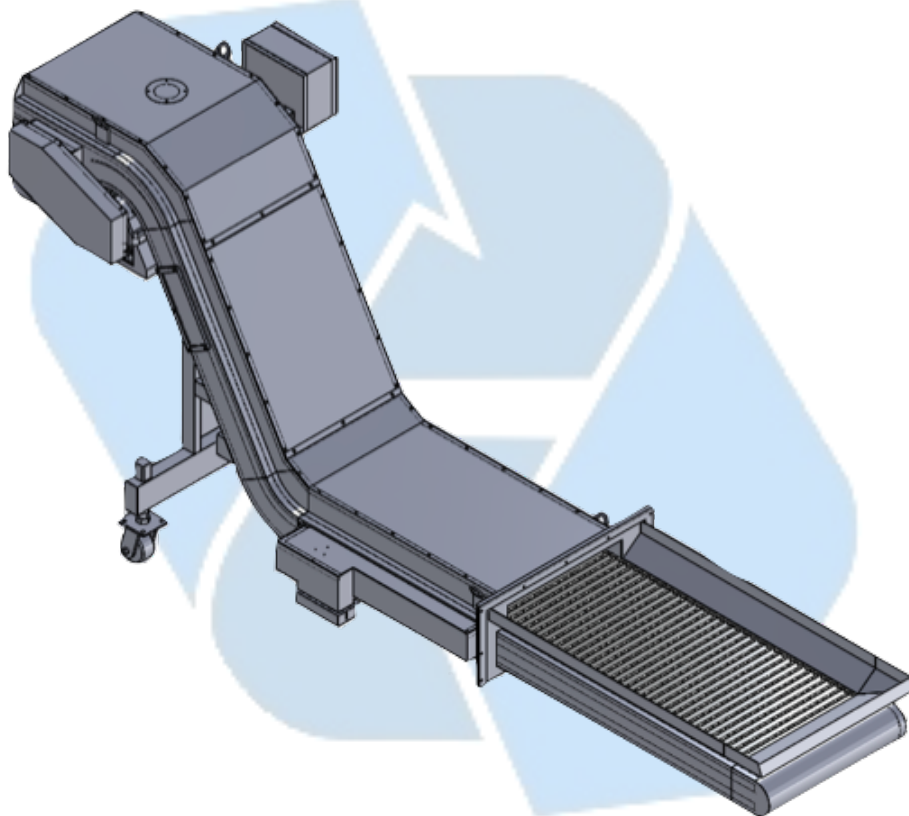


# Operator's Manual

## **Hinged Steel Belt Chip Conveyor (RSCW50) for XT - 2305328 series**



RING SUN



**RING SUN**  
MACHINERY CO., LTD.

Address : Rotkäppchenstr. 60, 12555 Berlin, Germany

E-mail : [rin.sun@msa.hinet.net](mailto:rin.sun@msa.hinet.net)

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# CE CERTIFICATE

## Safenet Certification Services Ltd.

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e-mail: office@safenetcs.ie

Website: www.safenetcs.ie

### EC Examination Attestation of Conformity

This is to certify that

#### Ring Sun Machinery Co., Ltd.

No. 207-1, Dasin Village, Siluo Township, Yunlin County 648, Taiwan  
(R.O.C.)

Has had a range of Metal Chip Conveyers examined to the Machinery Directive 2006/42/EC, as amended and the Safety Objectives of the Low Voltage Directive 2014/35/EU.

With reference to model **RSCW50**

Manufactured by:

#### Ring Sun Machinery Co., Ltd.

No. 214-20, Dasin Village, Siluo Township, Yunlin County 648, Taiwan  
(R.O.C.)

1. The technical file contains all the relevant information.
2. Having verified that the appropriate tests have been conducted.
  - 2.1. The standards and transposed standards have been applied correctly.
  - 2.2. The example representing series production of the item, complies with the essential health and safety requirements of the Directive 2006/42/EC, as amended.
  - 2.3. The technical file contains all the information required to include the models listed in the attached annex to this attestation.
  - 2.4. Compliance with EN 60204-1:2018 gives compliance with the Low Voltage Directive 2014/35/EU.

Number: 4431250624

Date: 26/07/2024 Expiry Date: 26/07/2027

Signed for Safenet Certification Services Ltd.



Peter McNicol  
Technical Manager

This Document remains the property of Safenet Certification Services Ltd. and will be returned to them if so requested. The client is required to request a review to ensure continued compliance of the machinery on a 3 yearly basis to check for changes in the state of the art and validity of the certificate.



# UKCA CERTIFICATE

## Safenet Limited

Denford Garage, Denford, Kettering, Northants, NN14 4EQ, U.K.

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Website: [www.safenet.co.uk](http://www.safenet.co.uk)

## UK Examination Certificate

This is to certify that

### Ring Sun Machinery Co., Ltd.

No. 207-1, Dasin Village, Siluo Township, Yunlin County 648, Taiwan (R.O.C.)

Has had a range of Metal Chip Conveyers examined to the Supply of Machinery (Safety) Regulations 2008 SI 2008/1597, as amended by SI 2011/1043, SI 2011/2157 and SI 2019/696.

With reference to model **RSCW50**

Manufactured by:

### Ring Sun Machinery Co., Ltd.

No. 214-20, Dasin Village, Siluo Township, Yunlin County 648, Taiwan (R.O.C.)

1. The technical file contains all the relevant information.
2. Having verified that the appropriate tests have been conducted.
  - 2.1. The standards and designated standards have been applied correctly.
  - 2.2. The example representing series production of the item, complies with the essential health and safety requirements of the Supply of Machinery (Safety) Regulations 2008 SI 2008/1597, as amended by SI 2011/1043, SI 2011/2157 and SI 2019/696.
  - 2.3. The technical file contains all the information required to include the models listed in the attached annex to this certificate.
  - 2.4. Compliance with EN 60204-1:2018 gives compliance with the Electrical Equipment (Safety Regulations) 2016, as amended.

Certificate Number: 9176250624

Date: 26/07/2024

Expiry Date: 26/07/2027

Signed for Safenet Limited



Peter McNicol  
Technical Manager

This Document remains the property of Safenet Limited and will be returned to them if so requested.  
The client is required to request a review to ensure continued compliance of the machinery on a 3 yearly basis to check for changes in the state of the art and validity of the certificate.



# DECLARATION OF INCORPORATION OF PARTLY COMPLETED MACHINERY



**Manufacturer:**

**RING SUN MACHINERY CO., LTD**

**Address:**

No.214-20, Dasin Village, Siluo Township, Yunlin County 648, Taiwan (R.O.C.)

TEL: +886-5-5868-598 / +886-5-5878-345

FAX: +886-5-5878-329

**Authorized to compile the technical file:**

Safenet Certification Services Ltd.,

Ducart Suite, Castletroy Park Commercial Campus, Plassey Park Road, Castletroy, Limerick,  
V94 Y6FD, Republic of Ireland

Telephone: +353 (0)61 50 2046

**Declares that the machinery described:**

Name: Metal Chip Conveyers

Model: RSCW50

Series number:

**Conforms to the following directives:**

Machinery Directive 2006/42/EC

Low voltage Directive 2014/35/EU

**Refers to the following standards:**

**EN ISO 12100: 2010**

**EN 60204-1: 2018**

**EN ISO 13849-1: 2015**

**EN ISO 14120: 2015**

**EN ISO 13850: 2015**

**EN ISO 13857: 2019**

**EN ISO 16090-1: 2018**

The Metal chip conveyor must be installed next to machine and used for chip discharge. It will not be put into service until installed with final machinery which has been conformed to machinery directive.

clauses 1.1.2, 1.1.3, 1.1.5, 1.1.6, 1.1.7, 1.3.1, 1.3.2, 1.3.4, 1.2.1, 1.2.2, 1.2.3, 1.2.4, 1.2.6, 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.3.7, 1.3.8, 1.3.9, 1.4.1, 1.5.1, 1.5.2, 1.5.3, 1.5.4, 1.5.8, 1.5.9, 1.5.11, 1.5.14, 1.5.15, 1.6.1, 1.6.2, 1.6.3, 1.6.4, 1.6.5, 1.7.1, 1.7.2, 1.7.3, 1.7.4. of essential requirements of the machinery directive are applied and fulfilled and that the relevant technical documentation is compiled in accordance with part B of Annex VII.

**Signed by**

  
Hanks Chung

**(Signature) on**

**(Date)**

05/Jul./2024

**Signed at**

Taiwan

**(Place)**

**Position**

General Manager



# CONTENTS

<u>PREFACE-----</u>	<u>P5</u>
<u>CHAPTER 1    Definition -----</u>	<u>P6-9</u>
<u>CHAPTER 2    Cautions for Safety -----</u>	<u>P10-17</u>
<u>CHAPTER 3    Operations-----</u>	<u>P18-23</u>
<u>CHAPTER 4    Maintain and Inspection-----</u>	<u>P24</u>
<u>CHAPTER 5    Maintenance of Reducer-----</u>	<u>P25</u>
<u>CHAPTER 6    Introduction of Mechanism-----</u>	<u>P26-33</u>
<u>CHAPTER 7    Regulation of Warranty-----</u>	<u>P34</u>
<u>※TORNOS MECHANICAL SPARE PARTS-----</u>	<u>P35</u>

# PREFACE

For safe operation, read this instruction manual carefully before operation. There are three levels of cautions for this manual: DANGER, WARNING, and CAUTION. Be sure to follow the rules stipulated below.

