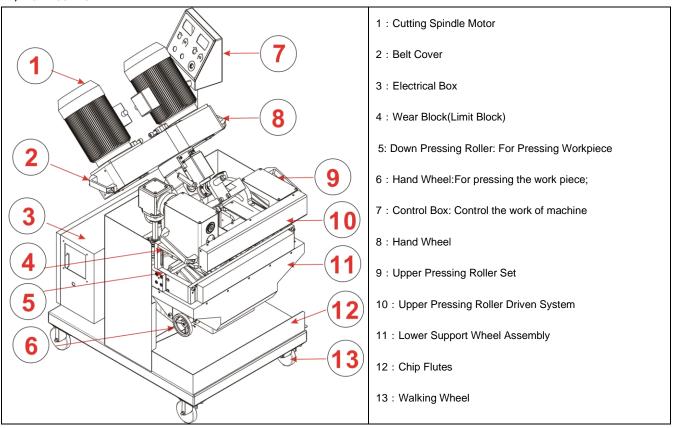
## 1) Control Panel

- "1"-Feed Speedometer: Showing current cutting speed,
- "2"-Feeding Speed Table: Showing current feeding speed
- "3"-Spindle Switch: switch for cutting spindle
- "4"-Speed Control Knob:cutting spindle speed adjustment, range from 750-1500r/min(Subject to actual testing)



- "5"-Positive & Negative Rotation Knob:Adjust the feeding direction
- "6"-Speed Control Knob:feeding speed adjustment, range from 0-1500mm/min
- "7"-Indicator:Lights up while machine powered(White Light)
- "8" Safety Lock: For lock the use of machine. Key should be kept by operator or warehouse manager.
- "9" Emergency Stop: Immediately press "Emergency Stop" while an emergency occurs and the power will be completely cut off.

#### 2) Full Machine



## 10.2 Speed Setting Reference Table (Parameters for reference only, Higher bevel width, lower speed, please refer to the actual situation)

Work piece can not locate over the red line, Distance between Red line and Green line is "Low speed Area" for starting, After green line (Cutter head) should be "speed up area", When plate end close to red line should be "Complete area".

Materi	Low Seed	Speed Up Area	Complete
al	Area	ореса ор жа	Area
Q235	150-250	300-800	300-500
45#	150-250	300-700	300-500
16Mn	150-250	300-600	300-500
AL	150-250	300-1000	300-800
306	150-200	200-500	200-300
316L	150-250	200-400	200-300



Diagram

## 10.3 Basic Operation

Small Plate Beveling: As a manual operation to adjust the required bevel type, angle, depth, cutting speed and feeding speed, and then start

to work.( ONLY WBM.100VJ)

Large Plate Beveling.......When bevel large size metal plate, which need to put it on the auxiliary support attachment, and then adjust the required bevel angle, bevel depth, feeding speed and cutting speed on the machine to complete work. (ONLY WBM.100VJ)

## 10.4 Operation Steps:



- Working Piece Location Workpiece should be stick along with the feeding limit block and Plate leading end should keep distance 10-15mm with cutter head;
- 2) Working Piece Clamping.....Please refer to operation 9;
- 3) Start to milling.....Power On, Turn on Spindle 5-10 seconds to stable rotation speed and feeding speed.

## After Beveling

Close the feed, close the spindle, and loosen the clamping wheel.

Make feeding speed back to "0"

## 11. Lubrication & Cleaning

Lubrication Location	Lubricating Method	Lubricating Method		
Complete machine	Spray anti-corrosion oil, remove iron pin, and a dust-proof cover, straight in a dry place	3 months or a long time not to use		
3 months or a long time not to use	Use a broom to clean up in time, so as to avoid excessive accumulation of equipment.	Clean up according to the actual situation		
Dadwaan	Clean up the scraps by air compressor	While needed		
Reducer	Add Gear oil	Life free maintenance		
Control/Electric Box	Cover with dust and rain shield	When long time not to use		
Inserts	Replace Inserts and screws in time when any broken found	Replace Inserts and screws in time when any broken found		
Inserts Screw	If the knife is broken in the tray, please use the drill out	As per manual point 7		
Main Shaft	Injet lubricating oil into the inlet on the side of spindle (Can not use grease instead)	Once every 3 months		



## Lubricating Oil Injet and scraps cleaning

["1"Lead Screw] Adjust the thickness, Clean scraps, Spray anti-corrosion oil once a month;

["2"Guide Rail] Clean up the iron scraps every day, Spray lubricant if not use for a long time.

