# **CB**Up-feed Belt Conveyor

Date: Oct, 2017

Version: Ver.B (English)





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# 1. General Description



Please read this manual carefully before using this machine in order to operate correctly against any damage caused due to improper operation.



Forbidden to process flammable or toxic material!

Shini manufactures five model of belt conveyor as follows under technical license from a leading european manufacturer:

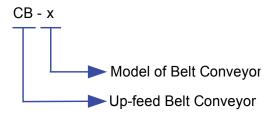
CB series conveyor feature reliable performance and ease of operation and are suitable for conveying sprues or finished products to a higher level beside the moulding machine.



Model: CB-6



## 1.1 Coding Principle



#### 1.2 Feature

- The patent bracket "future".
- PVC belt is adopted for smooth and efficient conveying.
- Height adjustable floor stand.
- CB series has material fence to facilitate regrind conveying.
- Sidewalls for CB series are 95 mm respectively.
- Maximum loading capacity of CB is 56kg,
- Power supply for CB series are 3Φ, 400VAC, 50/60Hz.
- Optional with frequency converter, the normal application and safety speed control of the conveyor are within 3~6m/min.

All service work should be carried out by a person with technical training or corresponding professional experience. The manual contains instructions for both handling and servicing. Chapter 6, which contains service instructions intended for service engineers. Other chapters contain instructions for the daily operator.

Any modifications of the machine must be approved by SHINI in order to avoid personal injury and damage to machine. We shall not be liable for any damage caused by unauthorized change of the machine.

Our company provides excellent after-sales service. Should you have any problem during using the machine, please contact the company or the local vendor.

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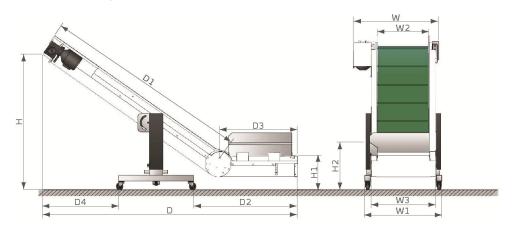


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Tel: (91) 250 3021 166



# 1.3 Technical Specifications



Picture 1-1: Out Dimensions

Chart 1-1: Out Dimensions List

Model	CB-1	CB-2	CB-3	CB-4	CB-5	CB-6
H (mm)	940+65	940+65	940+65	1168+145	1168+145	1168+145
H1 (mm)	262+65	262+65	262+65	200+145	200+145	200+145
H2 (mm)	405+65	405+65	405+65	343+145	343+145	343+145
W (mm)	533	603	733	533	603	733
W1 (mm)	483	553	683	483	553	683
W2 (mm)	250	320	450	250	320	450
W3 (mm)	359	429	559	359	429	559
D (mm)	1815	1815	1815	2225	2225	2225
D1 (mm)	1300	1300	1300	1800	1800	1800
D2 (mm)	845	845	845	909	909	909
D3 (mm)	690	690	690	690	690	690
D4 (mm)	520	520	520	665	665	665
Weight (kg)	92	102	112	100	100	120

We reserve the right to change specifications without prior notice.



## 1.4 Safety Regulations

To avoid any body injures and damages of the machine, please obey the regulations in this manual. When operating this machine, please obey the regulations as follows.

#### 1.4.1 Safety Signs and Labels



Electrical installation should be done by qualified electricians. Turn off the main switch and control switch before servicing and maintenance.



#### Warning!

The sound level produced by the machine is < 70dB (max) at the position of the operator.



#### Notice:

Noise level test refers to the following conditions: 1m around the machine, 1.6m above the machine.



#### Warning!

- 1) Don't use the machine and don't try to repair it before carefully read this manual and understood all its parts completely.
- 2) In particular, it is important to adopt the precaution listed in section a: 'safety instruction'.
- 3) It is forbidden to use the machine in any condition or for any use different from what is indicated in the manual. SHINI has no responsibility for breakdowns, trouble, or injuries caused by improper operation.



#### Attention!

No need for regular inspection because all the electrical parts in the control unit are fixed tightly!



Attention!



The maximum weight of the pieces to be carried on the conveyor belt must not be over 56kg in total (Conveying capacity is less than 56kg as the set value of the regulator is smaller than 4.5m/min).

The conveyor belts are not suitable to transport loose material.



#### Attention!

These conveyor belts can be easily used by all of the personnel of the plant they are installed in, and they do not present any risk for the operator, if used properly.

Therefore, it is recommended to read the manual carefully before using the machine.



#### Attention!

SHINI claims no responsibility when:

- 1) Use of the conveyor belt is in any way openly opposed to what is indicated in the present instruction manual.
- 2) There are feeding defects.
- 3) There is a serious deficiency of the foreseen maintenance.
- 4) Non-authorized changes are adopted.
- 5) Spare parts that are non-authorized or not suitable for the actual model are used.
- 6) There are exceptional events. Please don't disassemble the protector sponge and quick tube & nip in the outlet of collecting material box.