**DANGER** : Incorrect operation might result in death or serious injury.

**WARNING** : Incorrect operation might possibly result in death or serious injury.

**CAUTION** : Incorrect operation might result in a serious injury and object damage.

The following mark is adopted throughout this manual:

\* Cautions for safety (for example)



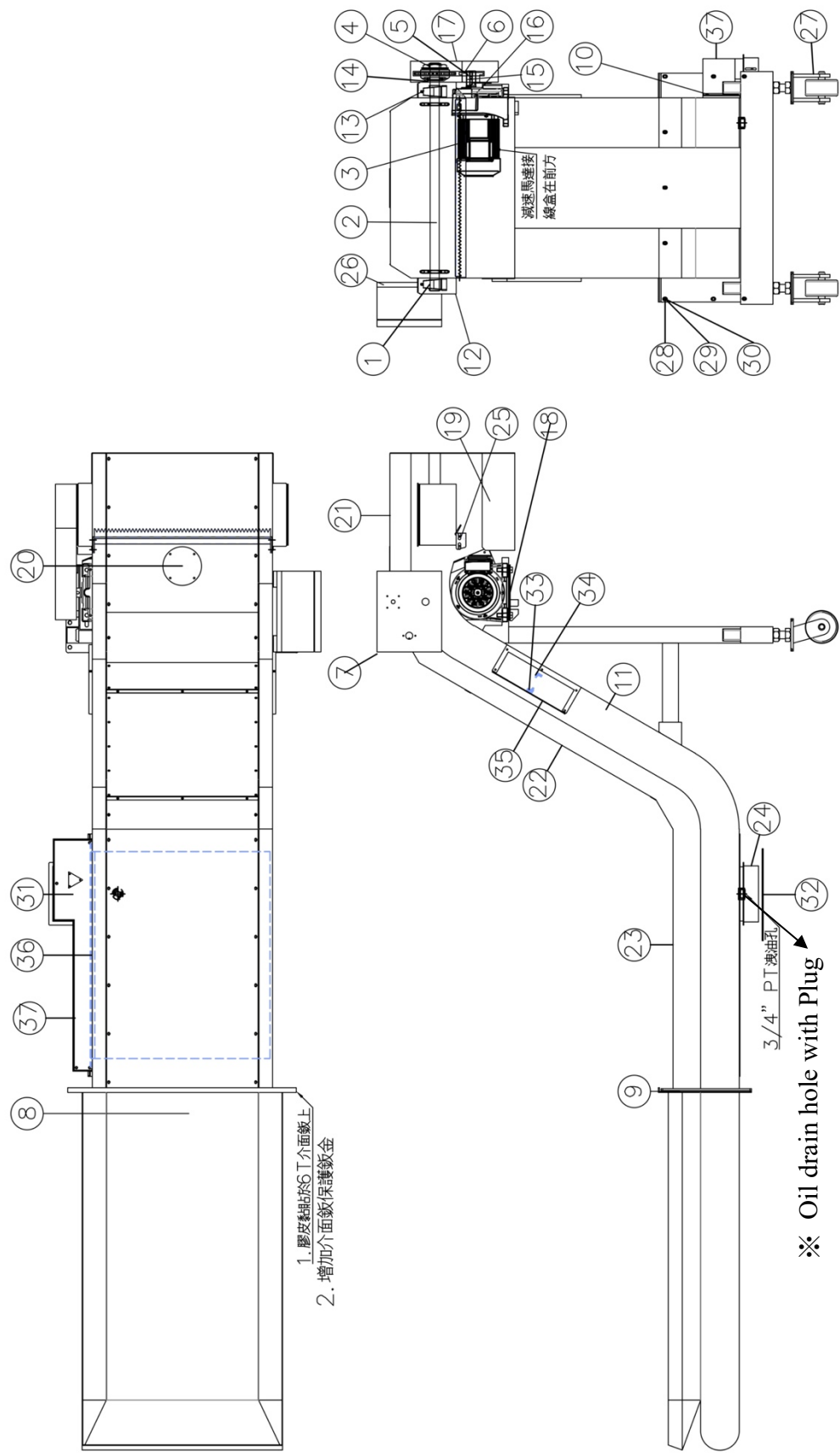
## WARNING

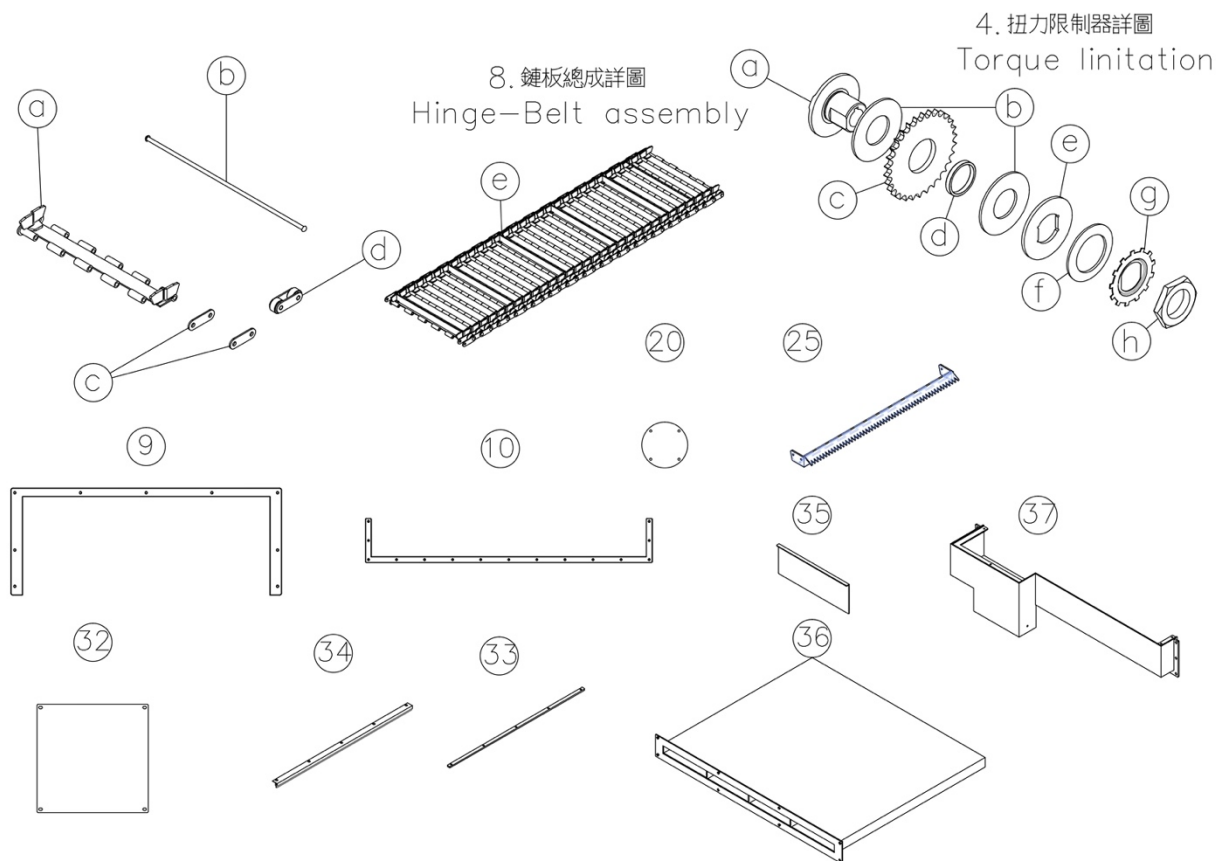
Body parts might be rolled in resulting in physical injury, be sure to keep a safe distance.

# CHAPTER 1

## Definition

1. Product Name:  
Hinged Steel Belt Chip Conveyor for **XT Series - 2305328**





編號 NO.	件號 Item no.	件名 Description	規格/說明 Specification	圖號 Drawing no
1.	20N0201002	傳動軸承 Bearing	P205	
2	20N010508	傳動軸 Drive axle	ø25*705L	
3.	20N181020341	小型齒輪減速機 Small gear reducer	1/4HP 1/165 400V	
4.	20N2000011	扭力限制器 Torque Liniter	TL350-1	
4-a		體座 Hub	ø25-8*4	
4-b		磨擦片 Friction	t=3.5 ø89.3*ø42.5	
4-c		齒輪 Gear	t=7 P12.7*30T	
4-d		軸襯 Bush	t=6.5 ø49*ø42	
4-e		壓力板 Plate	t=4.5 ø89	
4-f		盤式彈簧 Spring	t=3 ø81*ø54	
4-g		鎖緊梅花片 Lock Washer	t=1.2 ø83	
4-h		螺帽 Lock nut	M42	
5.	20N0701021	馬達傳動齒輪 Gear for reducer	RS40 17T	
6	20N0301001	傳動鏈條 Chain	RS40*64	
7	20N1902001	電控箱(亞邦) Control box	400V(CE)	
9		橡膠墊片 pocking	Viton	
10		排油槽橡膠墊片 pocking	Viton	

編號 NO.	件號 Item no.	件名 Description	規格/說明 Specification	圖號 Drawing no
8	20N080108S	鏈板總成 Hinge-Belt	W500 C2052	
8-a	20N08010811	鏈板主體 Linking Plate	W500	
8-b	20N08010821	鏈軸 Chain shaft	W500(D5*)	
8-c	20N08010834	內/外節片 Chain(out/inter join)	C2052 P31.75	
8-d	20N08010842	轉子 Roller link	C2052	
8-e	20N08010851	履帶擋板 Block plate	For Type	
11	20A1511320301	排屑機外殼 Conveyor outer case	For Type	
12	20A15112661901	左軸承蓋 Bearing cover-L	For Type	
13	20A15112661902	右軸承蓋 Bearing cover-R	For Type	
14	20A15112661903	傳動護蓋固定板(大) cover fixed plate-L	For Type	
15	20A15112661904	傳動護蓋固定板(小) cover fixed plate-S	For Type	
16	20A15112661905	固定板加強支架 Fixed plate bracket	For Type	
17	20A15112661906	傳動護蓋 Cover of drive gear	For Type	
18	20A15112661907	馬達固定板 Fixed plate of reducer	For Type	
19	20A1511320308	屑口護蓋 Cover for chip exit	For Type	
20	20A15112661909	圓孔蓋板 circle cover	For Type	385902
21	20A1511320310	上蓋板一 cover one	For Type	
22	20A1511320311	上蓋板二 cover two	For Type	
23	20A1511320312	上蓋板三 cover three	For Type	
24	20A1511320313S	導油槽延伸板金 Extend case	For Type	
25	20A1511320314	鋸齒狀擋屑板 Jagged plate	For Type	
26	20A15112661915	電控箱固定板 Box adapter plate	For Type	
27	20N230302032	4" PU活動輪 4" PU Wheel	M22*150L Screws	
28	20N190303190106	鎖固螺絲 Screw	M6*16L Hex Socket Head Cap Screws	
29	20N1903020006	彈簧墊片 Spring washer	M6	
30	20N1903010006	螺絲墊片 Screw washer	M6	
31	20A1511320316	導油槽蓋板 Outlet cover	For Type	
32	20A1511320317	回水口蓋板 Outlet cover	For Type	
33	20A1511320318	毛刷固定板 Brush fixed plate	For Type	
34	20A1511320319	毛刷 Brush	For Type	
35	20A1511320320	維修孔遮蓋 Repair cover	For Type	
36	20A1511320321	濾網盒 Filter	For Type	
37	20A1511320322	導油槽 slope outlet	For Type	



## 2. Features

Our company manufactures several types of conveyors: Precision Scraper type Conveyor, Combination Screening Conveyor, Steel Belt type Conveyor, Surface Conveyor, Magnetic Scraper Conveyor and Hinge and Drum Conveyor. Particularly, we design dividing conveyors to satisfy our customers in the market.

However, this conveyer is designed for the transportation of metal chips during drilling, cutting, milling operations, etc. This equipment is utilized to freight metal chips. It is not suitable for the transportation of bigger objects such as screws, nuts, and so on which have the tendency to destroy the chip conveyor during transportation immediately.

For safety reasons, it is very important to operate the chip conveyor appropriately. Please make sure that the operator fully comprehends all the details of the manipulation procedures before using the conveyor. This user's manual should be stored in a place easily accessible at any given time. Under correct and normal operations, this machine can keep working without any problems for 10 years and longer. Please do not hesitate to contact us if you have any questions.

