

 SIMPLE\FAST\CONVENIENT

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SHAR SPLICE

Installation Guide

SHAR SPLICE



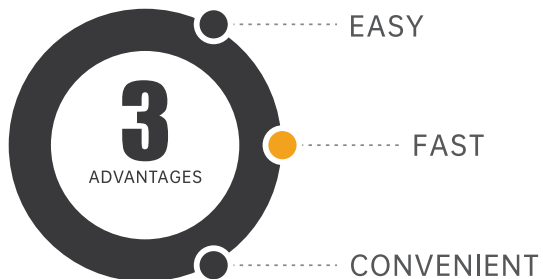


SHAR SPLICE

The Advantages of

// Please Read this manual carefully

This products suitable for the splicing of textile conveyor belts only



// The Advantages of SHAR SPLICE

- 1** Quick and easy installation
- 2** No need for power on site to install(lithium battery needed)
- 3** No need for expensive equipment
- 4** Special self-taping screw: avoid damaging the carcass
- 5** The carcass' structure is similar to that of the conveyor belt, but stronger
- 6** The splicing have good flexibility



CONVEYOR BELT
STRENGTH



THE WORKING
TENSION



OVERALL
THICKNESS

SELECT CORRECT
COVER GRADE



01STEP

Choose the proper products type

// Please refer to the following table when selecting

Need to know the strength, working tension, overall thickness and the cover grade of the conveyor belt, choose the proper SHAR SPLICE type based on these parameters; Or tell us the type of conveyor belt, we will choose for you.

Product Type	SP35	SP63	SP65	SP80	SP85	SP100	SP105
conveyor belt thickness mm	4~11	4~13	4~13	4~15	5~15	6~15	6~15
Nominal strength of conveyor belt N/mm	315	630	630	800	800	1000	1000
Maximum working tensionN/mm	35	63	63	80	80	100	100
Minimum roller diameter Φ mm	160/200	220/300	250/300	250/350	270/400	300/350	350/400
Popular conveyor belt	EP400, EP315	EP500,EP630		EP800		EP1000	

//Remarks

- Such as EP 800 , the belt strength is 800 N/mm
- After SHAR SPLICE Type confirmed, have to select suitable screws as per the belt thickness.

Product Type	SP125	SP127	SP180	SP185	SP200	SP205
conveyor belt thickness mm	7~20.5	7~19	7~20.5	7~19	7~19	7~17.5
Nominal strength of conveyor belt N/mm	1250	1250	1800	1800	2000	2000
Maximum working tensionN/mm	125	125	180	180	200	200
Minimum roller diameter Φ mm	350/400	350/500	400/800	500/800	500/1000	650/1000
Popular conveyor belt	EP1250		EP1800		EP2000	



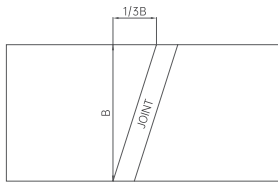
02 STEP

Confirm SHAR SPLICE Dimension

// The splicing length is determined by the width of different type of SHAR SPLICE as follows:

Product Type	SP35	SP63	SP65	SP80	SP85	SP100	SP105	SP125	SP127	SP180	SP185	SP200	SP205
Model Width mm	62	110		156						266			
Joint Length mm	62	110		156						266			

// It will be Bia splicing, and the length of the inclined edge is 1/3 of the belt width



- Calculate according to the figure:
- The required length of SHAR SPLICE is commonly based on the belt width + 10 % of the belt width as the slightly redundant of SHAR SPLICE. After the splicing is completed, it will be cut to an appropriate width.

