



Extreema® soft slings

User instructions



Extreema®

LIFTING YOUR WORLD

## Introduction

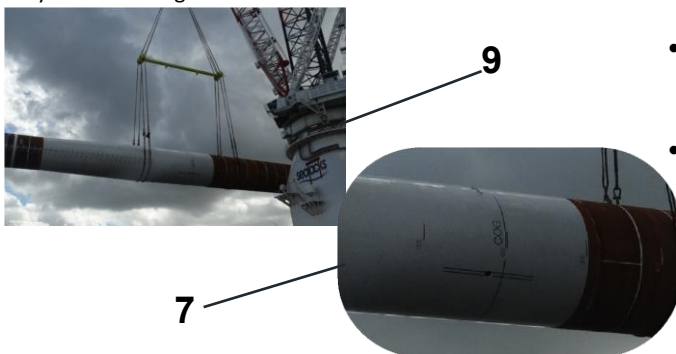
The Extreema® soft slings are made from High-Performance load-bearing fibers, i.e. HMPE (Dyneema or General HMPE). The sling shall be equipped with a label identifying the following: manufacturer (Lift-Tex®), type of load-bearing fiber (HMPE), month of manufacturing, serial number, Minimum Break Load (MBL), Working Load Limit (WLL), effective working length. (EWL)

Each product is delivered with a DOC (Declaration of Conformity). The DOC states the following data: Company name, type of sling, Extreema® Soft sling, yarn composition, sewing yarn, your P.O., serial number, WLL, EWL, application, safety factor and date of manufacturing.

The WLL is not always defined for project-specific lifting since the safety factor is sometimes different. For such cases, the slings shall refer to the specifications provided by the customer.

## General

1. In selecting an Extreema® soft sling, its maximum workload should be considered based on the method of use and the load to be hoisted. (see Table 1)
2. Extreema® soft slings are only used between -40 °C and +70 °C. For temperatures higher or lower, contact the sling manufacturer or the local dealer.
3. Extreema® soft slings must never be knotted, twisted, or constricted (e.g. by tape, tie-wraps, a.o.)
4. When lifting with the Extreema® soft slings, ensure the load is evenly distributed over the sling's full width.
5. Suppose the Extreema® soft sling is used as a loop (choke hitch). Never try to tighten the loop with force. The correct way to use an Extreema® soft slings in a choke hitch is indicated in the label or Table 1.
6. If the Extreema® soft slings are used in a basket hitch or a multi-legged lift, the angle may not exceed 60 degrees (see Table 1).
7. The Extreema® soft slings must be fastened so the load cannot fall out during lifting. Ensure that the lifting point is above the center of gravity of the load to balance the load. Otherwise, the load to be hoisted could slip out of the sling. Slipping out or tilting the load must be prevented.
8. If lifting takes place using the U-sling method it is necessary to ensure the load is appropriately secure.
9. A lifting beam is recommended if the Extreema® soft slings are to be used in pairs. If lifting is to occur using one or more Extreema® soft sling, the angles indicated in Table 1 must be observed. These values are based on practical experience and calculations of forces occurring in the case of asymmetrical lifting.



10. Avoid shock loads or impact to the load.
11. Never push the load to be hoisted into the Extreema® soft sling.
12. Make sure that the Extreema® soft sling is not dragged along the ground or over rough surfaces.
13. Never let the load rest on the Extreema® soft sling as this could damage the sling.
14. If several Extreema® soft slings are used at once, none must be overloaded, and the load must be stable and balanced.
15. Ensure that the Extreema® soft sling does not catch on any parts sticking out, and never use force to pull the sling from under the load.
16. When not in use, Extreema® soft slings should be stored at room temperature in a dry, well-ventilated room, away from heat sources.
17. Ensure that the Extreema® soft sling does not come into contact with hot surfaces
18. Extreema® soft slings that get wet through use or as a result of cleaning must be allowed to dry naturally, not near a heat source.
19. Raw material from which the round sling is produced are susceptible to degradation if exposed to ultraviolet radiation. Round slings should not be stored in direct sunlight or sources of ultraviolet radiation.
20. More than one person should handle with the appropriate apparatus an Extreema® soft slings heavier than 18kg that is regularly transported.
21. Only use Extreema® soft slings for lifting, not for pulling, dragging, lashing etc.
22. Always check extreemasoftslings.com as a guideline to determine the proper sling configuration. For further information, please get in touch with our Technical Sales Department.
23. At low temperatures, ice can be formed. The ice can act as a cutting agent and be abrasive, damaging the slings inside (core). Additionally, this will affect the flexibility of the sling and, in extreme cases, make it unusable.
24. The flattening, "hardening", or compression of the bearing core is a normal phenomenon and can "easily" be softened again by massaging with hands. Furthermore, the hardening, or bedding in, of the bearing point does not affect the safety of the round sling. Instead off fixed bearing points, nonrotating, it could work out positively to rotate, e.g. weekly or monthly, thus spreading loads on the bearing core and sleeve and even lengthening lifetime.
25. For proofloading, contact the manufacturer for advice and/or assistance.