There is an oil drain hole located at the bottom of the outer case(item NO. 11) of the chip conveyor near the slope outlet(item NO. 37). Since the filter box(item NO. 36) is designed to allow the cutting oil to overflow through the filter box for achieving the filtration effect, a considerable amount of cutting oil will be deposited at the bottom of the machine body. This oil drain hole can provide convenient access to leakage the cutting oil during maintenance or annual cleaning. The user tip: use a hexagonal wrench to loosen the oil drain plug(※) from the drain hole and drain the remaining cutting oil.

# CHAPTER 2

## Cautions for Safety

### 1. Basic Safety Operations

Be sure to clearly determine the way of operation before operation for safety purposes. Operators who are in charge of installation, conveying, and maintenance of the Chip Conveyor must carefully read the cautions stipulated in this manual before operating for absolute safety. However, in the event of the operating individual being unable or unwilling to follow these instructions and cautions resulting in body injuries or malfunction of the machine, that individual and/or his or her company are to take full responsibility.

### 2. Regarding danger levels

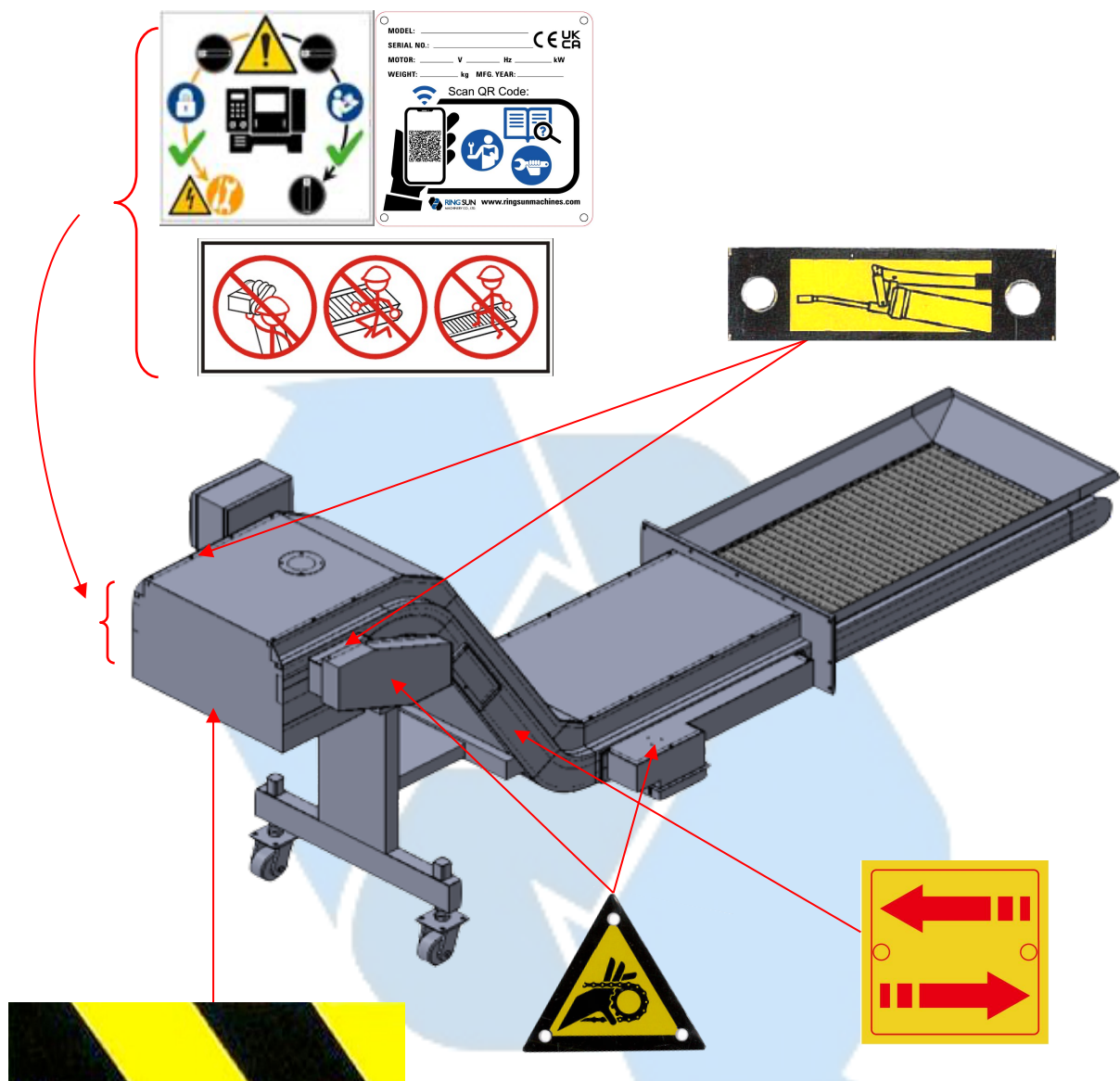
Please refer to the preface about the levels of danger, not following the safety rules may result in body injury or disorder of machine or article damaging.



※ Caution is specified to prevent accidents such as physical injury, disorder of machine, or damaged articles.








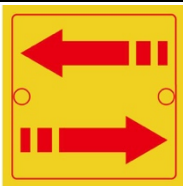
### 3. Content of DANGER labels

There are marked panels on each part of danger for Chip Conveyor so that the operator can operate it safely. Operators who are unable to follow the panel mark content, may risk serious accidents. Please watch out for it.

#### 4. Panel marks and warning signs (Label locations)

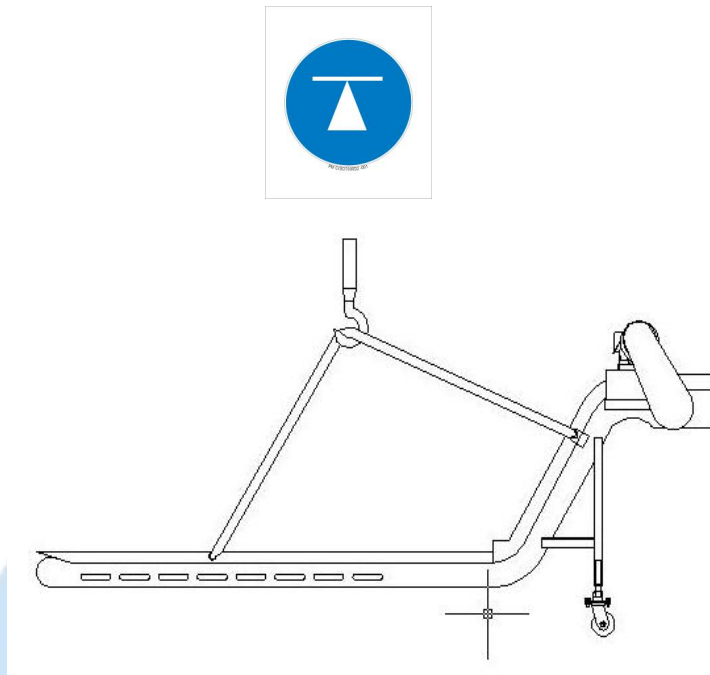


N O T I C E		General warning and warning notice
P L A T E		Product identification plate and customer service system launching QR code.

D A N G E R		While the machine is running, keep hands and body away from the rotating part prevent body parts being dragged in.
		Don't put hands, feet or any other part of the body into any moving part of the Chip Conveyor while the machine is in running.
		Do not traverse the conveyor while in operation.
W A R N I N G		Keep all body parts and clothing clear of moving parts away of the conveyor to prevent being rolled in during operation.
		Watch out! Danger of an electric shock!
		Warning signs at the chip discharge outlet
C A U T I O N		Add infusible fat regularly.
		Please follow this arrow to ensure the correct rotating direction.

## 5. Transport

### (1). Mark



### (2). Movement Method

The method of movement of the chip conveyor can be divided into three categories: hand operations, load carrier, and forklift vehicle.

#### ① Hand Operations

Put the tail part of the chip conveyor onto the hand-pushing car and release the brakes of PU wheels on the main part of the chip conveyor. Additionally, move the chip conveyor to the desired position.

#### ② Load Carrier

Utilize the load carrier with hanging forces greater than one ton and hang up the chip conveyor at the head position with the fiber belt. Additionally, move the load carrier to the desired location.

#### ③ Forklift Vehicle

Utilize a forklift of any kind to place the chip conveyor associated with 1/3 of the total length counting from the chip head upon the forklift plated and move it to the desired position.



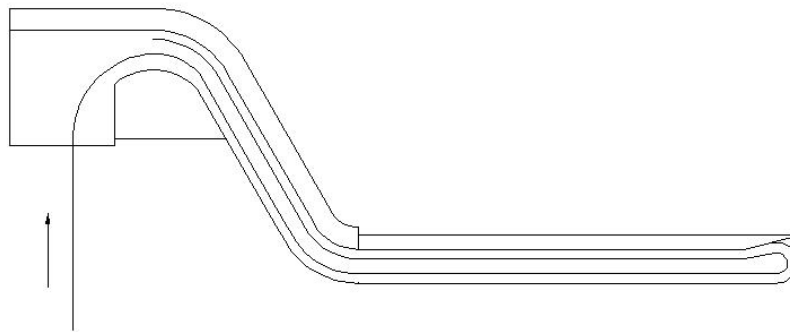
## 6. Installation with Machining Center

- (1) Before positioning the chip conveyor, please adjust the chip conveyor to the required height from the casters and then brake it.
- (2) Full lighting, emergency stop and related alarms facilities must be installed to ensure running safe operations of the chip conveyor.

## 7. Direction of the steel belt

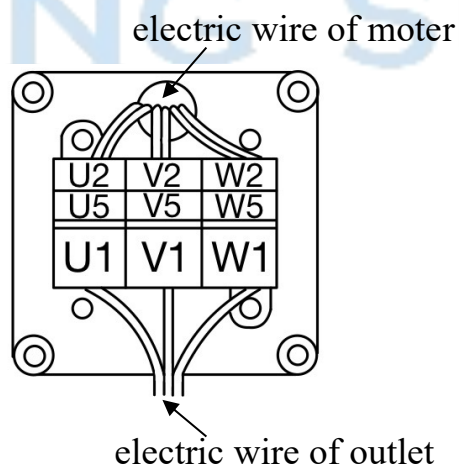
Please check the direction of the steel belt, follow the arrow for the correct direction. Chips can be transported by the steel belt. Please adjust the electric wire in the motor's control box if the direction is not right.

©The process of changing the direction must be performed by a competent electrician.