03 STEP

Choose the performance of SHAR SPLICE

// Products performance is categorized as follows

Abrasion Resistant (AR) Suitable for most abrasion and general use occasions DIN abrasion index: $\leq 90 \text{ mm}^3$	Heat Resistant (HR) Suitable for conveying materials up to 150°C , such as pellets, sinters and clinker	High Temperature Resistant (HTR) Suitable for conveying materials up to 200°C , such as pellets, sinters and clinker
Low Temperature Resistant (LTR) Suitable for material transportation in cold environment, cold resistant temperature $\geq -45^\circ\text{C}$	Oil Resistant (OR) Suitable for conveying oily materials such as wood, oil and urban solid waste	Fire Resistant (FR) Suitable for materials transportation under environments such as power plants, coal mines and underground mines

The performance of SHAR SPLICE

The performance of SHAR SPLICE is designed and produced according to the highest international standards for conveyor belts, which can meet the requirements of transporting different materials. Choosing the right performance has significant effect on product longevity and it needs to be checked carefully during products selection.



04 STEP

Choose the screw for SHAR SPLICE

- The screws suitable for SHAR SPLICE are special self-tapping screws. Need to select the screw size according to the thickness of the conveyor belt (we have determined the required number according to the products type). You can choose according to the following table or inform us the conveyor belt type, and we will choose the most suitable specification for you.
- The selection of the length of the special screw is vital: if the length of the screw is too short, the product installation cannot be completed, and the required strength of the joint cannot be achieved. If the length of the screw is too long, the screw's end will be exposed.

Φ5mm special screws and spacers								
SHAR SPLICE		Type	SP35	SP63	SP65	SP80	SP85	SP100
Number of screws screw/m			110	200		280		
Number of spacers spacer/m			10					
Screws PZ Bits			PZ 2					
Belt thickness mm		Spacer Type	Screw size Φ × L mm					
4~5			5×10	5×10	5×12	5×12	NONE	NONE
5~7			5×12	5×12	5×14	5×14	5×16	5×16
7~9			5×14	5×14	5×16	5×16	5×18	5×18
9~11			5×16	5×16	5×18	5×18	5×20	5×20
11~13			5×18	5×18	5×20	5×20	5×22	5×22
13~15			NONE	NONE	NONE	5×22	5×24	5×24

Φ6mm special screws and spacers							
SHAR SPLICE	Type	SP125	SP127	SP180	SP185	SP200	SP205
Number of screws screw/m		254					
Number of spacers spacer/m		10					
Screws PZ Bits		PZ 3					
Belt thickness mm	Spacer Type	Screw size Φ × L mm					
7~8		6×19.5	6×21	6×19.5	6×21	6×21	6×22.5
8~10		6×21	6×22.5	6×21	6×22.5	6×22.5	6×24
10~11.5		6×22.5	6×24	6×22.5	6×24	6×24	6×25.5
11.5~13		6×24	6×25.5	6×24	6×25.5	6×25.5	6×27
13~14.5		6×25.5	6×27	6×25.5	6×27	6×27	6×28.5
14.5~16		6×27	6×28.5	6×27	6×28.5	6×28.5	6×30
16~17.5		6×28.5	6×30	6×28.5	6×30	6×30	N/A

05 STEP

Tools & PPE Wear instruction

If help needed, please contact us.

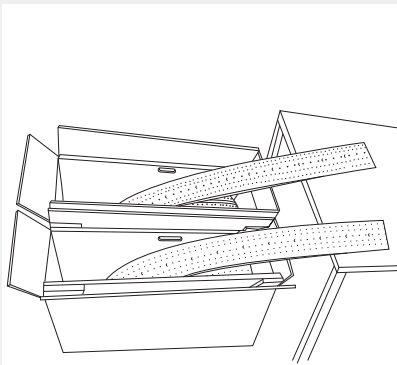
Object	Requirement	Purpose	Note
Work gloves	With certain anti-cut function	Protect the hands of operator	
Safety goggles	High transparency	Protect the eyes of operator	
Measuring tape	Range 3000mm/1000mm	Measure the size of the belt and SHAR SPLICE	
Cutting Knife	With metal sheath	Cut the conveyor belt	
Mark pen	White and water-soluble color	Marking	
Electronic screw drive	Lithium battery is recommended for easy operation	Screwing	
Electronic skiver and blades	Lithium battery is recommended for easy operation	Skiving the rubber cover	