#### Danger!

Risk of fire: Risk of fire is present whenever the conditions of the conveyor belts are not suitable for the operation they are used for (in particular: temperature of the pieces carried). Adjust the condition of the conveyor belt according to the table shown here below.



Risks of high temperature: These conveyor belts are designed for transporting molded parts, i.e. hot pieces. If you need to operate on the conveyor belt, use safety gloves (in particular where the parts fall on the belt).



Type of belt	Max. temp. of parts
PVC	60℃



#### Attention!

The packing material must not be left around, and it must be disposed of according to the regulations in force. It is possible to lift the conveyor with a fork lift.



#### Danger!

To protect the operator's safety, and the integrity of the machine, assure the stable lifting of the conveyor. Once the conveyor belt is running, it is necessary to fix the machine by locking the castors. Moreover, suitable slings or fixtures must be attached, to keep it steady during transportation.

## 1.5 Exemption Clause

The following statements clarify the responsibilities and regulations born by any buyer or user who purchases products and accessories from Shini (including employees and agents).

Shini is exempted from liability for any costs, fees, claims and losses caused by reasons below:

- 1. Any careless or man-made installations, operation and maintenances upon machines without referring to the Manual prior to machine using.
- 2. Any incidents beyond human reasonable controls, which include man-made vicious or deliberate damages or abnormal power, and machine faults caused by irresistible natural disasters including fire, flood, storm and earthquake.
- Any operational actions that are not authorized by Shini upon machine, including adding or replacing accessories, dismantling, delivering or repairing.
- 4. Employing consumables or oil media that are not appointed by Shini.

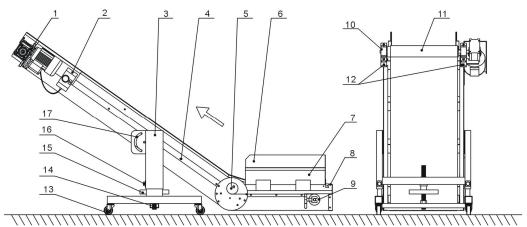


# 2. Structural Features and Working Principle

## 2.1 Function Description

CB series Up-feed Belt Conveyor use the gear motor to drive the conveyer Belt to transport the materials, It is used around the moulding machine to bring the waste materials or finished products from the bottom to the top. Adjustable gradient for your requirements, easily operation and stable performance.

## 2.1.1 Working Principle



3.Base

#### Parts name:

- Gear motor
   Control switch
- 4. PVC belt 5. Pinch roller 6. Mterial block
- 7. Feed-in board 8. Front board
- 9. Conveying rotor (motor less) 10. Bearing block
- 11. Conveying rotor 12. End cap 13. Brake rotor
- 14. Screw 15. Driving wheel
- 16. Butterfly hand shaft 17. Adjustable bolt

Picture 2-1: Working Principle

The conveyor belts of this series are made up of:

Equipped with a 4 swivel castors and locking facility (13) base (3), the conveyor belt can be easily moved to the working area. On the conveying belt, there are two material fenders (6, 7) separately installed on the sidewall of the belt and the collection area. The conveying rotor (11) located on the top end is directly connect to the gear motor (1).

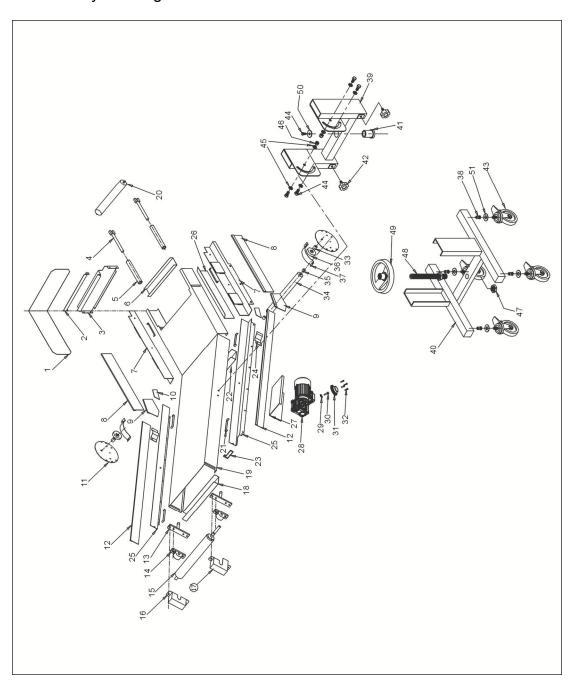


Matched with the motor, there is a control switch (2) which has the function to start and stop the belt. The screw mechanism (14) control by the hand wheel (15), control the height of the conveying belt. Two wheel gears with knob (16) perfectly lock the conveyor at the desired position. Moreover, the belt is connected to the support frame, so it is possible to change its inclination by adjusting the two bolts (17). Generally, the operator stands at the conveyor top end (discharging area). The controlling parts are located here as well. The sprue separator, for those machines so equipped, has an adjustable height, and it can also be orientated on the horizontal plane. It is also equipped with an adjustable clutch device, which stops the rotation of the separator, in case of interference with the carried objects and/or with the operator's limbs.