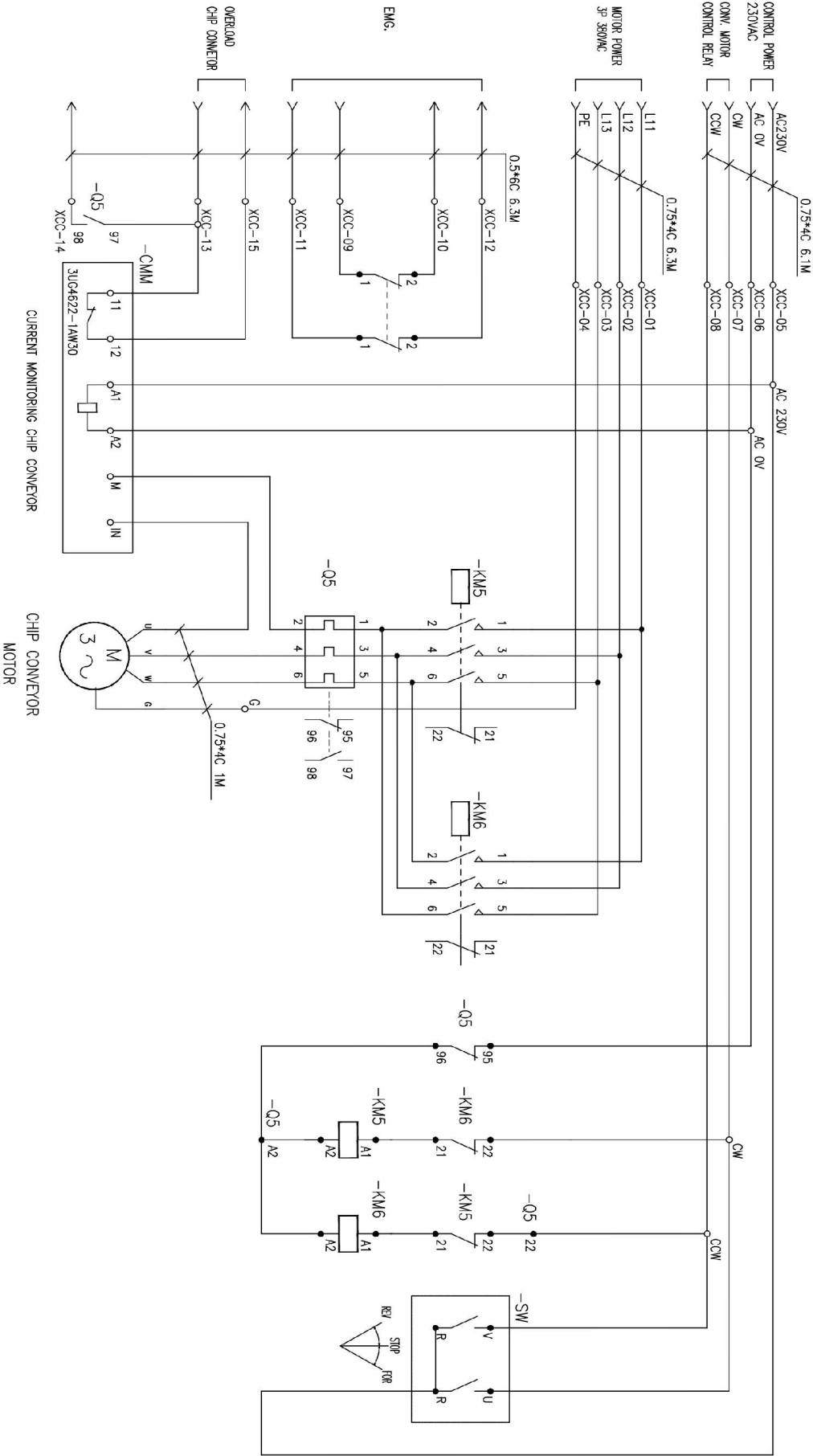


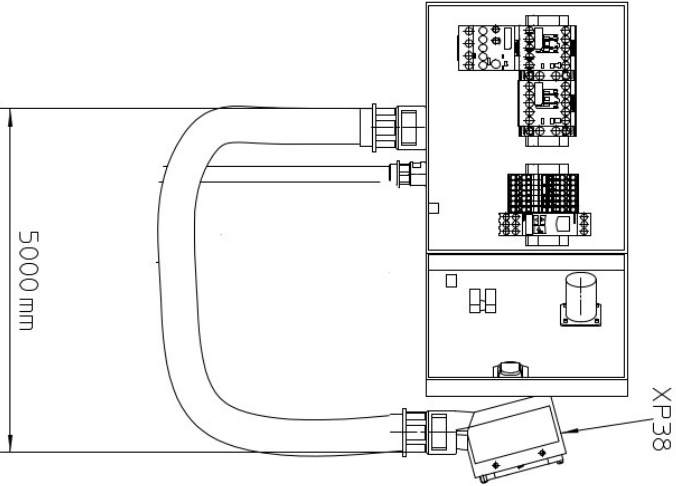
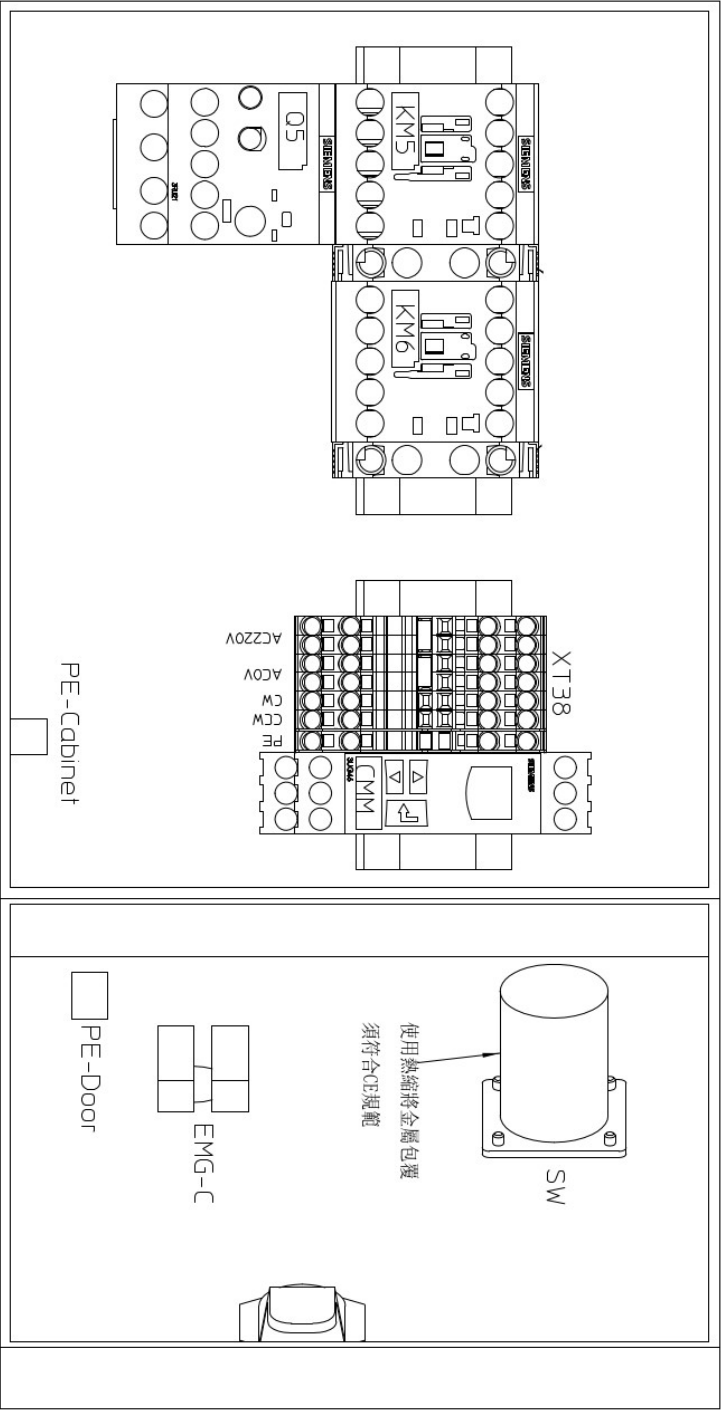
## 8. Motor Wiring Diagram

©The assembly of the motor parts must be conducted by a professional.



9. Electrical circuit of the electric box and part list



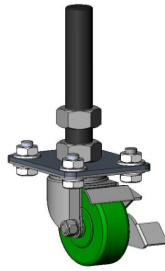


Mark	Description EN	TORNOS Number
KM5	Contact	230617
	Auxiliary contact	230618
KM6	Contact	230617
	Auxiliary contact	230618
Q5	Overload relay	230204
CMM	Current monitoring	229494
EMG-C	Nameplate	229463
	Emergency button	229462
BOX-SW	Control selector	229486

## 10. Locking the brakes of the PU wheels

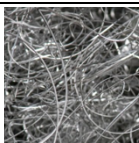
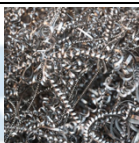
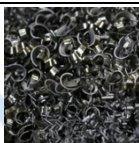
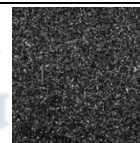
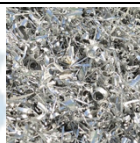


◎ Operators need sufficient light to utilize the machine safely.

◎ Note that when the chip conveyor is connected to any other machine, please make sure all electrical circuits are safe and available.



※ After installation of the machining tools on the ground, together with the water box, place the chip conveyor to the proper position just below the machining tools. In addition, please lock the brakes of the PU wheels of the chip conveyor.

## 11. Conveyor Models and suitable Chip Types

	Long Iron Chip	Curly Iron Chip	Foundry Chip	Iron Powder Chip	Aluminum Chip	Brass chip	Metal Powder
Chip types							
RSCW series	◎	◎	◎	☒	◎	◎	☒

◎ Good

◎ Fine for the chip size above 1 mm wide.

☒ Not recommended

# CHAPTER 3

## Operations

### 1. Basic Items

#### ( DANGER )

⊙ Do not touch or get close to any transmission part of the Chip Conveyor while the machine is running.

#### ( WARNING )

⊙ Control box and motor must be maintained by qualified technician.

⊙ Be sure to turn the power off before performing a check or a maintenance.

⊙ Do not turn the power on or touch any button of the machine when your hands are wet.

⊙ Keep the surroundings of the machine clean and tidy.

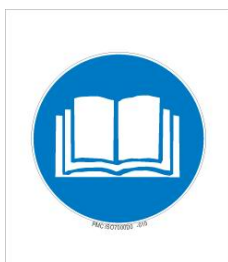
#### ( CAUTION )

⊙ Do not cut the power source off when experiencing power failures.

⊙ You must ensure that the control box is not hit by a strong force.

⊙ Do not take off or modify the mark labels on the Chip Conveyor, and be sure to renew and stick them back on its original position if the label is damaged.