- Note**
- Do not use the impact drill
 - Put thick wood board under the SHAR SPLICE
 - Do not screw on the drum
 - PPE wear important
 - Do not slide the thick wood board under SHAR SPLICE

06 STEP

Installation of SHAR SPLICE

● Open SHAR SPLICE package



■ Identify the upper part and the bottom part:

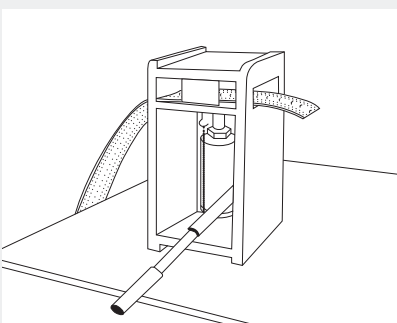
Both upper and bottom parts have printed marking in the middle for identification. Upper part is use for the working cover side of the conveyor belt; Bottom part used only for the Pulley cover side of the conveyor belt.

The upper and bottom parts are packaged separately, but they have been matched.

■ Important:

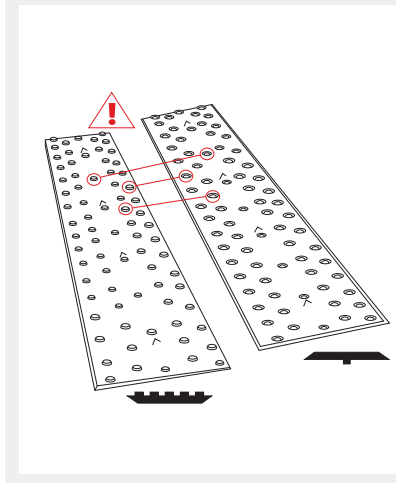
Please carefully check the batch number on the package. The upper and bottom parts with the same batch number are matched.

● Cut SHAR SPLICE to the required length



- Use hydraulic cutting tools for cutting. (contact us if you need cutting tools)
- Grinder can be used for cutting.

● Align top and bottom holes

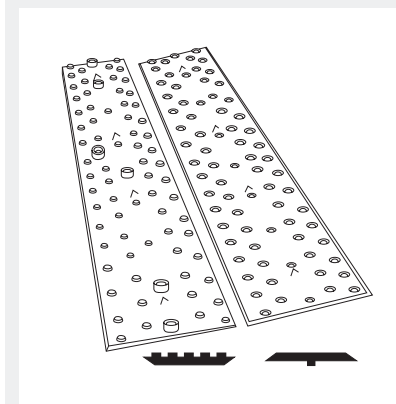


■ Note:

When aligning, the arrows on the marking strips must be pointing at the same direction. Small gaps may be noticed due to the elasticity of materials.

- (In this figure, bottom part is on the left with its working surface downward; Upper part is on the right with its working surface upward).

● Install the spacers from both sides (for the middle rows of products)

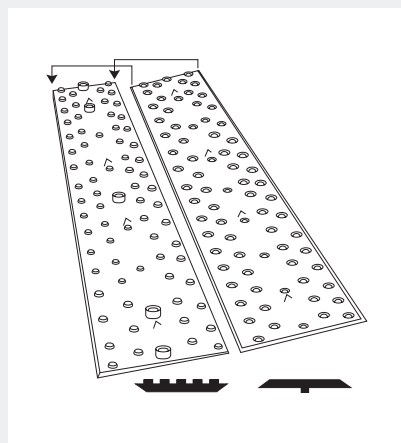


■ Note:

The spacer is to determine the position of the upper and bottom parts. When the spacers are fixed, the positions of the upper and bottom belt screw hole will also be aligned.

