

# MARTEC Chain Sling Inspection Standard

Chain slings shall be inspected daily<sup>(1)</sup> and periodically<sup>(2)</sup> as specified in Table 2.

- (1) Inspection to be carried out before use.  
 (2) Inspection to be carried out on a regular basis depending on the frequency of use, but in principle shall be performed once a month.

**Table 2: Inspection Standard**

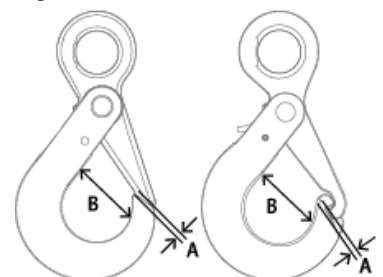
Inspection Items	Inspection Type		Inspection Method	Inspection Criteria
	Daily	Periodic		
<b>COMPLETE CHAIN SLING</b>				
Working Load Limit (WLL)	○	○	Visual check	Confirm the WLL on the tag attached to the chain sling.
Assembly condition	○	○	Visual check	All parts shall be properly assembled, no loose fastenings.
<b>CHAIN</b>				
Elongation of 5 chain links		○	Measurement	If elongation exceeds 5% of the original dimensions, the chain shall not be used. Prepare a dimension table before use.
Chain link wear	○		Visual check	If diameter wear exceeds 10% of the original dimension, the chain shall not be used.
		○	Measurement	
Chain link bent	○		Visual check	If link bent exceeds 10% of the original dimension, the chain shall not be used.
		○	Measurement	
Chain link twists	○	○	Visual check	Chain with twisted links shall not be used.
Scratches, other harmful defects	○	○	Visual check, magnetic particle test <sup>(3)</sup> or penetration test <sup>(4)</sup>	The chain shall be free from scratches, cracks and other harmful defects.
Corrosion	○	○	Visual check	The chain shall be free from significant rust.
<b>MASTER LINKS, INTERMEDIATE LINKS</b>				
Deformation	○		Visual check	If horizontal or vertical deformation exceeds 5% of the original dimensions, the link shall not be used. Prepare a dimension table before use.
		○	Measurement	
Wear	○		Visual check	If wear exceeds 10% of the original dimensions, the link shall not be used.
		○	Measurement	
Scratches, other harmful defects	○	○	Visual check, magnetic particle test <sup>(3)</sup> or penetration test <sup>(4)</sup>	The link shall be free from scratches, cracks and other harmful defects.
Corrosion	○	○	Visual check	The link shall be free from significant rust.
<b>HOOKS</b>				
Hook opening	○		Visual check	There shall be no deformation compared to the original B dimension (see Figure 1). Prepare a dimension table before use.
		○	Measurement	
Deformation	○	○	Visual check	The hook shall be free from bents or twists.
Latch	○	○	Visual check, manual check	The latch shall be free from significant wear, show no deformation and shall move properly.
Latch gap (locking hooks BK, OBK)	○	○	Visual check Caliper measurement	Hooks with a gap between hook and latch tip exceeding dimension A in Table 2b shall not be used.
Wear, corrosion	○	○	Visual check	Hooks with severe wear or corrosion shall not be used.
Rotation (swivel hook)	○	○	Manual check	The hook shall rotate smoothly
Scratches, other harmful defects	○	○	Visual check, magnetic particle test <sup>(3)</sup> or penetration test <sup>(4)</sup>	The hook shall be free from scratches, cracks and other harmful defects.
<b>CONNECTING ITEMS, COUPLINGS</b>				
Deformation	○	○	Visual check	The item shall be free from deformation.
Wear, corrosion	○	○	Visual check	Items with severe wear or corrosion shall not be used.
Scratches, other harmful defects	○	○	Visual check, magnetic particle test <sup>(3)</sup> or penetration test <sup>(4)</sup>	The item shall be free from scratches, cracks and other harmful defects.
Pin looseness	○	○	Visual check	Coupling pins shall not be loose.

- (3) According to JIS G 0565 (Methods of magnetic particle inspection for steel materials and classification of defective magnetic particle patterns).  
 (4) According to JIS Z 2343 (Methods of penetrant inspection and classification of defective indication patterns).

**Table 2b**

Hook Size	Dimension A (mm)
BK/OBK-6	2.2
BK/OBK-7/8	2.7
BK/OBK-10	3
BK/OBK-13	3.3
BK/OBK-16	4
BK/OBK-18/20	5.5
BK/OBK-22	6
BK-26	6.5
BK-28	7
BK-32	7

**Figure 1**



# MARTEC Chain Sling Inspection Standard

## Inspection Control Sheet

Sling Name / Code: \_\_\_\_\_

Registration No.: \_\_\_\_\_

Work Manager: \_\_\_\_\_

Start Date of Use: \_\_\_\_\_

Safety Manager: \_\_\_\_\_

Part	Inspection Item	Inspection Results					
		Date	Check	Date	Check	Date	Check
Complete Sling	Working Load Limit (WLL)						
	Assembly condition						
Chain	Elongation of 5 chain links						
	Chain link wear						
	Chain link bent						
	Chain link twists						
	Scratches, other defects						
	Corrosion						
Master Links, Intermediate Links	Deformation						
	Wear						
	Scratches, other defects						
	Corrosion						
Hooks	Hook opening						
	Deformation						
	Latch						
	Latch gap (BK, OBK)						
	Wear, corrosion						
	Rotation (swivel hook)						
	Scratches, other defects						
Connecting Items, Couplings	Deformation						
	Wear, corrosion						
	Scratches, other defects						
	Pin looseness						

Notes:



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