### 2. Before connecting to a power source





- (1) Note that when the chip conveyor is connected to any other machine, please make sure all electrical circuits are safe and available.
- (2) Operators need sufficient light to utilize the machine safely.
- (3) For safety purposes, please be sure to read this manual carefully for each part of the machine and the ways of operation.
- (4) Do not touch or get too close to any transmission part of the Chip Conveyor while the machine is running. Please do not take off any cover that serves as a protecting device for operators.
- (5) Be sure to check carefully that the power cable is not damaged before turning on the machine, otherwise electrical leakages or electric shocks might occur.
- (6) All gearboxes need to be checked for leakage.
- (7) Reducer Gearboxes under 0.2kW (1/4 HP) are sealed and grease lubricated for life and must be replaced if leaking.
- (8) Reducer Gearboxes over 0.4KW (1/2 HP) can be topped up with oil.
- (9) Be sure to confirm that the switch runs smoothly.
- (10) Please make sure that the running part is not obstructed by people or barriers before operation.
- (11) During operation, objects other than chips shall not be thrown into the conveyor which might result in a malfunction or damage of the machine.
- (12) Be sure to notice the discharge quantity of the chip. The rising part of the conveyor will be blocked if the amount of chips exceeds the original set conveyor quantity. In that case, repeat the positive and negative run of the conveyor to take off the blocked chips. Please contact our service member for instructions if the conveyor is still not operating properly.
- (13) In order to prevent operators from slipping and falling, be sure to clean away the oil, water, and dust on the ground.

- (14) For Scraper Type Chip Conveyors, please note that the transmission occlusion for reducer motor and conveyor must be placed correctly and tension is also necessary to be adjusted.

### 3. After the power connection



- (1) Ensure a clear way of operation before using the conveyor for safety purposes.
- (2) Please follow the instructions and be sure to confirm a correct rotating direction before operation.
- (3) While running, prevent clothing or hair being rolled in by the driving and rotating parts by keeping a safe distance.
- (4) Be sure to check carefully that the power cable is not damaged, otherwise electrical leakages or electric shocks might occur.
- (5) Please keep the conveyor in operation when your machine is working.  
Avoid accumulating too many chips as that may result in a break down.

### 4. Stopping the conveyor mid-operation

Turn the power of the conveyor off to stop the operation if it is necessary.

### 5. Ending the Operation

- ◎ Be sure to turn the power off after the conveyor has finished operating.
- ◎ Be sure to turn the power off first while cleaning the conveyor.
- ◎ Do not wear gloves while cleaning chips. Please clean chips using tools.

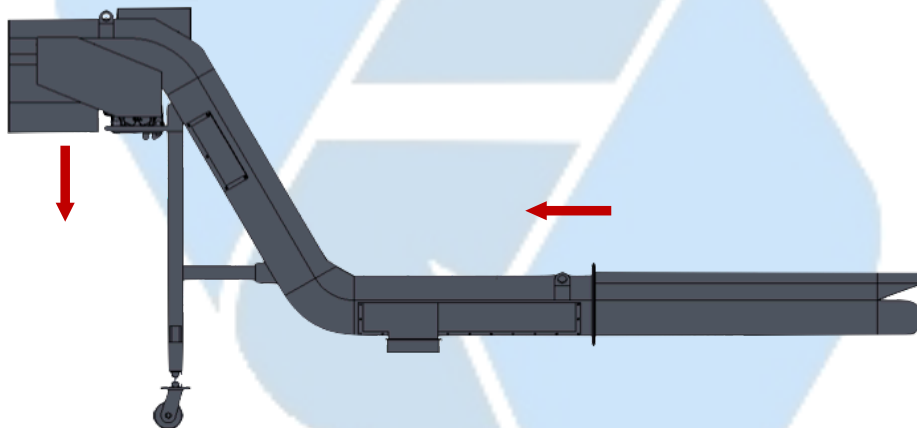
◎ If you encounter an abnormal condition after turning the conveyor on again, please cut the power off to stop the operation immediately.

**6. When starting the chip conveyor for the first time after the electrical installation, check the following functions:**

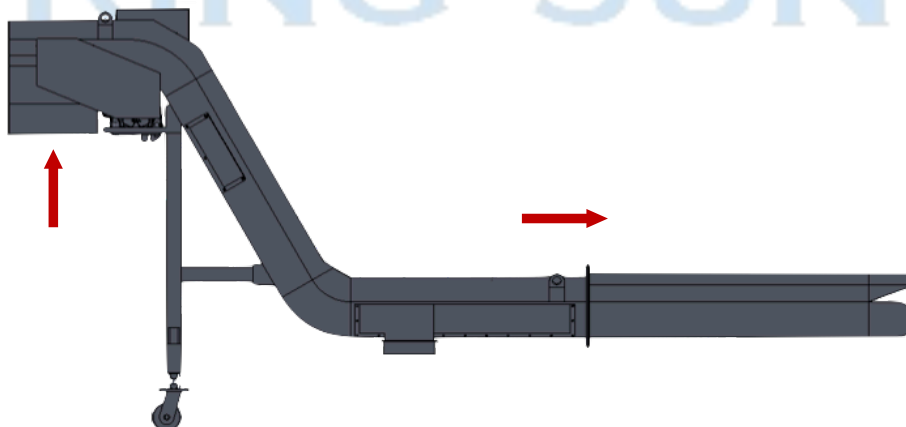
(1) Manual function:

- a. Check and ensure that the direction of movement of the conveyor belt is correct, by turning the "control switch".

◎The "clockwise" or "forward" direction of the conveyor belt is shown by the diagram in the middle of this page.

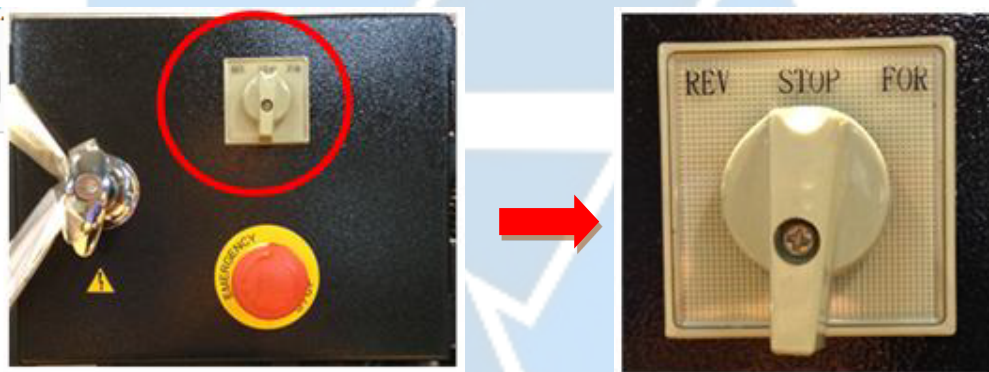


◎The "counterclockwise" or "backward" direction of the conveyor belt is shown by the diagram at the bottom of the page.



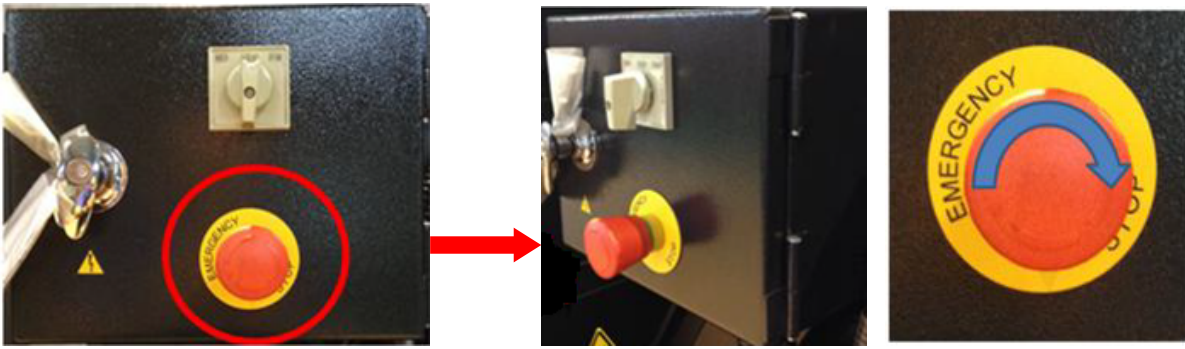
If the direction of movement is incorrect, stop the machine tool and the chip conveyor and have the power supply phase of the speed reduction motor reversed by a qualified electrician.

- b. The manual "rear" function of the conveyor should only be able to be performed by continuous manipulation with the "control switch". The "back" function should immediately cease when the hands release the "control switch". This will prevent chips from getting stuck at the bottom of the chip conveyor. Should the chip conveyor and machine tool fail to comply with safety regulations, have the chip conveyor and machine tool circuit checked by a qualified electrician.



(2) Safety function:

- a. The electrical cabinet of the chip conveyor should be equipped with an "emergency stop button". Test it and make sure that pressing the "emergency stop button" causes the machine tool to stop immediately. Should the chip conveyor and machine tool fail to comply with safety regulations, have the chip conveyor and machine tool circuit checked by a qualified electrician.
- b. The power to the chip conveyor must be immediately cut off when the machine tool's "emergency stop button" is pressed. Check this by turning the "control switch" when the machine tool's "emergency stop button" is pressed. If the chip conveyor should move, have the chip conveyor and machine tool circuit checked by a qualified electrician.



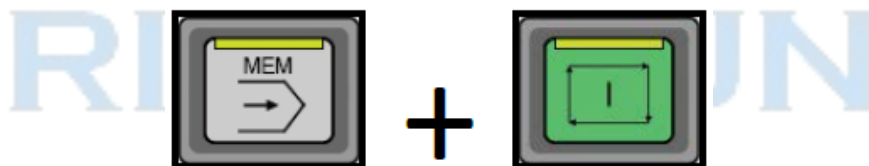
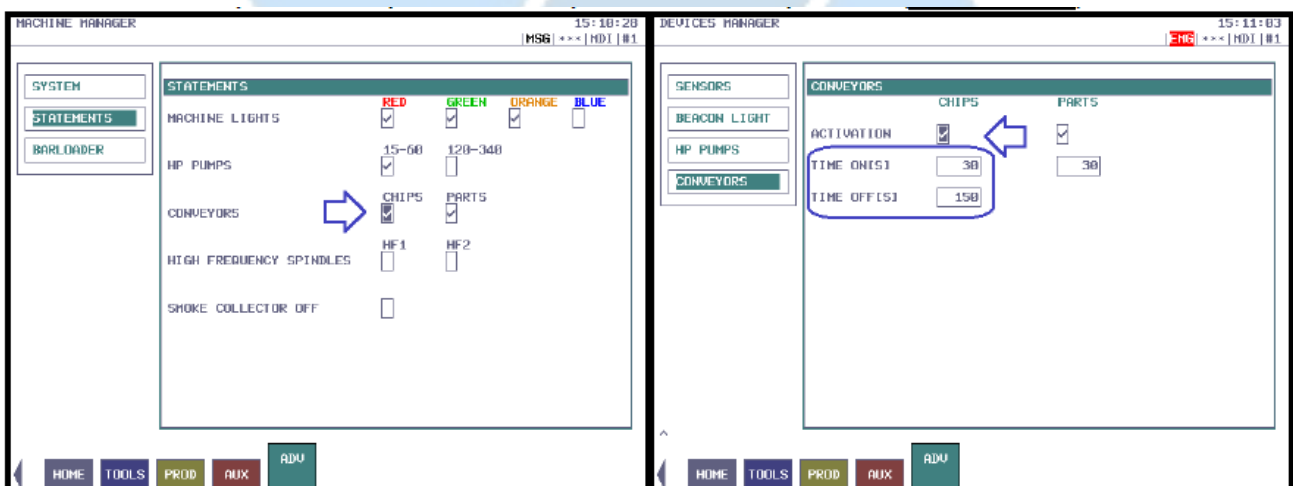
### (3) Automatic function for TORNOS:

Step 1: activate the chip conveyor function on the machine's TMI pages.

