




Liko

Sling inspection
and maintenance
Sling masterclass
workshop AAMHP 2014

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Hill-Rom International

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patients and their caregivers: **Hill-Rom**

Why?



Liko

- More stringent requirements according to ISO 10535 – 2006
- Became European and Swedish Standard 2007 – SS-EN 10535 – 2007
- National standards in the EU updated/replaced no later than July 2007
- AS/NZS ISO 10535:2011 ISO 10535:2006

Page 2
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What?



- The periodic inspection of the sling should take place within the time interval recommended by the manufacturer, but **at least every sixth month**
- If the sling is used and/or washed more than customary, more frequent inspections may be needed

Who Should Perform the Inspection?



The owner is responsible, but:

the inspection should be performed by a person who is suitable, has good experience and sufficient knowledge about design, use and maintenance of the sling

What Does This Mean for the Facility?



- Safety in focus
- Must perform inspections and discard worn slings
- Needs staff who can perform the Periodic Inspection
- Needs training in performing PI
- Needs time to perform PI

OR employ an external inspector



Page 5

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Critical Parts of the Sling



1. Edgings
2. Seam
3. Fabrics



Page 6

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The Life time of the Sling can be Shortened



Laundry

- Too hot
- With bleach – or other unsuitable chemicals
- Laths left during laundry
- Washing machine too full (mechanical wear)
- Tumble dry over 50°C (122°F)
- Dryer too full (mechanical wear)



Page 7

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Sling cleaning



Washing Instructions

Follow the washing instructions on the sling's product label.



Remove plastic laths (where applicable).



If necessary, pre-wash at low temperature, 25-30°C (77-86°F). Some spots disappear more easily at lower temperatures.



Machine wash at indicated temperature. Use detergent.



Tumble dry at low temperature, maximum 50°C (122°F), or dry in cabinet dryer.

✘ No chlorine bleaching.

✘ No dry cleaning.

✘ No ironing.

Alcohol Wiping

For plastic laths and products in plastic-coated net, wiping with 70% ethanol or 45% isopropanol is recommended. Plastic laths can also be wiped with water-soluble soap. However, please note that some details, for instance straps and seams, could be of a different material and may need to be machine washed to get them thoroughly clean.

Disinfection

For thermal disinfection, wash in 65°C (149°F) for at least 10 minutes or in 71°C (160°F) for at least 3 minutes. For both alternatives we recommend adding 8 minutes to ensure that the heat penetrates the fabric and that disinfection is ensured. It is important to finish the washing program with a rinse cycle.

(Ref. HSG (95)18: Hospital Laundry Arrangements for Used and Infected Linen, Department of Health, NHS).

Page 8

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The Life time of the Sling can be Shortened



Handling error

- Lifting in the handles
- Getting stuck (wheelchair, bed, sling bar)

But also through:

- Wear from the sling bar
- High usage frequency
- High load



Inspection Protocol

Requirements in the standard:

The inspection protocol should be stored safely to enable review should an accident occur

Should contain the following information:

- Date
- Identification information and serial number
- The condition of the sling
- Date for next inspection
- Signature by the person who performed the inspection

[illegible]

Structure of inspection protocols



UniversalSling, Mod. 00, 02

Periodic Inspection

7EN 160803-01

Product information:

Product No:

Serial No:

Year of production:

Customer references:

Contract No:

Name:

Address:

Page 11

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Structure of inspection protocols



Check points:

Instruction for check points, see page 2.

	Approved	To be actioned	Not approved	Comments:
1. Product label	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Fabric	<input type="checkbox"/>		<input type="checkbox"/>	
3. Edging	<input type="checkbox"/>		<input type="checkbox"/>	
4. Strap loops	<input type="checkbox"/>		<input type="checkbox"/>	
5. Leg support loops	<input type="checkbox"/>		<input type="checkbox"/>	
6. Handles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Seams	<input type="checkbox"/>		<input type="checkbox"/>	
8. Reinforcement seams (batacks)	<input type="checkbox"/>		<input type="checkbox"/>	
9. Shortening position	<input type="checkbox"/>	<input type="checkbox"/>		
10. Documentation	<input type="checkbox"/>	<input type="checkbox"/>		

Page 12

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Structure of inspection protocols



Approval to use the product *:

Approved ☐

To be actioned ☐

Not approved ☐

* If the product has one or more check points with the result "Not approved" the product must not be used. If the product has one or more check points with the result "To be actioned" these actions should be performed immediately, see the document Action Instructions for Slings. After performed actions sign below and fill in the label for Periodic Inspections placed on the sling.