- The spacers are only placed on a row of raised holes in the middle of the back side of the bottom parts.

● Close the upper and bottom belt as shown in figure



■ **Note:**
When the spacers are installed, close the upper and bottom part as shown in the figure. At this time, just move the upper belt.

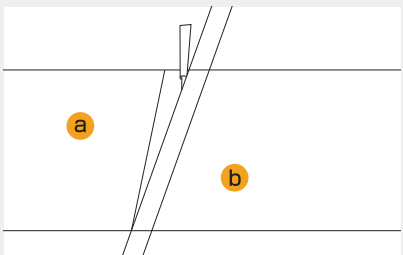
● Install screws through the spacers



■ **Note:**
After closing the upper and bottom parts, use an electronic screwdriver to position the screws in the middle row of spacer holes. The screws connect the upper and bottom parts through the spacers.
Install screws by following this sequence.

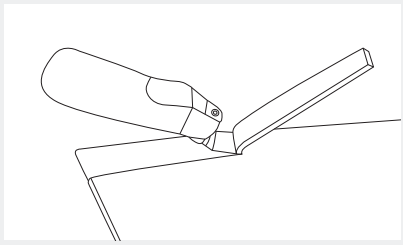


● Measurement, scribing and cutting on the belt end



■ **Note:**
Distance from end of right-angle edge to break point of hypotenuse = 1/3 belt width (unit: mm). According to the measurement, both ends of the cutting are aligned.

● Skiving the rubber cover to appropriate thickness

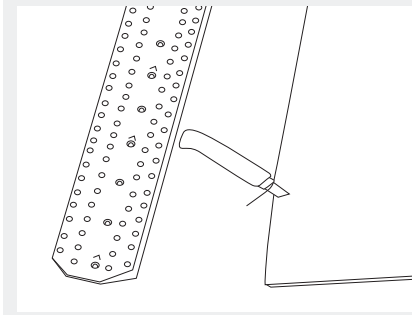


■ Use the special electronic skiver to remove the rubber cover.
■ **Note:** Keep the adhesive layer on the carcass to protect the carcass.
■ Please refer to the following table to determine the skiving depth.

SHAR SPLICE	SP35	SP63	SP65	SP80	SP85	SP100	SP105
Skiving depth trailing side mm	24	50	72				
Skiving depth leading side mm	38	60	84				
Top belt thickness±1mm	4.5	5	6.5	6	7.5	7.5	9
Bottom belt thickness±1mm	3.7	4	4	4.5	4.5	4.5	4.5

SHAR SPLICE	SP125	SP127	SP180	SP185	SP200	SP205
Skiving depth trailing side mm	126					
Skiving depth leading side mm	140					
Top belt thickness±1mm	6.5	8.5	6.5	8.5	8.5	10
Bottom belt thickness±1mm	6	6	6	6	6	6

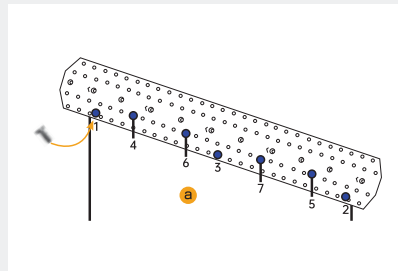
● Chamfering both sides of the conveyor belt



■ **Note:**

If the total thickness of the conveyor belt $\geq 6\text{m}$, then chamfering is required. Place the SHAR SPLICE in close contact with the belt, ensuring that SHAR SPLICE is resting against the spacers.

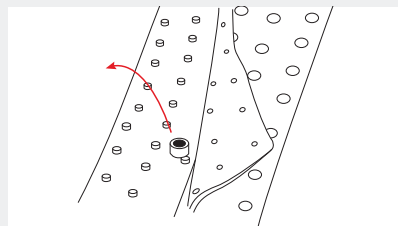
● Screwing from the trailing side



■ **Note:**

Screwing sequence is shown in figure. Place a thick wood board underneath the belt, then screwing on it.