Step 2: run a part program in automatic mode.

©The belt should operate regularly as follows:

- Moving forward for a period defined by TMI (TIME ON [S]).
- Stopping of movement for a period defined by TMI (TIME ON [S]).



If the chip conveyor does not operate as described above (for example: incorrect direction of travel), have the chip conveyor and machine tool circuit checked by a qualified electrician.



# CHAPTER 4

## Maintenance and Inspection

◎To perform any machine maintenance make sure to turn the power off and cease the operation beforehand.

◎Maintenance shall be done usually each day, month and year.

### Check Items

Item	Content	Yearly	Monthly	Daily
1	Chips must be removed from the conveyor.	★	★	★
2	The tension of scraper type shall be adjusted via the tightness of the adjustment seat.		★	
3	Check if the friction piece inside torque controller is worn out.	★		
4	Check the interior of body and scraper type for damages and that each bolt is fixed firmly. If not, please replace and fix.	★		
5	The chain between the reducer motor and driving spindle must maintain an appropriate occlusion.		★	
6	Please check the current of the motor in case of abnormal sounds or unusually high temperature (60°C).			★
7	Driving chain must be lubricated.	★		

※Please provide the production number and date when requesting service.

※The disposal of the conveyor shall comply with your local waste regulations.

# CHAPTER 5

## Maintenance of Reducer

1. In order to prolong the service life for the reducer, be sure to replace lubricant every two thousands hours of operation. The lubricant specification is ISOVG150~320 or an equivalent standard oil.

2. Please check the current of the motor in case of abnormal sounds or unusually high temperature (60°C).

◎Overload detector (special accessory)



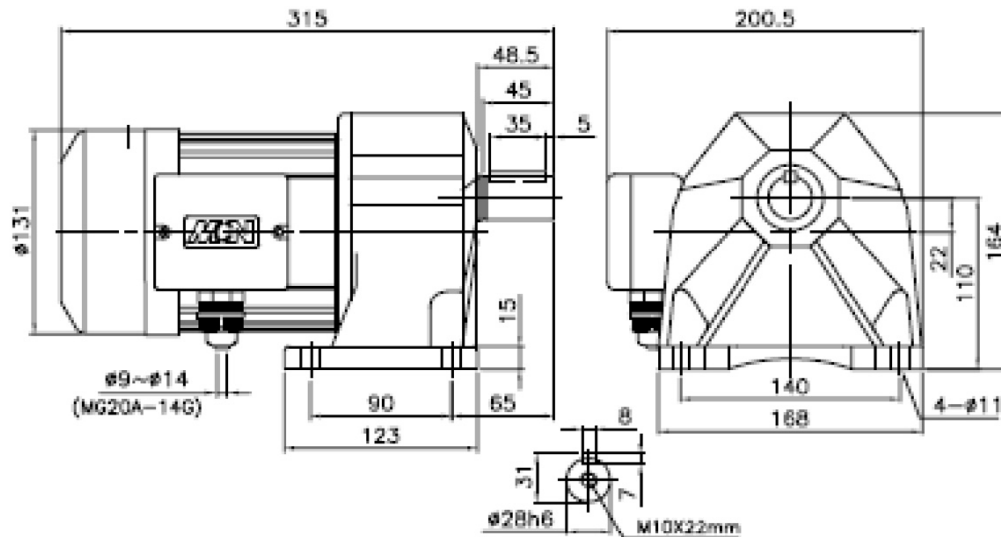
The overload device is built into the turbine speed reducer.

※ This special accessory cannot only be mounted to check for overload, but it also adopts transmission spindle mounting with re-rotating board for re-rotation movement and cycle movement of specific time receiving by proximity switch. A warning signal will appear if the cycle movement is delayed.

# CHAPTER 6

## Introduction of Mechanism

### 1. Transmission



3 Phase Gear Motor Horizontal Type

Ratio : 1/165

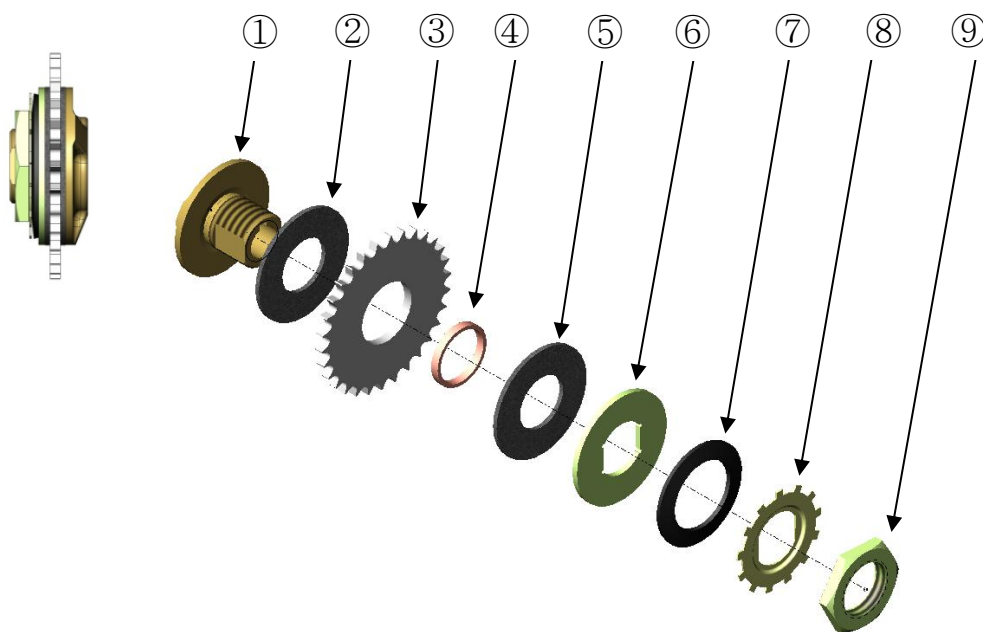
HP : 1/4HP\*4P

### 2. Detecting Unit

◎Avoid the Detecting Unit from being idle and ensure that the friction sheet in the controller does not get stained with oil when oiling the chain.

- (1) The torque settings of the torque controller can be adjusted via the Hub (No.1) and the Lock Washer (No.9) by using a torque wrench.
- (2) The torque settings need to follow the torque setting limit table to ensure the correct torque.

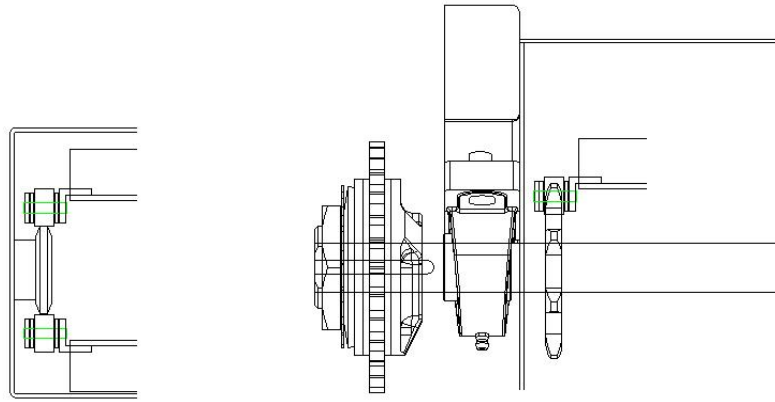
Name of Parts		
1. Hub	4. Plate	7. Nut
2. Friction	5. Spring	8. Set Screw
3. Bush	6. Washer	9. Lock Washer



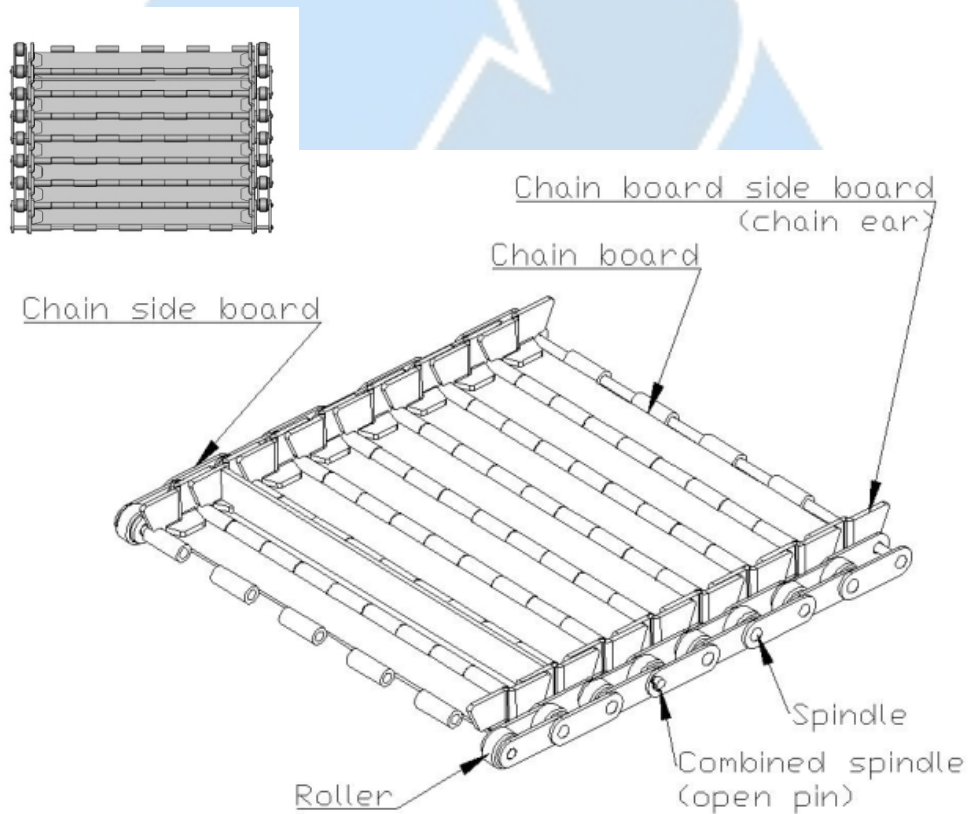
Torque setting limit table		
Unit: kgf-cm		
Conveyor Type	Motor and Pitch Spec.	Setting limit
履帶式輸送機	1/4HP motor	1400
Belt Type	Pitch= 31.75 mm	1400

### 3. Driving Shaft

- (1) The BS bearing will fall off automatically to protect the whole mechanism in case the conveyor is overloaded.
- (2) The friction piece of the torque controller will slide off automatically to protect the whole mechanism in case the conveyor is overloaded.