# 2.2 Assembly Drawing

## 2.2.1 Assembly Drawing



Note: Please refer to 2.2.2 material list about the parts code.

Picture 2-3: Assembly Drawing



## 2.2.2 Parts list

Chart 2-1: Parts List (CB-1)

No.	Name	Part No.	No.	Name	Part No.
1	Material block	-	27	Protection board for the motor	-
2	Front top board	-	28	Gear motor	YM50406000300
3	Front board	-	29	Big gasket A GB/T96 10(10.5x30x2.5)-longzine	YW66103200000
4	Fork head screw shaft	BH10000603840	30	External hexagonal screw M8x30-longzine 4.8	YW60083000100
5	Adjustable sleeve	BH10060400010	31	The cover for the gearmotor	BL56000032320
6	Front beam	-	32	Inner hexagon cylindrical screw GB/T70.1 M6x12-12.9-longzine	YW61061200000
7	Front side board	-	33	The sleeve for the press out wheel	BH10062500010
8	Front encircle board	-	34	Iron stick (Φ50x490)	YW08041300000
9	Middle encircle board	-	35	The small sleeve	BH10062600010
10	Middle side board	-	36	Combination of the press out wheel	BH10062700010
11	Middle protection board	-	37	Cover for the press out wheel	-
12	Back encircle board	-	38	Undraw cat M12	YW64101600000
13	Combination of the fixed board	BH10061300010	39	Lifter	BL56000210121
14	The base of the bearing	YW11020500200	40	Base	BL56000600940
15	Feeding rotor (Φ73x490)	YW08000400300	41	Adjustable glue sleeve	BH10060400010
16	Right below cover	-	42	Butterfly screw shaft (Φ50 4L M10x15)	YR40104500000
17	Left below cover	-	43	Castor	YW03010000000
18	Back beam	-	44	Hexagon screw bolt GB/T5783 M12x25-8.8-longzine	YW60122500100
19	Horizontal support shelf	-	45	Flat gasket A GB/T97.1 6(6.4x12x1.6)	YW66061200000
20	Feeding rotor	YW08041200000	46	Hexagon nut M10x16mm	YW64101600000
21	The inner line bar	-	47	Hexagon nut GB/T6170 M27-longzine	YW64002700000
22	Middle beam	-	48	Screw shaft (M27)	BH10061100010
23	The motor confine board	-	49	Driving wheel (M27)	YR40061300000
24	Side belt block	-	50	Main screw shim (12x48)	-
25	Back side board	-	51	Shim (18x48x3)	-
26	Feed-in board	-			

<sup>\*</sup> means possible broken parts. \*\* means easy broken part. and spare backup is suggested.



## Chart 2-2: Parts List (CB-2)

No.	Name	Part No.	No.	Name	Part No.
1	Material block	-	27	Protection board for the motor	-
2	Front top board	-	28	Gear motor	YM50406000300
3	Front board	-	29	Big gasket A GB/T96 10(10.5x30x2.5)-longzine	YW66103200000
4	Fork head screw shaft	BH10000603840	30	External hexagonal screw M8x30 -longzine 4.8	YW60083000100
5	Adjustable sleeve	BH10060400010	31	The cover for the gearmotor	BL56000032320
6	Front beam	-	32	Inner hexagon cylindrical screw GB/T70.1 M6x12-12.9-longzine	YW61061200000
7	Front side board	-	33	The sleeve for the press out wheel	BH10062500010
8	Front encircle board	-	34	Iron stick (Φ50x490)	YW08041300000
9	Middle encircle board	-	35	The small sleeve	BH10062600010
10	Middle side board	-	36	Combination of the press out wheel	BH10062700010
11	Middle protection board	-	37	Cover for the press out wheel	-
12	Back encircle board	-	38	Undraw cat M12	YW64101600000
13	Combination of the fixed board	BH10061300010	39	Lifter	BL56000210121
14	The base of the bearing	YW11020500200	40	Base	BL56000600940
15	Feeding rotor (Φ73x490)	YW08000500600	41	Adjustable glue sleeve	BH10060400010
16	Right below cover	-	42	Butterfly screw shaft (Φ50 4L M10x15)	YR40104500000
17	Left below cover	-	43	Castor	YW03010000000
18	Back beam	-	44	Hexagon screw bolt GB/T5783 M12x25-8.8-longzine	YW60122500100
19	Horizontal support shelf	-	45	Flat gasket A GB/T97.1 6 (6.4x12x1.6)	YW66061200000
20	Feeding rotor	YW08041200000	46	Hexagon nut M10x16mm	YW64101600000
21	The inner line bar	-	47	Hexagon nut GB/T6170 M27-longzine	YW64002700000
22	Middle beam	-	48	Screw shaft (M27)	BH10061100010
23	The motor confine board	-	49	Driving wheel (M27)	YR40061300000
24	Side belt block	-	50	Main screw shim (12x48)	-
25	Back side board	-	51	Shim (18x48x3)	-
26	Feed-in board	-			

<sup>\*</sup> means possible broken parts.