If anything is unclear or if you have questions, please contact Liko or your local Liko representative. Contact information is to be found at www.liko.com.

Inspection performed by: _____ Date: _____

Final approval by: _____ Approval Date: _____

Next inspection: _____

Inspection performed in accordance with ISO 10535:2006 Annex B – Periodic Inspection.

Page 13

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Inspection Protocol

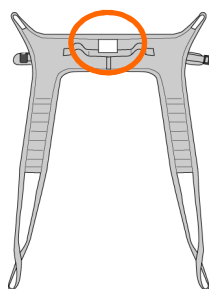


1. Product label

Check that

- max. load
- product name
- product number
- serial number
- year of manufacture
- laundry instructions

are legible on the product label



Page 14

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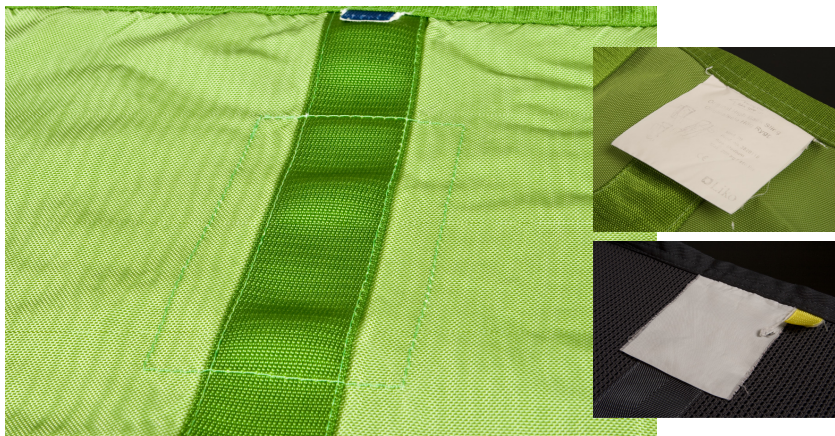
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1. Product label



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Action Product Label

New product label to be ordered from your
local Liko representative

Indicate product number, and serial number
if possible – to be able to get the right
maximum load of the sling

The product label is sewn on by the
customer

Preferably onto the edging

Otherwise, carefully onto the fabric

Synthetic thread is recommended

Leather needle must not be used

Page 16

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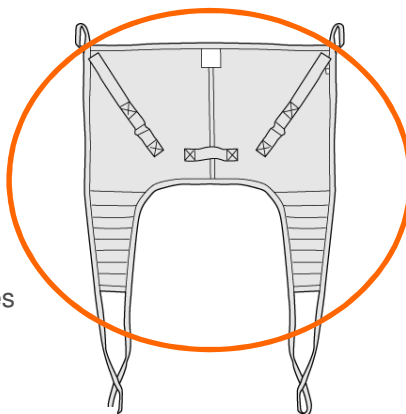
2. Fabric

Check that:

the fabric has no holes,
is not thin or worn

no wear or holes in the
fabric has occurred along
the border

the fabric under the handles
is intact/undamaged



Page 17

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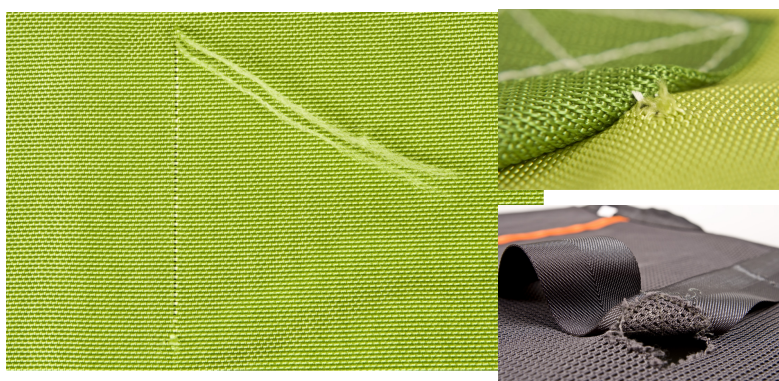
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2. Fabric



