

# HI SB 034

Modular spreader system  
User Manual

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### User Manual



#### Introduction

The HI SB 034 is a spreader system designed for carrying loads. The HI SB 034 may only be assembled and used by suitably skilled staff. This user manual tells you the correct way to assemble the HI SB 034 in the desired configuration and how you can use it safely. Always keep this user manual in a safe place near the HI SB 034.

#### Product Description

The HI SB 034 has a modular construction and it comprises a set of end units, associated shackles and various struts. The lengths of the struts vary from half a meter to six metres. See Figure 1, Figure 2 and Table 1 for more information about the various parts.

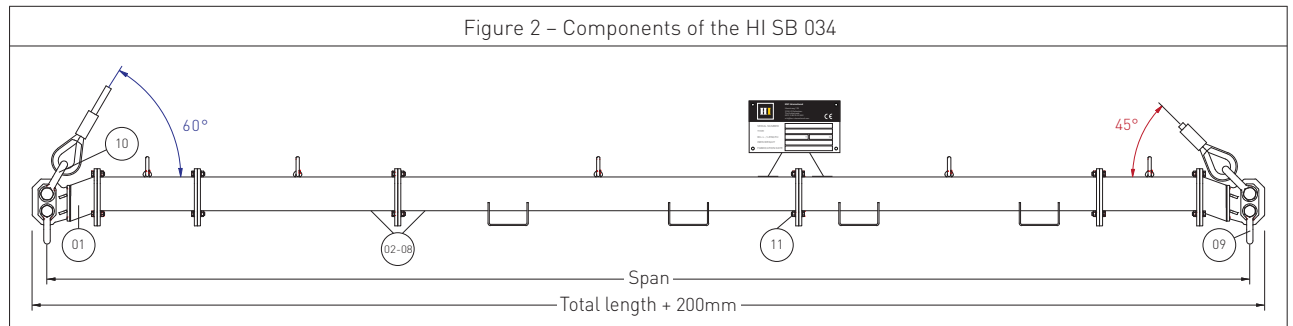
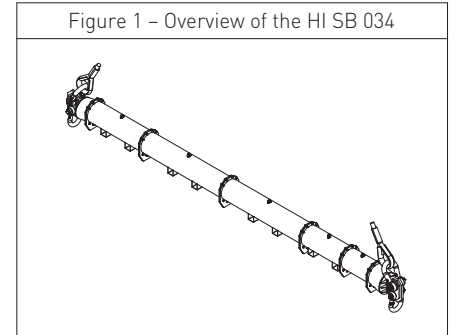


Table 1 - Components	#	Type	Description	Specifications	Weight (kg)	Qty
	01	HI SB 034 00	HI End unit	0,50m	37	2
	02	HI SB 034 05	HI Strut	0,50m	28	*
	03	HI SB 034 10	HI Strut	1m	44	*
	04	HI SB 034 20	HI Strut	2m	83	*
	05	HI SB 034 30	HI Strut	3m	114	*
	06	HI SB 034 40	HI Strut	4m	146	*
	07	HI SB 034 50	HI Strut	5m	177	*
	08	HI SB 034 60	HI Strut	6m	209	*
	09	G-4163	Green Pin shackle	WLL 17t	8,19	2
10	G-4163	Green Pin shackle	WLL 25t	14	2	
11	Grade 8.8	Bolts, Nuts and Washers	M16x55	6 pcs per connection		

\*Depending on the configuration.



#### Safety Instructions

- Use the hoisting eyes at the tops of the strut or end unit only for moving a single component.
- Never use the HI SB 034 if the information on the documents supplied with it does not match the data on the identification plate.
- Never exceed the working load limit. See Table 2 for additional information.
- Never use less than the mandatory minimum sling length. See Table 2 for more information.
- Never use the HI SB 034 if the angle of the lower slings is more than 6 degrees from perpendicular.
- Always use suitable and certified slings.
- Use ropes to guide the load while it is being moved.
- Never use the HI SB 034 for lifting people.
- Never use the HI SB 034 if the annual inspection has not taken place or if it has expired. Make sure that the HI SB 034 is inspected and declared to be safe at least annually by a certified inspector of hoisting equipment.
- Never make alterations to the HI SB 034. Modifications can have consequences for safety.
- Never suspend loads from the struts or the flanges of the HI SB 034.
- Observe the locally applicable legislation and regulations about the use of the crane from which the HI SB 034 is suspended.