<sup>\*\*</sup> means easy broken part. and spare backup is suggested.



## Chart 2-3: Parts List (CB-3)

No.	Name	Part No.	No.	Name	Part No.
1	Material block	-	27	Protection board for the motor	-
2	Front top board	-	28	Gear motor	YM50406000300
3	Front board	-	29	Big gasket A GB/T96 10(10.5x30x2.5)-longzine	YW66103200000
4	Fork head screw shaft	BH10000603840	30	External hexagonal screw M8x30 -longzine 4.8	YW60083000100
5	Adjustable sleeve	BH10060400010	31	The cover for the gearmotor	BL56000032320
6	Front beam	-	32	Inner hexagon cylindrical screw GB/T70.1 M6x12-12.9-longzine	YW61061200000
7	Front side board	-	33	The sleeve for the press out wheel	BH10062500010
8	Front encircle board	-	34	Iron stick (Φ50x490)	YW08041300000
9	Middle encircle board	-	35	The small sleeve	BH10062600010
10	Middle side board	-	36	Combination of the press out wheel	BH10062700010
11	Middle protection board	-	37	Cover for the press out wheel	-
12	Back encircle board	-	38	Undraw cat M12	YW64101600000
13	Combination of the fixed board	BH10061300010	39	Lifter	BL56000210121
14	The base of the bearing	YW11020500200	40	Base	BL56000600940
15	Feeding rotor (Φ73x490)	YW08000600300	41	Adjustable glue sleeve	BH10060400010
16	Right below cover	-	42	Butterfly screw shaft (Φ50 4L M10x15)	YR40104500000
17	Left below cover	-	43	Castor	YW03010000000
18	Back beam	-	44	Hexagon screw bolt GB/T5783 M12x25-8.8-longzine	YW60122500100
19	Horizontal support shelf	-	45	Flat gasket A GB/T97.1 6(6.4x12x1.6)	YW66061200000
20	Feeding rotor	YW08041200000	46	Hexagon nut M10x16mm	YW64101600000
21	The inner line bar	-	47	Hexagon nut GB/T6170 M27-longzine	YW64002700000
22	Middle beam	-	48	Screw shaft (M27)	BH10061100010
23	The motor confine board	-	49	Driving wheel (M27)	YR40061300000
24	Side belt block	-	50	Main screw shim (12x48)	-
25	Back side board	-	51	Shim (18x48x3)	-
26	Feed-in board	-			

<sup>\*</sup> means possible broken parts.

<sup>\*\*</sup> means easy broken part. and spare backup is suggested.



## Chart 2-4: Parts List (CB-4)

No.	Name	Part No.	No.	Name	Part No.
1	Material block	-	27	Protection board for the motor	-
2	Front top board	-	28	Gear motor	YM50406000300
	- · · ·			Big gasket A GB/T96 10	\/\/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
3	Front board	-	29	(10.5x30x2.5) -longzine	YW66103200000
4	Fork head screw shaft	BH10000603840	30	External hexagonal screw	YW60083000100
	TOR Head Sciew Shart	B1110000003040	30	M8x30-longzine 4.8	1 000003000100
5	Adjustable sleeve	BH10060400010	31	The cover for the gearmotor	BL56000032320
6	Front beam	_	32	Inner hexagon cylindrical screw	YW61061200000
	Tronc beam		02	GB/T70.1 M6x12-12.9-longzine	17701001200000
7	Front side board	-	33	The sleeve for the press out wheel	BH10062700010
8	Front encircle board	-	34	Iron stick (Φ50x490)	YW08041300000
9	Middle encircle board	-	35	The small sleeve	BH10062600010
10	Middle side board	-	36	Combination of the press out wheel	BH10062700010
11	Middle protection board	-	37	Cover for the press out wheel	-
12	Back encircle board	-	38	Undraw cat M12	YW64101600000
13	Combination of the fixed board	BH10061300010	39	Lifter	-
14	The base of the bearing	YW11020500200	40	Base	-
15	Feeding rotor (Φ73x490)	YW08000400300	41	Adjustable glue sleeve	BH10060400010
10	Dight helew saver		42	Butterfly screw shaft	VD40404500000
16	Right below cover	-	42	(Φ50 4L M10x15)	YR40104500000
17	Left below cover	-	43	Castor	YW03010000000
18	Back beam		44	Hexagon screw bolt	YW60122500100
10	Dack Dealli	-	44	GB/T5783 M12x25-8.8-longzine	1 000 122500 100
19	Horizontal cupport shalf		45	Flat gasket A	YW66061200000
19	Horizontal support shelf	-	40	GB/T97.1 6 (6.4x12x1.6)	1 00000 1200000
20	Feeding rotor	YW08041200000	46	Hexagon nut M10x16mm	YW64101600000
21	The inner line bar		47	Hexagon nut	YW64002700000
21	The line line bal	-	47	GB/T6170 M27-longzine	1 00040027 00000
22	Middle beam	-	48	Screw shaft (M27)	BH10061100010
23	The motor confine board	-	49	Driving wheel (M27)	YW09002700000
24	Side belt block	-	50	Main screw shim (12x48)	-
25	Back side board	-	51	Shim (18x48x3)	-
26	Feed-in board	-			