NOTE: Anti-corrosion oil can use [WD40]





## Lubricating Oil Injet and scraps cleaning

["3" Angle Hole] Clean up the iron scraps before adjust the angle, ad spray the anti-corrosion oil once a month;

["4"Guide Rail] Clean up the iron scraps everyday, spray the anti-corrosion oil once a month.

["5"Lead Screw] Spray the anti-corrosion oil once a month.

## 12. Common Trouble Repair & Maintenance

	12. Common Trouble Repair & Maintenance								
NO.		Fault	Maintenance & Repair						
1	No response from	No electricity	Check the wire of electricity						
'	electrical equipment	Broken Line, Poor Connect	Check if anywhere broken line or poor connection						
0	Electrical OK, Still no	Emergency on	Rotate the emergency button						
2	response	Power lock not open	Move the key on the panel						
2	Dotation Error	Spindle Rotate Error	Change the wire line sequence						
3	Rotation Error	Feed motor rotate Error	Check the "Feed switch "" L or R" on panel"						
4	Abnormal Naine	From Motor	Power supply shortage						
4	Abnormal Noise	From Gear	Gear wear, inject with lubrication oil						
_	On to the constraint	Over load	Power off and reset on the "Disconnector" (Refer to point 7)						
5	Spindle not run	Lock nut off	Lock up the Jam Nut (Overload)						
		Bearing Broken in main shaft	Replace the Bearing						
6	The compression can't be	tightened	Check if any scraps stick on the rollers or plates						
7	Workpiece ejected or defle	ected	Ensure if the feeding direction correct with request						
	Cariana Crante dunina	Overland	Reduce the bevel depth or speed,can add coolant properly						
8	Serious Spark during	Overload	when process stainless steel plate						
	operation	The Inserts wear	Replace Inserts						
9	Inserts smashed with work	xpiece	Check if the inserts already contact with plate before feeding						
10	Can't process with thin pla	te	Specified Working range for machine, Contact with supplier						
11	Inserts cracks once start b	eveling	Reduce feeding depth						
12	Feed wheel not working		Check if any problem on the feeding gear						
		Low friction coefficient	Increase the friction of feed wheel and add force to the						
13	Artifacts Skid	Low inction coefficient	conveyor						
		Feed speed doesn't match	Reduce feeding speed						
14	Electric control Error or an	y others	Contact with supplier in time						
15	Difficult to rotate the sace!		Ensure if already loosen jam nut or any scraps in the rotat						
10	Difficult to rotate the angel		holes.						

#### **CAUTIONS**



- Replace the direction of insert and fixing screws in time according to different factors of different processing materials, feeding depth, and cutting speed, etc.
- ♦ Recommend to replace the angle of insert cutting between 30-100m to protect the insert.
- Recommend to replace the screws of insert cutting between 30-100m to lower the risk of insert damage.

**NOTE:** The professional worker will decide if that can be taken out or not based on different situation if the screws are broken out, otherwise that may cause cutter head cannot work normally.

13. Packing List									
NO.	Description	Model	Qty	Unit	Remark				
1	Plate Beveling Machine	WBM.100VJ	1	Set					
2	Cutter Head	Φ100mm	1	PC	Including the set on the spindle				
3	Insert	100VJ Use	2	Set	Including the set on cutter head				
4	Insert Screws		2	Set	Including the set on cutter head				
5	Hex Wrench		1	Set					
6	Hex Wrench	V12	1	PC	Use for install cutter head				
7	Wrench	19	1	PC	Use for angle tighten screws				
8	Ratchet Wrench	17/19	1	PC					
9	Ratchet Wrench	13/16	2	PC					
10	Knife Wrench	T15	1	PC	For Insert Replacement				
11	Industrial Plug	4075	1	Set	Imported( On Electric Box)				
12	Tool Kit	4111	1	PC					
13	Universal Wheel	5001	4	PC	Walking Wheel				
14	Screws	M8*16	16	PC	For fixing universal wheels				
15	Operation Manual		1	PC					
16	Package Box	Wooden	1	PC	Fumigation-Free Export Package				

14. Vulnerable Parts List				
NO.	Part NO.	Qty in set	Description	Remark
1	80VPCA300	7	Insert PDER-G	Replace period as per manual
2	80VM3508	6	Insert Screws M3.5*8	
3	80V0063	1	Cutter Head	When bolts break and can not take out, request to replace for new
4	100VJ005		Top Roller (Long)	- Change period as per site situation
	100VJ006		Top Roller (Short)	
5	100VJ007		Down Roller	Change period as per site situation
6		4	Belt	
7	80type	1	Copper Bush	Change period as per site situation

NOTE: Inserts and screws are regular wear and tear parts which can stock accordingly. For other parts may need to replace, Please check as per your needs.