

Technical Bulletin No: 23-2016

Title:	Load Retention Straps / Lashings Specification and Inspection
Priority	Green – Opportunity to Improve
Legislation:	PUWER, HASWA S2 S3, Road Traffic Act
Brief Description:	Following a number of member enquiries, this bulletin covers the minimum specification and inspection requirements for load restraint straps / ratchet type straps
Equipment Affected:	Vehicles and trailers with load restraint points and associated straps

Lashing / strap performance made from webbing material is significantly affected by abrasion, cuts, contamination and UV damage causing deterioration. Straps should be inspected before use and ensure that they meet and are clearly marked with **BS EN 12195-2** standard which replaced BS5759 in 2001

This detail must be available and legible on the information label attached to straps. **image 1**

Lashing capacity should be matched to the type of load carried and straps should be protected against damage from sharp edges of loads. Lashing attachment points e.g. load restrain eyes or hooks on vehicle beds should be of suitable capacity for the lashing / straps used and type and weight of load being carried.

Tightening mechanism and hooks / eyes should be checked for damage, corrosion and function. **Image 2**

A maximum lateral cut of 10% is acceptable, this can reduce breaking strain of webbing by over 50%. **Image 3**

1 – Lashing / Ratchet Strap typical ID label	2- Tightening Mechanism and Hooks / Eyes																				
<table border="1"> <tr> <td>Lashing capacity</td> <td>LC ... daN</td> </tr> <tr> <td>Standard hand force*</td> <td>S_{HF} 50 daN</td> </tr> <tr> <td>Standard tension force</td> <td>S_{TF} ... daN</td> </tr> <tr> <td>Webbing material</td> <td>POLYESTER</td> </tr> <tr> <td>Length</td> <td>... m</td> </tr> <tr> <td></td> <td>"NOT FOR LIFTING!"</td> </tr> <tr> <td>Name of manufacturer or supplier</td> <td></td> </tr> <tr> <td>Manufacturer's traceability code</td> <td>CODE NR #####</td> </tr> <tr> <td>Year of manufacture</td> <td>DD MM YYYY</td> </tr> <tr> <td>Standard</td> <td>BS EN 12195-2</td> </tr> </table>	Lashing capacity	LC ... daN	Standard hand force*	S _{HF} 50 daN	Standard tension force	S _{TF} ... daN	Webbing material	POLYESTER	Length	... m		"NOT FOR LIFTING!"	Name of manufacturer or supplier		Manufacturer's traceability code	CODE NR #####	Year of manufacture	DD MM YYYY	Standard	BS EN 12195-2	
Lashing capacity	LC ... daN																				
Standard hand force*	S _{HF} 50 daN																				
Standard tension force	S _{TF} ... daN																				
Webbing material	POLYESTER																				
Length	... m																				
	"NOT FOR LIFTING!"																				
Name of manufacturer or supplier																					
Manufacturer's traceability code	CODE NR #####																				
Year of manufacture	DD MM YYYY																				
Standard	BS EN 12195-2																				

3 – Cuts, damage and misuse severely affect performance

<p>X</p> <p>Cuts/chafing across width. Result of inadequate edge protection.</p>	<p>X</p> <p>Frayed edge. No more than 10% damage across the width is permissible.</p>
<p>X</p> <p>Damaged core.</p>	<p>X</p> <p>Never use with knots. Knots can reduce the capacity by a half.</p>

Recommended Actions:	<ul style="list-style-type: none"> Review restraint specification and legal guidance - https://www.gov.uk/government/publications/load-securing-vehicle-operator-guidance Review condition and storage and ensure checks are recorded weekly Brief equipment users / drivers regarding pre-use inspection and safe use
-----------------------------	--

Circulation:	Transport management team and drivers
---------------------	---------------------------------------