<sup>\*</sup> means possible broken parts.

<sup>\*\*</sup> means easy broken part. and spare backup is suggested.



## Chart 2-5: Parts List (CB-5)

No.	Name	Part No.	No.	Name	Part No.
1	Material block	-	27	Protection board for the motor	-
2	Front top board	-	28	Gear motor	YM50406000300
3	Front board		29	Big gasket A GB/T96 10	VANCE 4.0220.0000
3	Front board	-	29	(10.5x30x2.5)-longzine	YW66103200000
4	Fork head screw shaft	BH10000603840	30	External hexagonal screw	YW60083000100
	T OIK Head Solew Shart	B111000000040	00	M8x30-longzine 4.8	144000000000000
5	Adjustable sleeve	BH10060400010	31	The cover for the gearmotor	BL56000032320
6	Front beam	-	32	nner hexagon cylindrical screw	YW61061200000
				GB/T70.1 M6x12-12.9-longzine	
7	Front side board	-	33	The sleeve for the press out wheel	BH10062700010
8	Front encircle board	-	34	Iron stick (Φ50x490)	YW08051300000
9	Middle encircle board	-	35	The small sleeve	BH10062600010
10	Middle side board	-	36	Combination of the press out wheel	BH10062700010
11	Middle protection board	-	37	Cover for the press out wheel	-
12	Back encircle board	-	38	Undraw cat M12	YW64101600000
13	Combination of the fixed board	BH10061300010	39	Lifter	-
14	The base of the bearing	YW11020500200	40	Base	-
15	Feeding rotor (Φ73x490)	YW08000500600	41	Adjustable glue sleeve	BH10060400010
16	Dight holow cover		42	Butterfly screw shaft	VD40404500000
16	Right below cover	-	42	(Ф50 4L M10x15)	YR40104500000
17	Left below cover	-	43	Castor	YW03010000000
18	Back beam		44	Hexagon screw bolt GB/T5783	YW60122500100
10	Dack Deam	-	44	M12x25-8.8-longzine	1 0000 122500 100
19	Harizantal support shalf		45	Flat gasket A GB/T97.1 6	YW66061200000
19	Horizontal support shelf	-	40	(6.4x12x1.6)	1 00000 1200000
20	Feeding rotor	YW08051200000	46	Hexagon nut M10x16mm	YW64101600000
21	The inner line bar		47	Hexagon nut GB/T6170	YW64002700000
21	The inner line bar	-	47	M27-longzine	1004002700000
22	Middle beam	-	48	Screw shaft (M27)	BH10061100010
23	The motor confine board	-	49	Driving wheel (M27)	YW09002700000
24	Side belt block	-	50	Main screw shim (12x48)	-
25	Back side board	-	51	Shim (18x48x3)	-
26	Feed-in board	-			

<sup>\*</sup> means possible broken parts.

<sup>\*\*</sup> means easy broken part. and spare backup is suggested.