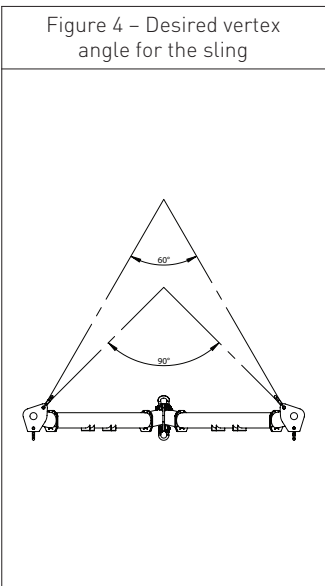
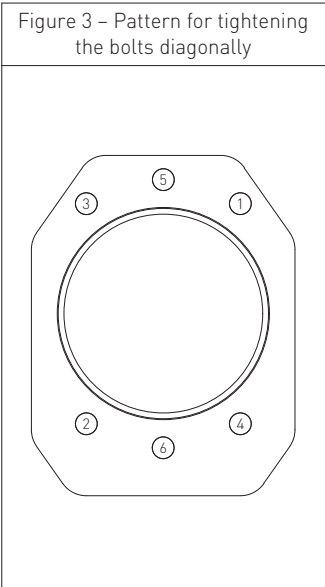


## Assembly

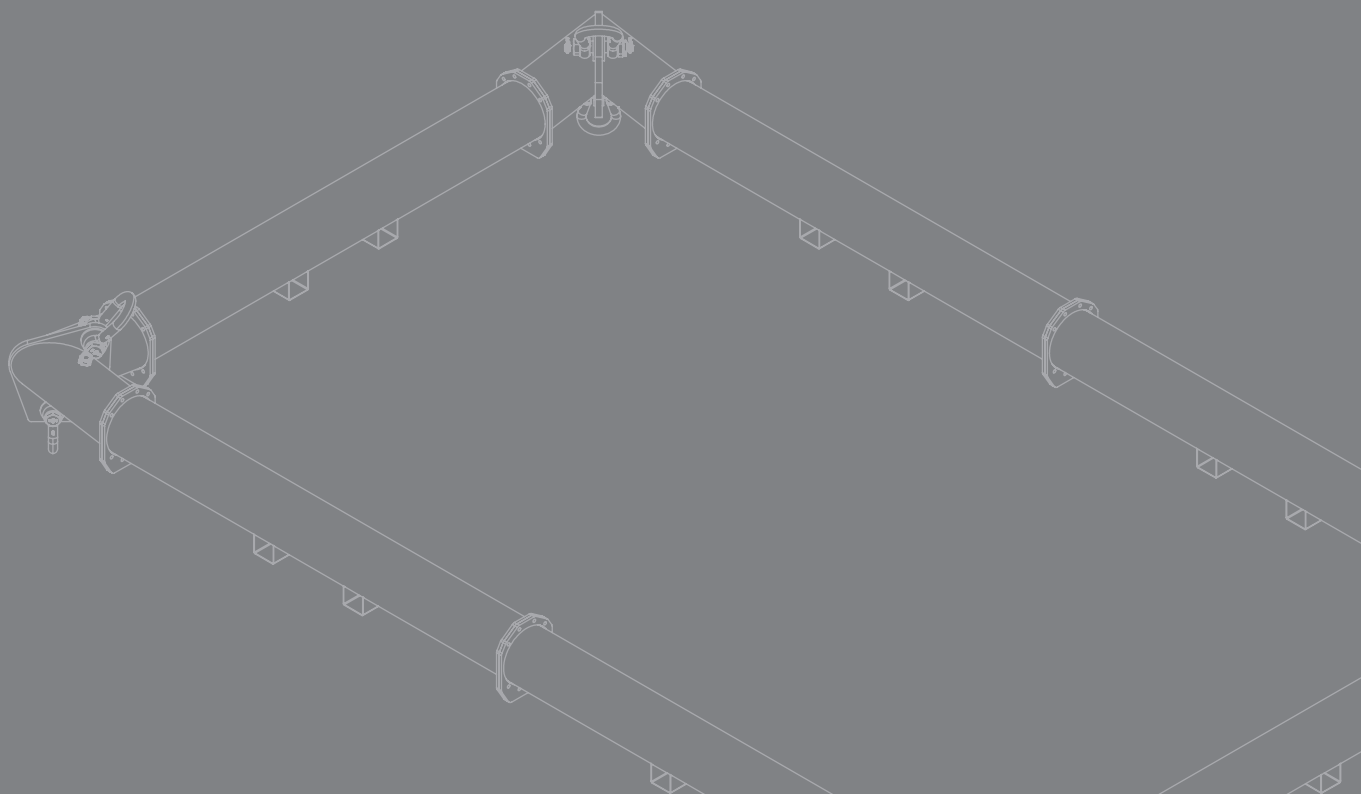
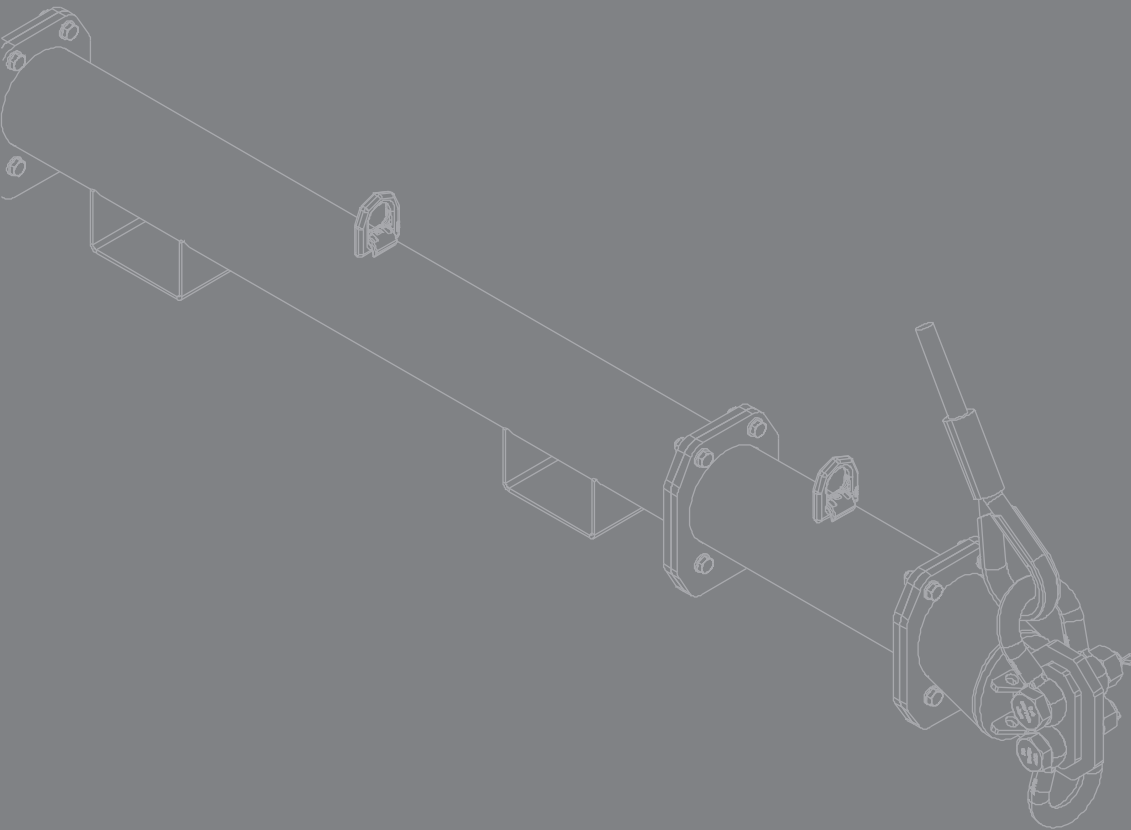
1. Lay out the struts with the longest strut in the middle in the desired configuration on a flat and clean surface.
2. Connect up each flange using 6 pcs. M16x55 8.8 bolts, nuts and washers.
3. Tighten the bolts in stages, using a diagonal pattern. See Figure 3 for additional information. Use the tightening torques
  - Step 1: 50 per cent, i.e. 50 Nm
  - Step 2: 80 per cent, i.e. 80 Nm
  - Step 3: 100 per cent, i.e. 100 Nm
4. Fit the Green Pin shackle (G-4163), WLL 25 tons, in the top hole in each end unit.
5. Use the sling to attach the HI SB 034 to the crane hook. When doing so, take account of the desired vertex angle, the sling length and the size of the load. See Figure 4 and Table 2 for more information.
6. Fit the Green Pin shackle (G-4163), WLL 17 tons, in the bottom hole in each end unit.
7. Get the HI SB 034 checked before use by a suitably competent member of staff or an external specialist.