## Inspection & repair

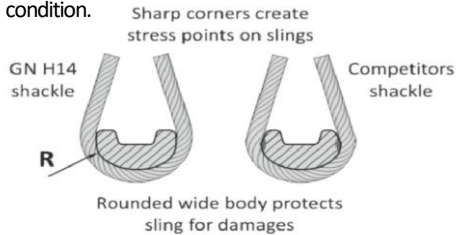
- Extreema® soft slings should be taken out of service for inspection and possible proof load by the user regularly to be determined in correspondence with local regulations.
- Before use, an Extreema® soft sling must be inspected along its entire length and under protection covers for damage to the stitching, equipment and the sling itself by a competent person.
- The sling must be withdrawn if the cover shows clear signs of wear. A certified dealer or the manufacturer must assess whether the sling in question can be safely reused after repair. An Extreema® soft sling, of which the core itself is visible, must be withdrawn from use.



- Extreema® soft slings may only be repaired by the manufacturer or a certified dealer. Repairs may only be carried out on slings still identifiable by their label

## Connection materials

- If Extreema® soft slings are combined with shackles, preferably wide-body shackles and lifting gear, they must be compatible and in good condition.



- The Extreema® softslings should be positioned so that, during lifting, the stitching of the overlap or side seam is not in contact with the connection material or the load.



- The D:d ratio and the bending radius between the sling and lifting gear/shackle must be considered. Extreema® soft slings under 150T should have a minimum of D:d ratio 1:1; everything above 150T is 1,5:1. If the WLL exceeds 300T or you require specific information consult the datasheets on our website: [extreemasoftslings.com](http://extreemasoftslings.com) or contact the manufacturer or a dealer.
- To avoid pinching off (and early damage of the sling), slings should never overlap in the shackle/ anchoring point or crane hook. There should always be enough space for the sling to position correctly on the attachment point. The low elongation of Extreema® soft slings makes correct sling positioning extra important.



## Label

- Only use Extreema® soft slings that have a legible label.
- Protect the label from damage caused by the hook, load or strapping if the sling is looped.
- The Extreema® soft sling may not be overloaded and should only be used according to the instructions on the label of the sling.

## Chemicals












- Acid and alkaline solutions may become so concentrated due to evaporation that they can damage the lifting sling. Discontinue the use of contaminated slings immediately. Extreema® soft slings made with HMPE/UHMPWE (with Dyneema®) sleeve resist chemicals, water/moisture and microorganisms. Contact the sling manufacturer or local dealer in case the effect of the chemical on the round sling is unclear.
- Contact with chemicals can cause local weakening and soften the cover material. Visible signs of this problem include flaking surface fibers (powder in extreme situations), which can be pulled or rubbed off. Discard the use of such Extreema® soft slings immediately.
- If an Extreema® soft sling has come into contact with acids and/ or alkalis, check the wash declaration. Sometimes, it may be necessary to consult the manufacturer about how to clean the Extreema® soft slings.