## Chart 2-6: Parts List (CB-6)

No.	Name	Part No.	No.	Name	Part No.
1	Material block	-	27	Protection board for the motor	-
2	Front top board	-	28	Gear motor	YM50406000300
3	Front board		29	Big gasket A GB/T96	MM66402200000
3	Front board	-	29	10(10.5x30x2.5)-longzine	YW66103200000
4	Fork head screw shaft	BH10000603840	30	External hexagonal screw	YW60083000100
	T OIR Head Sciew shall	B1110000000040	30	M8x30 -longzine 4.8	1 *************************************
5	Adjustable sleeve	BH10060400010	31	The cover for the gearmotor	BL56000032320
6	Front beam	_	32	Inner hexagon cylindrical screw	YW61061200000
	Trone soun		02	GB/T70.1 M6x12-12.9-longzine	1110100120000
7	Front side board	-	33	The sleeve for the press out wheel	BH10062700010
8	Front encircle board	-	34	Iron stick (Φ50x490)	YW08063700000
9	Middle encircle board	-	35	The small sleeve	BH10062600010
10	Middle side board	-	36	Combination of the press out wheel	BH10062700010
11	Middle protection board	-	37	Cover for the press out wheel	-
12	Back encircle board	-	38	Undraw cat M12	YW64101600000
13	Combination of the fixed board	BH10061300010	39	Lifter	-
14	The base of the bearing	YW11020500200	40	Base	-
15	Feeding rotor (Φ73x490)	YW08000600300	41	Adjustable glue sleeve	BH10060400010
16	Dight holow gover		42	Butterfly screw shaft (Φ50 4L	VD40404500000
10	Right below cover	-	42	M10x15)	YR40104500000
17	Left below cover	-	43	Castor	YW03010000000
18	Back beam		44	Hexagon screw bolt	YW60122500100
10	Dack Deam	-	44	GB/T5783 M12x25-8.8-longzine	1 000 122500 100
19	Horizontal support shelf		45	Flat gasket A	YW66061200000
19	rionzontai support siieli	_	40	GB/T97.1 6 (6.4x12x1.6)	1 00000 1200000
20	Feeding rotor	YW08063600000	46	Hexagon nut M10x16mm	YW64101600000
21	The inner line bar		47	Hexagon nut	YW64002700000
21	The liller lille bal	-	47	GB/T6170 M27-longzine	1 00040027 00000
22	Middle beam	-	48	Screw shaft (M27)	BH10061100010
23	The motor confine board	-	49	Driving wheel (M27)	YW09002700000
24	Side belt block	-	50	Main screw shim (12x48)	-
25	Back side board	-	51	Shim (18x48x3)	-
26	Feed-in board	-			

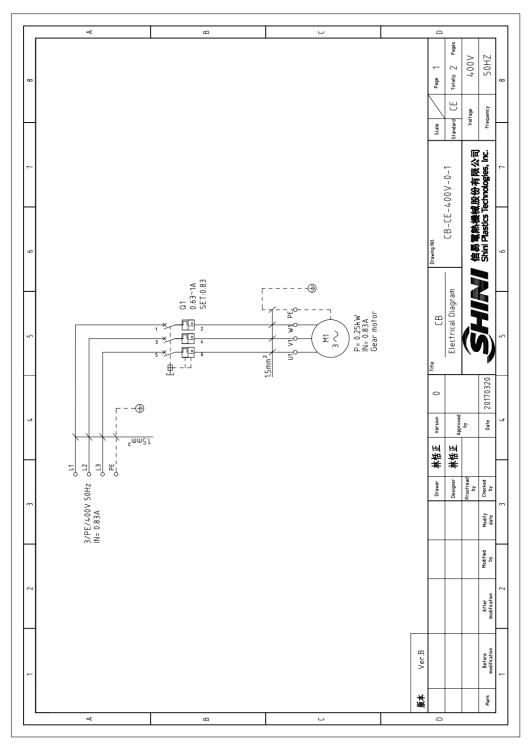
<sup>\*</sup> means possible broken parts.

<sup>\*\*</sup> means easy broken part. and spare backup is suggested.



# 2.3 Electrical Circuit Diagram

## 2.3.1 Electrical Diagram(400V)



Picture 2-2: Electrical Diagram(400V)



## 2.3.2 Electrical Components List(400V)

Chart 2-7: Electrical Components List (400V)

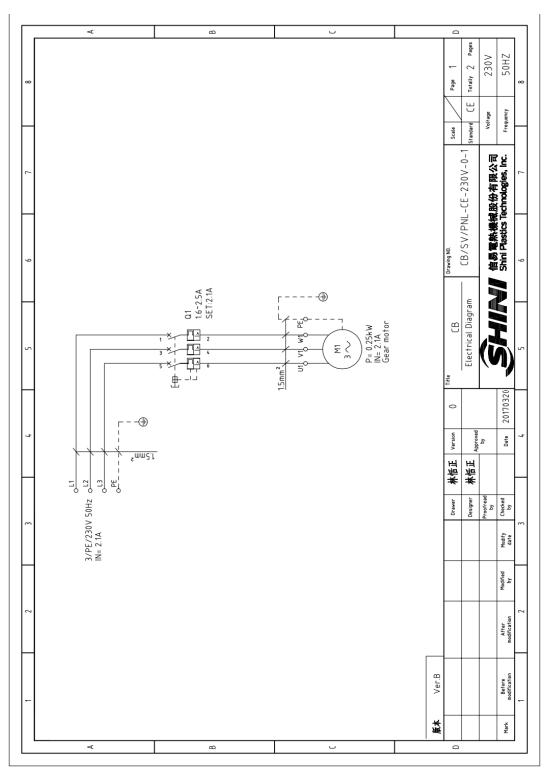
NO.	Symbol	Name	Specification	Part NO.
1	Q1	Thermomagnet circuit breaker	0.63~1.0A	YE10022500600
2		Waterproof box	-	YR40012000000
3	M1	Motor*	230V 250W 50Hz	-

<sup>\*</sup> means possible broken parts.