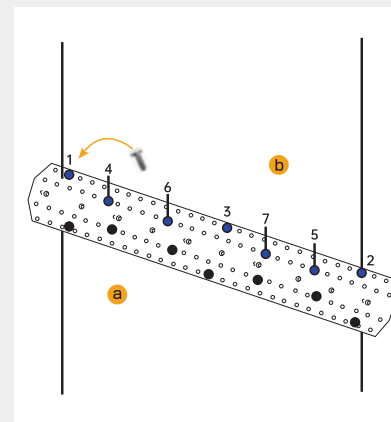
● Remove the spacers



■ **Note:**

Before removing the spacers, all screw on the SHAR SPLICE trailing side should all be tightened.

● Aligning and screwing on the other side

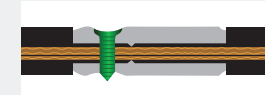


■ **Note:**

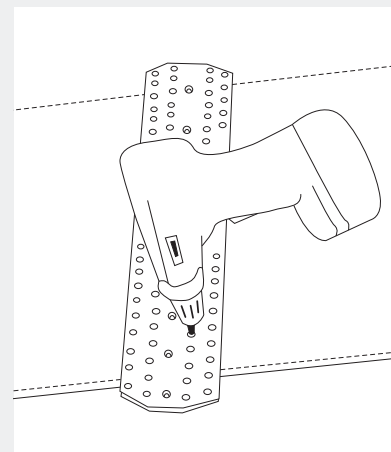
Screwing sequence is shown in figure. two parts should be in close contact.

WARNING

Get the 2 sides in contact

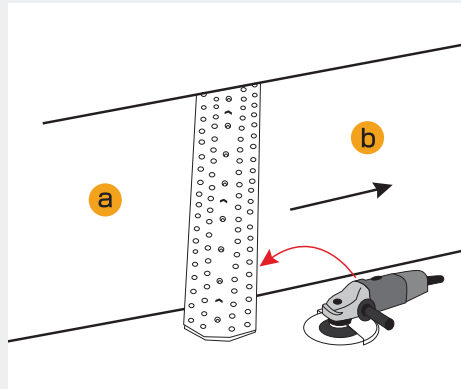


● Tighten all screws



■ Tighten all screws.

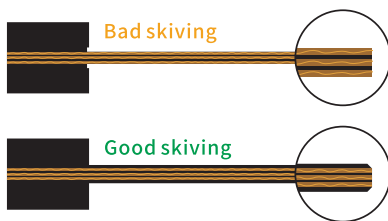
● If needed, trim the SHAR SPLICE with a grinder along the edge of the belt



- **If needed:**
trim the SHAR SPLICE with a grinder along the edge of the belt.

● Points to note when Splicing

01 Appropriate skiving of the covering rubber



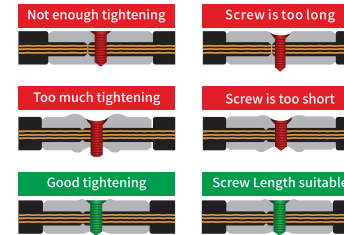
- A thin layer of rubber should be left to protect the carcass.
- As it is shown in the figure, covering rubber should be appropriately skived.
- Bad skiving: carcass is exposed and the skiving is uneven over the belt.

02 Spacer and trailing belt position



- **Note:**
The belt textile core should be tightly close to the spacer.

03 The tightness and the length of the screws



- Appropriate screw tightening is required.
- Select the appropriate screw length.

04 The belts textile core of the trailing belt should be in close contact without any gaps



When select SHAR SPLICE for chevron belt's splicing ,please contact us for tech support & suggestion.

- SHAR SPLICE also suitable for the splicing of Chevron Textile Conveyor Belting.
- **Attention :**
The splicing have to follow the chevron belts pattern.