## Protection

- We always advise to use protection covers.
- Extreema® soft slings should be protected from edges, friction and abrasion, whether from the load or the lifting appliance. Where reinforcements and protection against damage from edges and/or abrasion is supplied as part of the sling, this should be correctly positioned. Contact the sling manufacturer or local dealer for advice on the lift job.
- If a DIN-Hook is used, it is advised to use XL/XXL protection covers.
- The Extreema® soft sling protection should be positioned so that, during lifting, the Velcro of the Protection cover does not come in contact with the connection material or the load.
- Extreema® soft slings do not correspond with the colour coding of EN 1492-2.



**Table 1: Working load limits**

WLL of sewn webbing component	Colour of sewn webbing component	Working load limits in tonnes								
		Straight lift	Choked lift	Basket hitch		Two leg sling		Three and four leg slings		
				Parallel	$\beta = 0$ to $45^\circ$	$\beta = 45^\circ$ to $60^\circ$	$\beta = 0$ to $45^\circ$	$\beta = 45^\circ$ to $60^\circ$	$\beta = 0$ to $45^\circ$	$\beta = 45^\circ$ to $60^\circ$
		 	 		 	 	 			
		M = 1	M = 0,8	M = 2	M = 1,4	M = 1	M = 1,4	M = 1	M = 2,1	M = 1,5
1,0	Violet	1,0	0,8	2,0	1,4	1,0	1,4	1,0	2,1	1,5
2,0	Green	2,0	1,6	4,0	2,8	2,0	2,8	2,0	4,2	3,0
3,0	Yellow	3,0	2,4	6,0	4,2	3,0	4,2	3,0	6,3	4,5
4,0	Grey	4,0	3,2	8,0	5,6	4,0	5,6	4,0	8,4	6,0
5,0	Red	5,0	4,0	10,0	7,0	5,0	7,0	5,0	10,5	7,5
6,0	Brown	6,0	4,8	12,0	8,4	6,0	8,4	6,0	12,6	9,0
8,0	Blue	8,0	6,4	16,0	11,2	8,0	11,2	8,0	16,8	12,0
10,0	Orange	10,0	8,0	20,0	14,0	10,0	14,0	10,0	21	15,0
Over 10,0	Orange									

M = Mode factor for symmetrical loading. Handling tolerance for slings or parts of slings indicated as vertical = 6°

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## Disclaimer

This manual only provides general information on the characteristics and use of Extreema® soft slings with HMPE products. Purchase of Extreema® soft slings should be made only after a thorough assessment of particular needs and suitability of a specific Extreema® soft sling with HMPE with the assistance of a skilled Lift-TEX® Heavy Lift Slings professional. Information and specifications in this user manual are indicative and subject to change. No rights can be derived.

Extreema® soft slings are sold only under contracts containing specific product specifications and our general delivery conditions. Any pictures in this brochure are indicative only and unsuitable for copying. Setups

should be assessed by a skilled Lift-TEX Heavy Lift Slings professional. Extreema® is a registered trademark of Lift-TEX® Heavy Lift Slings, The Netherlands. Dyneema® is a registered trademark of Avient.

## Wash declaration

For synthetic Extreema Round slings

- It is recommended not to use a washing machine regularly.
- Water temperature max 40°C / degrees with a mild soapy detergent.
- After cleaning/washing the sling, allow the sling to dry naturally in a warm environment (room temperature), away from direct sunlight, before use.
- Regular hand-cleaning to wipe away surface dirt and grease is preferred, and when required, rub a mild soapy detergent with a damp sponge in the affected area.
- Solutions of harmless acids or alkalis can become sufficiently concentrated by evaporation.
- Contaminated slings should be taken out of service at once, soaked in cold water, dried naturally and referred to a competent person for examination.
- Where lifting slings have been into contact with acids, and/ or alkalis, dilution with water or neutralization with suitable medium is recommended before storage.



## Extreema® soft sling checklist

- Repetitive or engineered lift?
- Drawings, pictures or other relevant information available?
- What will be lifted? (WLL, MBL, dimensions, weights, shape etc.)
- Static or dynamic lift?
- Bearing points Are there (welded on) anchoring points or lifting points on the object?
- Are the bearing points inspected?
- Type of crane hook being used?
- Is the crane hook inspected?
- What tolerances are acceptable?