<sup>\*\*</sup> means easy broken part. and spare backup is suggested.



## 2.3.3 Electrical Diagram(230V)



Picture 2-3: Electrical Diagram(230V)



## 2.3.4 Electrical Components List(230V)

## Chart 2-8: Electrical Components List (230V)

NO.	Symbol	Name	Specification	Part NO.
1	Q1	Thermomagnet circuit breaker	1.6~2.5A	YE10162500100
2		Waterproof box	-	YR40012000000
3	M1	Motor*	230V 250W 50Hz	-

<sup>\*</sup> means possible broken parts.

<sup>\*\*</sup> means easy broken part. and spare backup is suggested.



# 3. Installation Testing

Read this chapter carefully before installation, Must observe the installation steps as follows!



The connection of the power supply should be done by qualified electricians only!

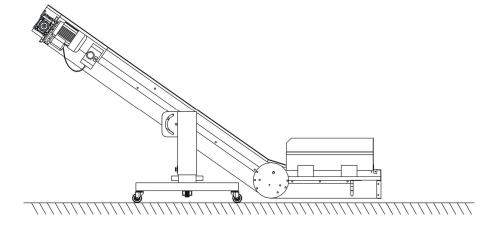
#### 3.1 Attention

- 1) Verify that the power supply corresponds to the specifications of the plate near the controls of the conveyor.
- 2) Connect the power cable and the PE wire accroding to the local regulations.
- 3) Use independent power cable and switch, Make sure that the diameter of the cable is not smaller than the cable used in the control box.
- 4) The connection end of the power cable should be safely and tightly.
- 5) This series use the power with single phase and 3 wires, (L) connect to the live wire of the power, and the PE should be connected.
- 6) Power supply requirement:

Main power voltage: ±10%

Main power frequency: ±2%

#### 3.2 Horizontal Installation



Picture 3-1: Horizontal Installation



Conveyor don't require any particular preliminary operation before starting-up. The conveyor must be plugged into an outlet of suitable characteristics, by using the cable and the plug supplied by the manufacturer.

With reference to the layout of the cables, make sure that they are protected against damage and that they don't hamper the operators.

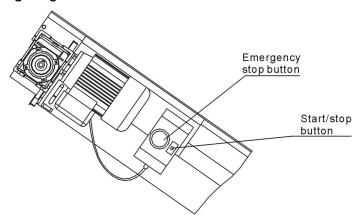


#### Attention!

The conveyor often used around the moulding machine to bring the waste materials or finished products from the bottom to the top, so that the lower flat surface (collection area) of the conveyor must be inserted into the special space, which is located under the mold of the moulding machine.

#### 3.3 Power Connections

Up-feed Belt Conveyor and motor protector should be connected strictly comply with the wiring diagram.



Picture 3-2: Power Connections



#### Attention!

After the power connected, check the direction of the motor rotation, if the motor reverses, please turn off the power. Asking a professional electrician to change the terminal of the switch and the connection position of any two lines.





Picture 3-3: Machine Installation Drawing



Attention!

Machine should be kept 1 meter away from Inflammable.



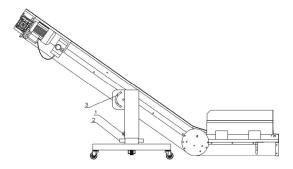
# 4. Operation

## 4.1 Adjustment of the Height of the Conveyor

Loosen the locking butterfly knob(1), rotate the manual-wheel(2), to adjust the height, and then tighten the butterfly knob again(1).

## 4.2 Adjusting Adjustor Panel

The black key (3) on the adjustor panel can control the power on/off of gear motor, while the rotating key (4) will be used for adjust the speed of gear motor.



Picture 4-1: Conveyor Belt Adjusting Drawing

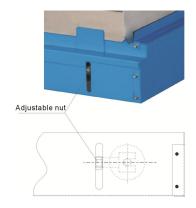


#### Attention!

If the screw does not locked after adjustment, the conveyer belt will lost it's balance!

## 4.3 Adjusting the Central Space of the PU Belt

Rotate this nut to adjust the central space of the PU Belt



Picture 4-2: PVC Adjusting Drawing





## Danger!

To check the proper centering it is necessary to make the machine run. However, the adjustment must be done when the machine is stopped, and then the belt must be made to run only for the time necessary to verify its proper centering.



