

# MATLOCK

## LIFTING EQUIPMENT

# DECLARATION OF CONFORMITY

The Lifting Slings Itemised below comply with the  
 Machinery Directive 2006/42/EC  
 BS EN 1492-1:2000 (Webslings)  
 BS EN 1492-2:2000 (Roundslings)

Product Type:

Serial Numbers:

We hereby certify that the slings supplied by us and issued against this declaration comply with the above specifications.

*Martin Cooke*

**Name:** Martin Cooke      **Date of Manufacture :**  
**Position:** Director, The Kennedy Group Ltd.



<b>MATLOCK</b>  Working Load Limit (WLL) = Sling rating x Mode factor (all loads are in tonnes)  Factor of safety for all Web slings & Round slings is 7:1  Colour coding only applicable within the EU for Industrial Use and DOES NOT APPLY TO SHIPS EQUIPMENT!  BS EN 1492-1:2000 (Web slings) BS EN 1492-2:2000 (Round slings)	<b>RATED CAPACITIES for SAFE USE of WEB SLINGS and ROUND SLINGS</b>				
	Straight Pull	Choke Hitch	Basket Hitch		Two Leg sling Max 90°
			Parallel	90°	
Duplex/Single Web slings					
Round slings and Endless Web slings					
Mode factor (x)	1	0.8	2.0	1.4	1.4
1 tonne	1000Kg	800Kg	2000Kg	1400Kg	1400Kg
2 tonne	2000Kg	1600Kg	4000Kg	2800Kg	2800Kg
3 tonne	3000Kg	2400Kg	6000Kg	4200Kg	4200Kg
4 tonne	4000Kg	3200Kg	8000Kg	5600Kg	5600Kg
5 tonne	5000Kg	4000Kg	10000Kg	7000Kg	7000Kg

## Effect of Angle on loading capacities

When slings are used at an angle (i.e., two slings, or one sling in a basket hitch, attached to only one crane hook), sling capacity is reduced. How much it is reduced depends on the degree of the angle. You can determine the suitability of a sling if you know the angle between the sling leg and the horizontal using the table below to multiply the slings rating by the factor for the appropriate angle.

A sling capable of lifting 1000Kg in a 90° vertical basket hitch can only lift 866Kg at a 60° angle , 707Kg at a 45° angle and 500Kg at a 30 angle.

Angle Degrees	Factor	Angle Degrees	Factor	Angle Degrees	Factor
90	1.00	65	.906	40	.643
85	.996	60	.866	35	.574
80	.985	55	.819	30	.500
75	.966	50	.766	25	.423
70	.940	45	.707	20	.342

## Safe Working Practice for Web Slings



Failure to read, understand and follow the use and inspection instructions may result in severe personal injury or death. It is your own personal duty to always wear appropriate P.P.E. (Personal Protective Equipment)

Always inspect new slings to make sure they are as ordered and have not been damaged in transit

### INSPECTION

Remove Web slings from service if any of the following are visible:

- A rated capacity tag is missing or illegible.
- Exposure of red core warning yarn (for those slings that can contain warning yarn).
- Broken or worn threads in the stitching.
- Knots in any part of the sling.
- Any evidence of heat or chemical damage, including melting or charring.
- Any other visible damage which causes doubt as to the serviceability of the sling.

### OPERATING PRACTICE

- Always protect web slings from being cut or damaged by corners, edges or protrusions.
- Slings shall not be loaded in excess of the rated capacity. Consideration must be given to the effect of angles.
- Select slings having suitable characteristics for the type of load, hitch and environment.
- Slings must not be shortened by twisting, knotting or other unapproved methods.
- Slings must not be lengthened by knotting, choking or basketing slings together, or by any other unapproved method.
- Suitable fittings must interconnect slings.
- Slings shall be hitched in a manner providing control of the load.
- Web slings shall always be protected from being cut or damaged by corners, edges, protrusions or abrasive surfaces by using wear pads where necessary.
- Keep all parts of the human body from between the sling and the load, and from between the sling and the lifting hook.
- Stand clear of the suspended load.
- Do not ride on the sling or load suspended on the sling.
- Avoid shock loading as this causes stress damage.
- Slings must not be pulled from under a load resting on them, use blocking to facilitate sling removal.
- Avoid twisting and kinking slings during operation.
- Slings used with a hook should be centred in the base of the hook to prevent point loading on the hook.
- Prior to lifting, make sure that all lifting gear will not snag or bump other objects causing the possibility of damage to equipment, load or personnel.
- If using a basket hitch, select the proper slings to balance the load and prevent slippage causing the load to fall from the sling.
- If using a choker hitch, the slings must be long enough to choke onto the eye or body of the sling, not onto other fittings.
- Slings should be stored away safely where they will not be subject to mechanical damage, moisture, extreme heat or ultraviolet light.
- Do not expose slings to chemicals that are not compatible with the materials used in all of the sling.
- Do not use Nylon and Polyester slings in heat in excess of 200°F.
- Exposure to sunlight or ultraviolet light will degrade the strength of synthetic web.
- Slings should not be used at angles of less than 30 degrees from horizontal.
- Slings should not be dragged on the floor or over rough surfaces.
- When lifting points are below the centre of gravity, loads tend to be unstable. The correct use of rigging must restrict load rotation and avoid tipping and loss of load control.
- For lifts of non-symmetrical loads using multiple leg slings, an analysis should be performed by a qualified person to prevent overloading of any leg.

Refer to other regulations, codes and standards for additional information and safe operating practices. See OSHA CFR 1910.184 Regulations, ANSI/ASME B30.9, and the Web Sling and Tie Down Association Standards.