Table 2 - Working load of the HI SB 034

Length	WLL	Sling <sup>1)</sup>	Recommended configuration <sup>2)</sup>							Lifting angle top sling-vertical 90°			
			<	>						Length	WLL	Sling <sup>1)</sup>	
1m	34t	1m	<	>						1m	34t	0,7m	
1,5m	34t	1,5m	<	0,5	>					1,5m	34t	1,1m	
2m	34t	2m	<	1	>					2m	34t	1,4m	
2,5m	34t	2,5m	<	1	0,5	>				2,5m	34t	1,8m	
3m	34t	3m	<	2	>					3m	34t	2,1m	
3,5m	34t	3,5m	<	2	0,5	>				3,5m	34t	2,5m	
4m	34t	4m	<	3	>					4m	34t	2,8m	
4,5m	34t	4,5m	<	3	0,5	>				4,5m	34t	3,2m	
5m	34t	5m	<	4	>					5m	34t	3,5m	
5,5m	34t	5,5m	<	4	0,5	>				5,5m	34t	3,9m	
6m	34t	6m	<	4	1	>				6m	34t	4,2m	
6,5m	34t	6,5m	<	1	4	0,5	>			6,5m	34t	4,6m	
7m	34t	7m	<	4	2	>				7m	34t	4,9m	
7,5m	34t	7,5m	<	2	4	0,5	>			7,5m	34t	5,3m	
8m	34t	8m	<	2	4	1	>			8m	34t	5,7m	
8,5m	34t	8,5m	<	3	4	0,5	>			8,5m	34t	6m	
9m	34t	9m	<	4	4	>				9m	34t	6,4m	
9,5m	34t	9,5m	<	4	4	0,5	>			9,5m	34t	6,7m	
10m	34t	10m	<	4	4	1	>			10m	34t	7,1m	
10,5m	34t	10,5m	<	1	4	4	0,5	>		10,5m	30t	7,4m	
11m	34t	11m	<	2	4	4	>			11m	27t	7,8m	
11,5m	34t	11,5m	<	2	4	4	0,5	>		11,5m	25t	8,1m	
12m	34t	12m	<	3	4	4	>			12m	22t	8,5m	
12,5m	34t	12,5m	<	3	4	4	0,5	>		12,5m	20t	8,8m	
13m	31t	13m	<	4	4	4	>			13m	18t	9,2m	
13,5m	28t	13,5m	<	4	4	4	0,5	>		13,5m	16t	9,5m	
14m	25t	14m	<	4	4	4	1	>		14m	14t	9,9m	
14,5m	23t	14,5m	<	1	4	4	4	0,5		14,5m	13t	10,3m	
15m	21t	15m	<	2	4	4	4	>		15m	12t	10,6m	
15,5m	19t	15,5m	<	2	4	4	4	0,5	>	15,5m	11t	11m	
16m	17t	16m	<	3	4	4	4	>		16m	9t	11,3m	
16,5m	16t	16,5m	<	3	4	4	4	0,5	>	16,5m	8t	11,7m	
17m	14t	17m	<	4	4	4	4	>		17m	8t	12m	
17,5m	12t	17,5m	<	4	4	4	4	0,5	>	17,5m	7t	12,4m	
18m	11t	18m	<	1	4	4	4	4	>	18m	6t	12,7m	
18,5m	10t	18,5m	<	1	4	4	4	4	0,5	>	18,5m	5t	13,1m
19m	9t	19m	<	2	4	4	4	4	>	19m	5t	13,4m	
19,5m	8t	19,5m	<	2	4	4	4	4	0,5	>	19,5m	4t	13,8m
20m	7t	20m	<	3	4	4	4	4	>	20m	4t	14,1m	



<sup>1)</sup> Top sling - minimum sling length measured from inside eye to inside eye.  
<sup>2)</sup> Other configurations are possible. However, the configuration should consist as less struts as possible.  
 NB! The longest strut should always be in the middle of the spreader beam.



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