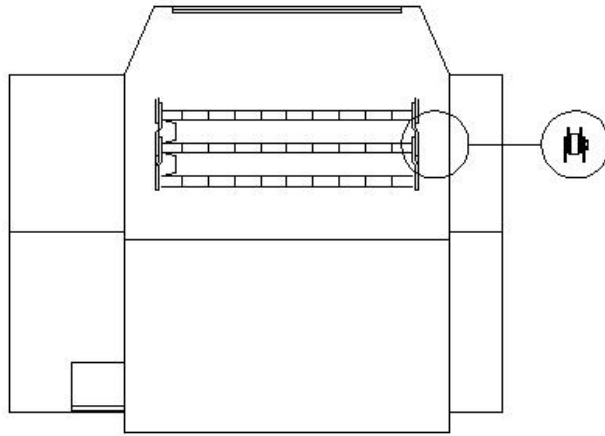
#### 4. Chain Board



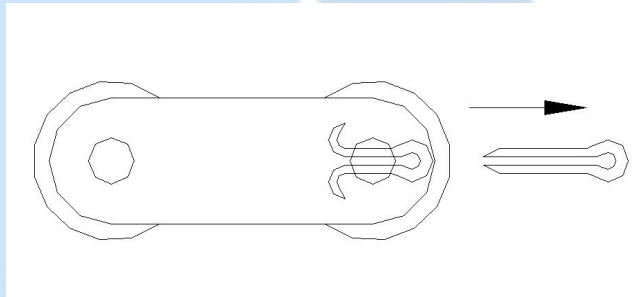
#### 5. Dismantling and Assembly of Chain Board

Dismantling of the Chain Board:

- (1) Pull up the open pin at the center of the spindle at movement spindle of rotating chain board to outlet.

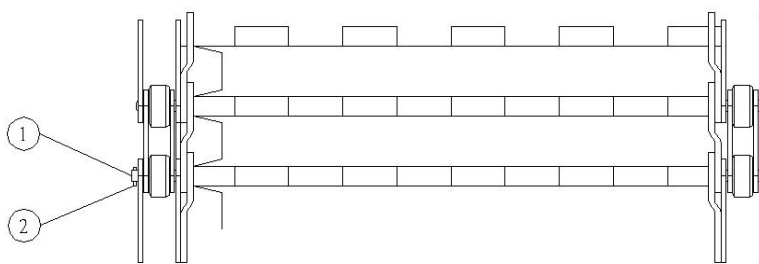


(2) Take off set snap ring of the motor chain.

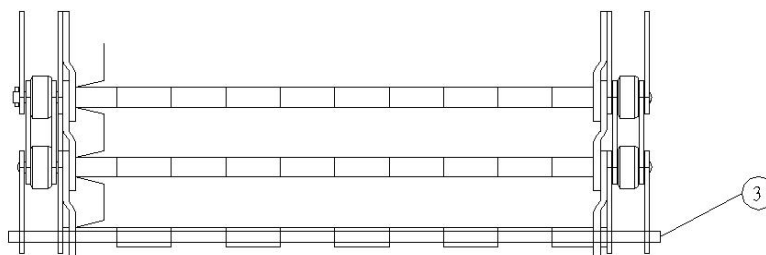


(3) Loosen adjustment seat for chain board.

(4) Dismount ② the pin and take out the spindle ①, while the chain board can be decomposed.

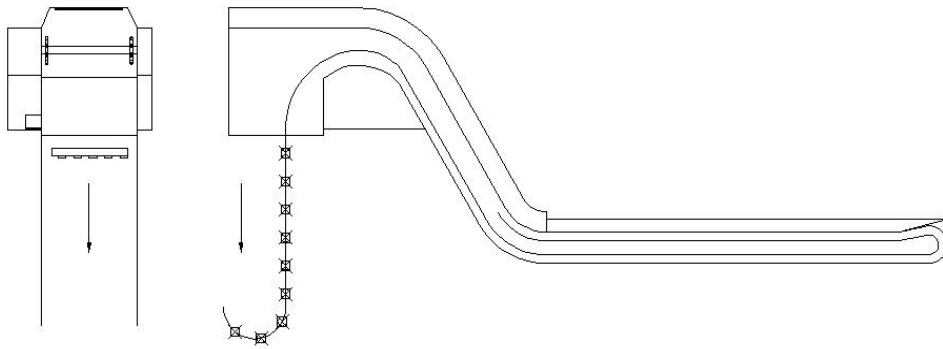


(5) Insert ③ the spindle below the chain board.



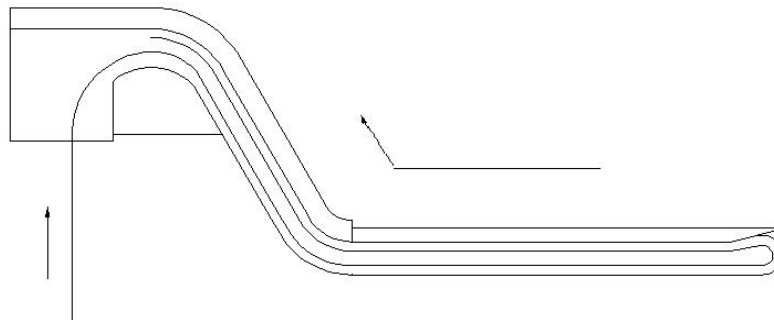


(6) Draw up the chain board from below.



(7) How to assemble the chain board

Draw out the chain board according to the direction of the arrows shown below.

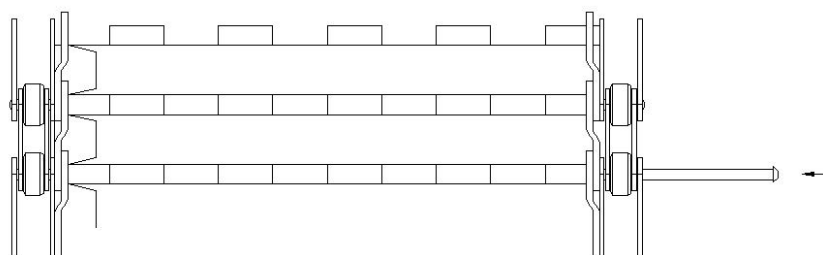


(8) Combination of the Chain board

① Combine front and rear ends of the dismantled chain board, and combine side board in order, roller, then insert into the spindle.

② Extend to another side to make both sides of spindle equal after inserting the spindle.

③ Fixate with the open pin.

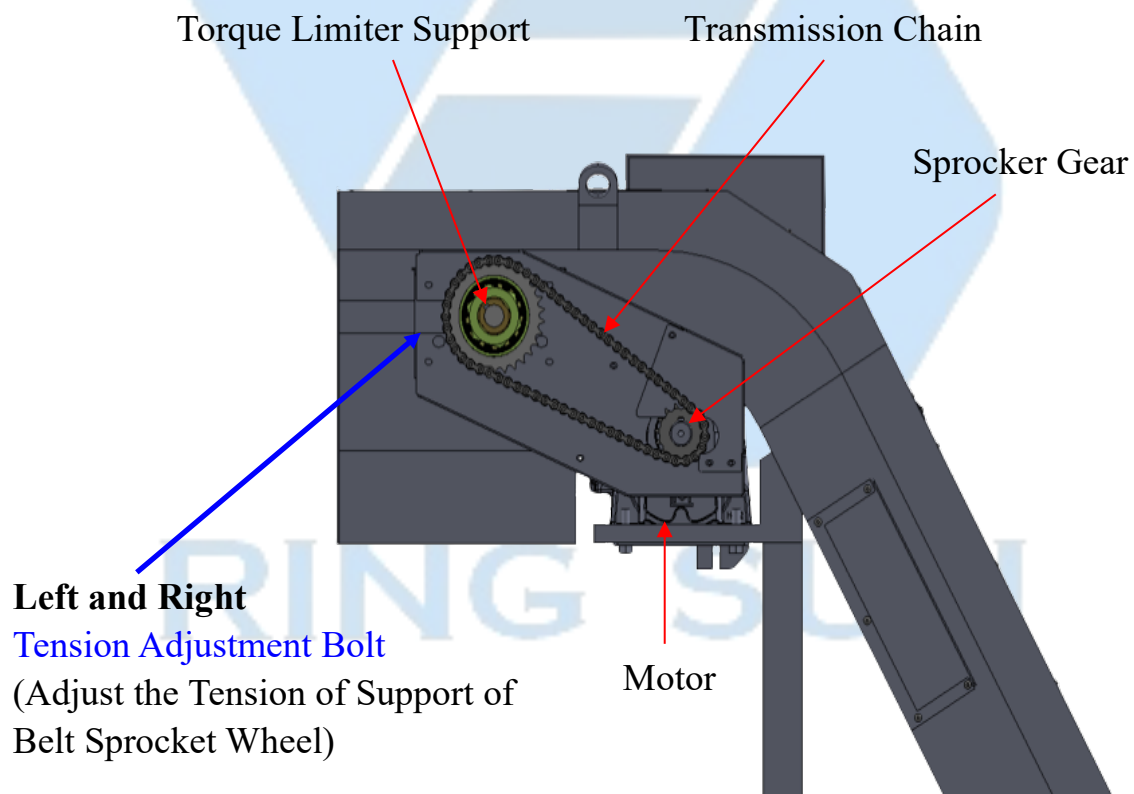


- (9) Adjust the chain adjustment seat to adjust the tension for chain board.
- (10) Combine the motor chain and fix the outside cover when the assembly is finished.

## 6. Tension adjustment of the chain :

The tension adjustment bolt is used to adjust the chain's tension to an appropriate degree.