#### Attention!

On a monthly basis verify that the external temperature of the motor and gearbox is not too high (it should be between 60 and  $20^{\circ}$ ). In case it is different, contact the technicians at SHINI directly.

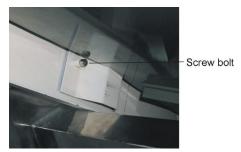


#### Attention!

- 1) The maximum weight of the pieces to be carried on the conveyor belt must not be over 56kg in total (Conveying capacity is less than 56kg as the set value of the regulator is smaller than 4.5m/min).
- 2) Not suitable to transport loose material.
- 3) The maximum resistant temperature of PU belt is 60°C.

## 4.4 Regulation of Sidewall

By rotating this screw bolt, position of the sidewall can be regulated to guide the direction of the belt.



Picture 4-: Regulation of Sidewall



The operator, or the maintenance technician, must wear suitable work clothes, without free parts. They must not wear chains, bracelets, or other objects which may be caught by mechanical parts in movement. In case of long hair, special hairnets must be used, to aviod the risk of being caught.



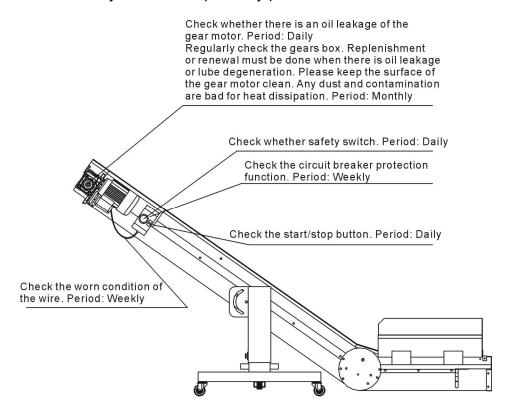
# 5. Trouble Shooting

Failures	Solutions			
Connect the power, rotate the motor protector knob , the motor doesn't run.	1.Check the circuit according to wiring diagram, the possible reasons can be as follows:  a: The power is failure.  b: The circuit is disconnected.  c: The motor protector is damaged.  d: The motor is failure.			
The circuit breaker often trips off.	Check the circuit according to wiring diagram, the possible reasons can be as follows:  a: The setting value of the breaker was too low, adjust the value to 1.1 times of the current one.  b: Short circuit may exist.  c: The motor protector is damaged.  d: The motor is failure.			



#### 6. Service and Maintenance

Up-feed belt conveyor do not require any particular maintenance.



## 6.1 Repair

To avoid any body injury and damage of the machine, all of the repair work should be done by professional person only.

It is the duty of the operator to keep the machine clean from foreign matter, such as deposits, oil, or other materials. So it is necessary to clean the machine at the end of every working shift. This must be performed when the machine is stopped, in stable starting of the machine.

#### 6.2 Maintenance

#### 6.2.1 Maintenance of the Gear Motor

Regularly check the gears box. Replenishment or renewal must be done when there is oil leakage or lube degeneration. Please keep the surface of the gear motor clean. Any dust and contamination are bad for heat dissipation.





Picture 6-1: Gear Motor



#### Danger!

Operating temperature range of gear motor is: 20 °C-60 °C.

#### 6.2.2 Clearance of the Machine

Please keep the machine clean from foreign matter, such as deposits, oil, or other materials. Do the cleanly work everyday.



It is forbidden to use flammable liquids during the cleaning operation. Periodically check the status of the PU belt, and replace it, if necessary. Once the machine has been cleaned, the operator must check for worn out or damaged parts (in which case, he must replace it immediately), or for parts which are not firmly fixed (in which case, he should fix them, if this is possible).



The machine protection and safety devices must not be removed, unless a specific repair and/or maintenance action is required. These protections must be put back as soon as the reason for their removal has disappeared, in any case, they must be installed before starting the machine.



If using compressed air, the operator must wear safety glasses, and make sure that nobody is near the machine, because they may be hit by materials and dust.



#### 6.2.3 Lubricate the Bearing

On a monthly basis lubricate the two supporters near the unloading area of the conveyor, below the protection cover, as indicated by the drawing.



Picture 6-2: Bearing Lubricate Drawing



Stop the machine and unplug the power supply before doing the repair or maintenance work.



# 6.3 Maintenance Schedule

## 6.3.1 About the Machine

Model	SN		Manufactu	re date				
Voltage	V Fı	equency	Hz	Power _	I	kW		
6.3.2 Check Afte	r Installation							
Check if the body of the machine installated horizontal  Check for eventual leaks of lubricant from the reduction gear  Check the status about the PU belt								
Electrical inst	Electrical installation							
	V		ol box is cor	rectly				
6.3.3 Daily Checl	king							
Check the switches of the machine.  Check if the reduction gears is oil leaking leaking.  Check the function of the safety switch.								
6.3.4 Weekly Cho	ecking							
	e electrical wires rotection functior		er.					