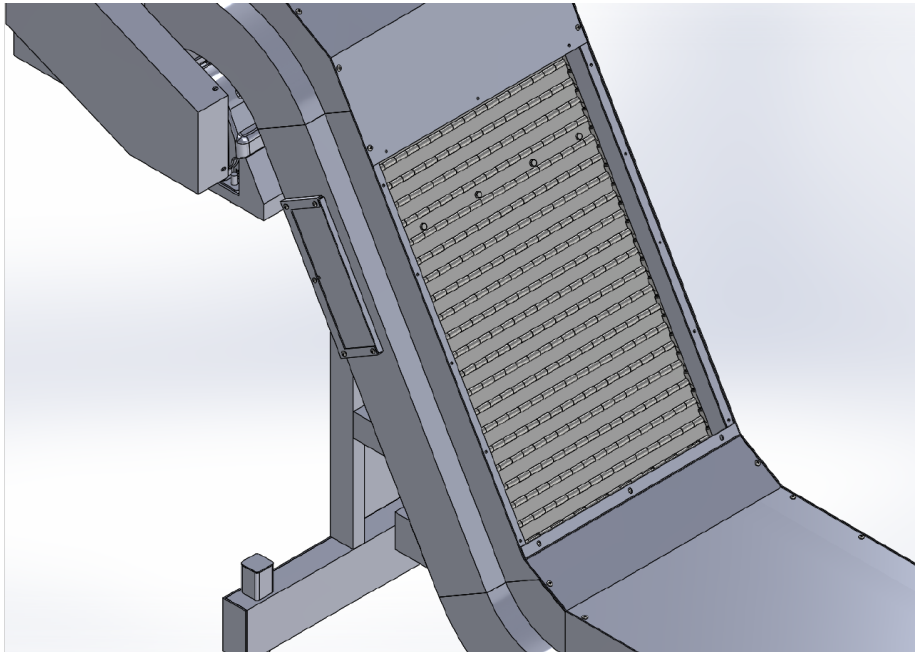
- ◎Avoid worker injuries and machine damaging during operation, please only operate it by a professional.
- ◎For safety, please adhere to the instruction manual while operating.



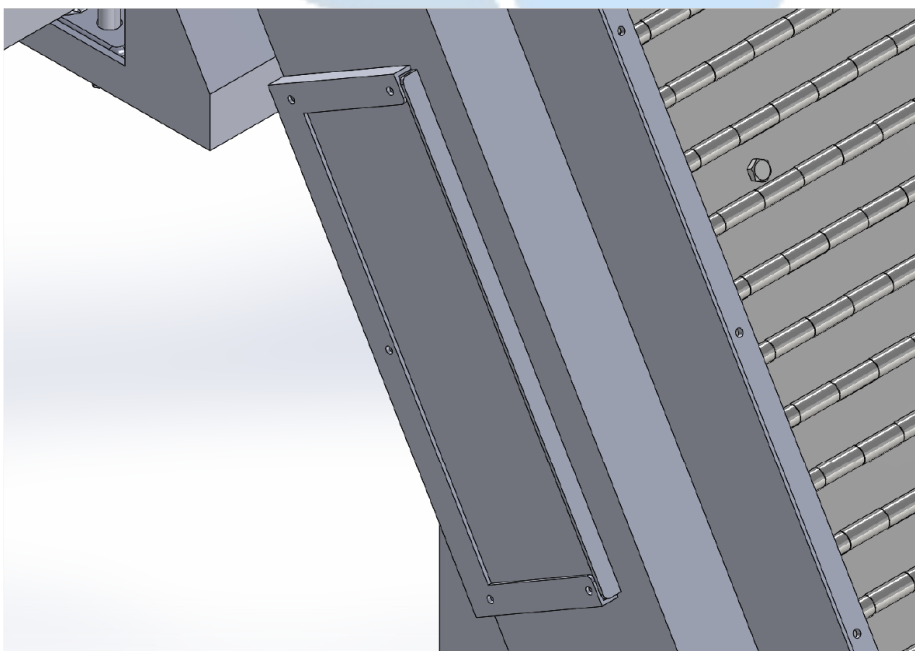
**Adjustment procedure:** Please disentangle bolts on the Left and Right. Adjust the Support of Belt Sprocket Wheel first, and then adjust the Transmission Chain and Tension simultaneously.

**7. Replace the Brush(item NO. 34) specific for XT series - 2305328 :**

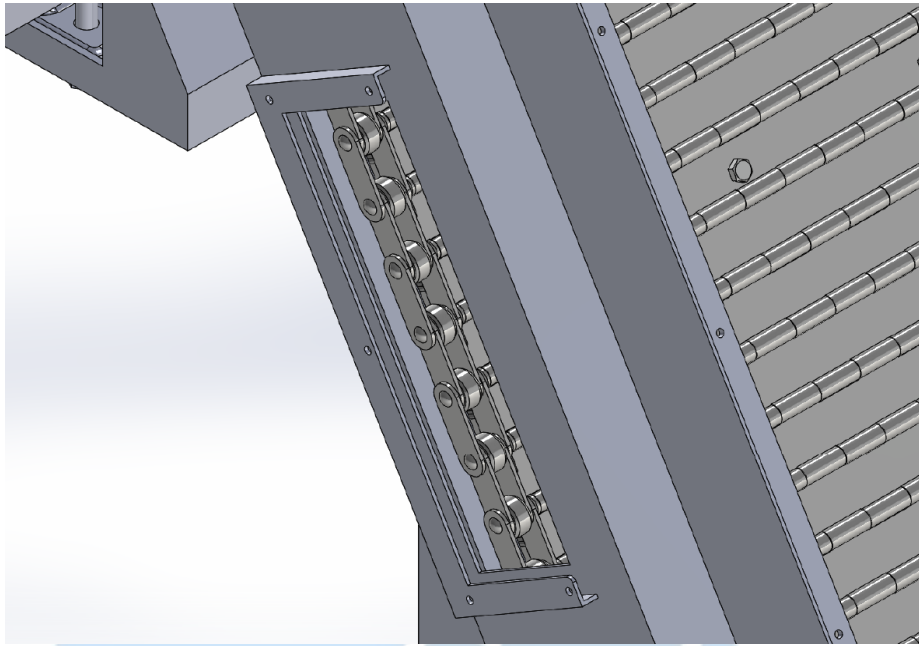
- (1) Unscrew and remove the locking screw on cover plate 2(item NO. 22). Confirm and move the chain plate so that the brush(item NO. 34) locking screws are within the range of the maintenance holes(item NO. 35) on both sides.



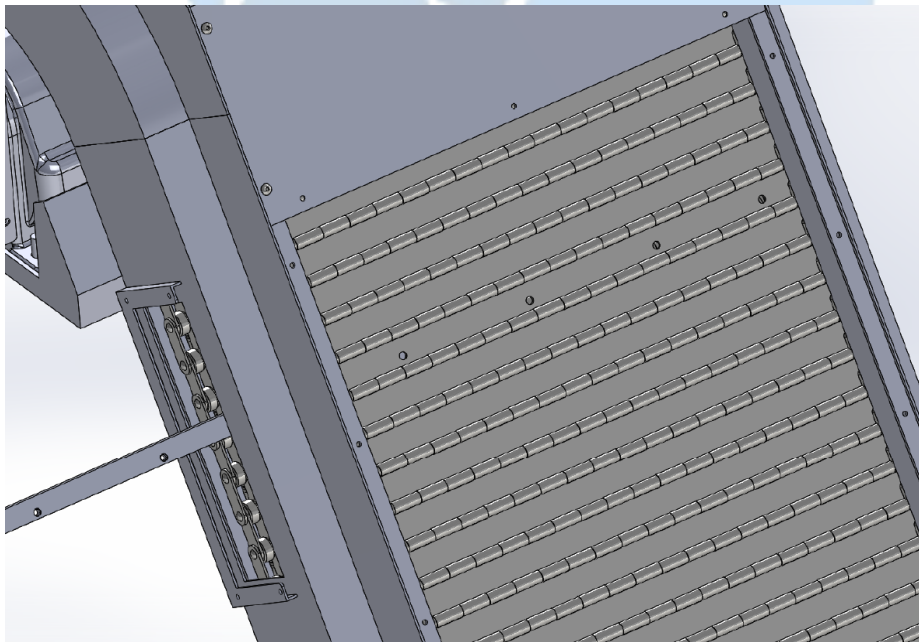
- (2) Unscrew and remove the locking screw on the maintenance cover(item NO. 35).



- (3) Remove the maintenance cover(item NO. 35)



- (4) Put on work gloves and put your hand into the maintenance hole(item NO. 35) to hold the brush(item NO. 34), loosen and remove the brush locking screw on the chain plate. You can take out the brush(item NO. 34) and fixing plate(item NO. 33).



- (5) Replace the new brush on the fixed piece, lock the replaced brush back to the chain plate, and restore it to its original state by reversing the previous steps.

# CHAPTER 7

## Regulation of Warranty

### **ONE YEAR WARRANTY AFTER THE PRODUCT LEAVES OUR FACTORY**

- \* If any malfunction occurs under normal operational circumstances, maintenance is free of charge.
- \* Renewed parts can be replaced by similar level items.
- \* Within the warranty period, we will collect a service charge if any of the conditions below occurs:
  1. **Inappropriate operation, thereby resulting in damage.**
  2. **Change of the original design.**
  3. **Replaced consumed parts.**
  4. **Damages resulted from Fire, Flood disaster, Earthquake, etc.**
- \* To extract of this content is allowed without our permission, please do not copy.
- \* We not only reserve the right to upgrade our products' quality and subjects, but have the right of change without notice.
- \* We considerably appreciate your opinions and comments related to this operator's manual.

RING SUN

## ※TORNOS MECHANICAL SPARE PARTS

The Bill Of Material (Please refer to the definition of each part of the chip conveyor in [Chapter 1.](#))

Model : XT 32		Drawing No. : 2305328	
Item No.	Material No.	Description	W/R/S
1	20N0201002	BEARING	W/S
2	20N0105008	DRIVE AXLE	S
3	20N181020341	SMALL GEAR REDUCER	W/R/S
4	20N2000011	TORQUE LIMITER	W/S
5	20N0701021	GEAR FOR REDUCER	S
6	20N0301001	CHAIN RS40*64	S
7	20N1902001	CONTROL BOX	W/R/S
8	20N080108S	HINGE BELT C2052 W500	W
11	20A1511320301	CONVEYOR OUTER CASE	—
12	20A15112661901	BEARING COVER - L	—
13	20A15112661902	BEARING COVER - R	—
14	20A15112661903	COVER FIXED PLATE - L	—
15	20A15112661904	COVER FIXED PLATE - S	—
16	20A15112661905	FIXED PLATE BRACKET	—
17	20A15112661906	COVER OF DRIVE GEAR	—
18	20A15112661907	FIXED PLATE OF REDUCE	—
19	20A1511320308	COVER FOR CHIP EXIT	—
20	20A15112661909	CIRCLE COVER	—
21	20A1511320310	COVER ONE	—
22	20A1511320311	COVER TWO	—
23	20A1511320312	COVER THREE	—
24	20A1511320313S	EXTEND CASE	—
25	20A1511320314	JAGGED PLATE	—
26	20A15112661915	BOX ADAPTER PLATE	—
27	20N230302032	4" PU WHEEL	—
28	20N190303190106	SCREW	—
29	20N1903020006	SPRING WASHER	—
30	20N1903010006	SCREW WASHER	—
31	20A1511320316	OUTLET COVER	—
32	20A1511320317	OUTLET COVER	—
33	20A1511320318	BRUSH FIXED PLATE	—
34	20A1511320319	BRUSH	W
35	20A1511320320	REPAIR COVER	—
36	20A1511320321	FILTER	—
37	20A1511320322	SLOPE OUTLET	—

W : WEAR PARTS 損耗品 R : REAR PARTS 需要維護品 S : SPARE PARTS 可更換零件