Page 18

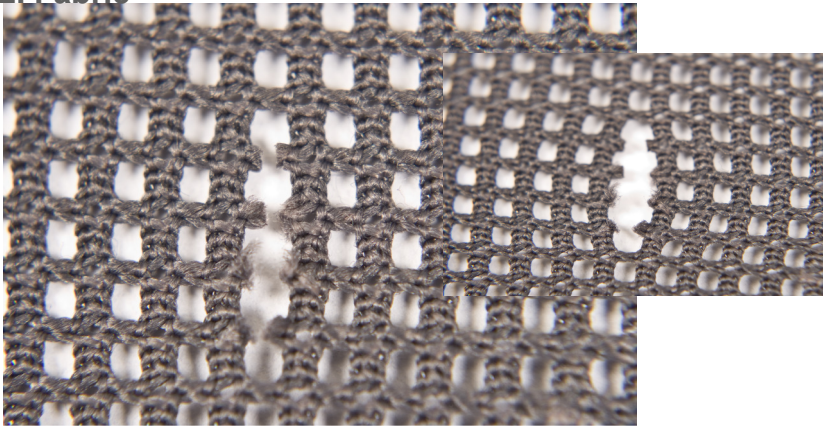
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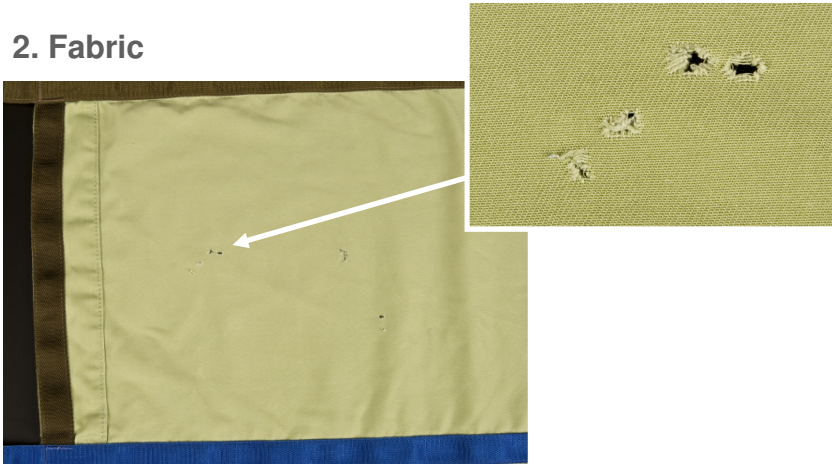


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2. Fabric



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2. Fabric



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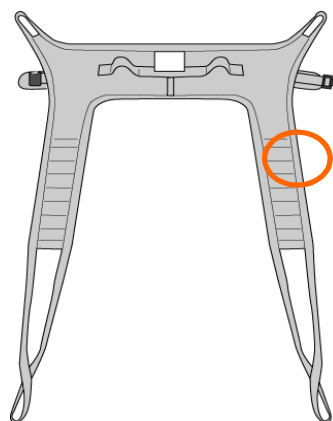
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3. Edgings

Check that the edging
is not damaged



Page 22

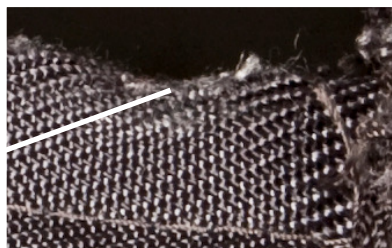
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3. Edgings



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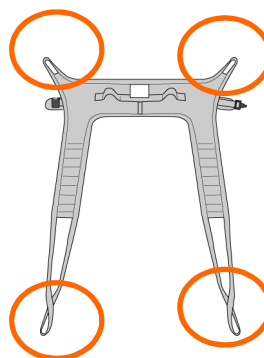


Inspection Protocol

4. Strap Loops

5. Leg Support Loops

Check that the straps have not been damaged by the sling bar. This is most often evidenced by broken threads



Page 24

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4. Strap Loops

5. Leg Support Loops



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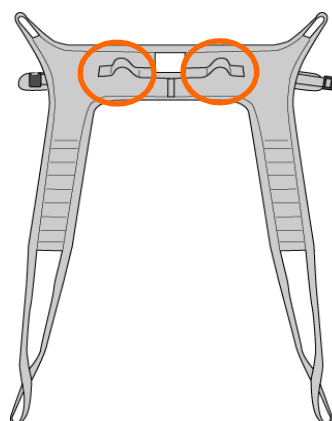
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6. Handles

Check that the seams on the handles are intact/undamaged



Page 26

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6. Handles



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Action Handles




Action

- If the seam is torn and the fabric is undamaged, a new seam can be sewn by the customer
- Synthetic thread is recommended
- No leather needle

Page 28
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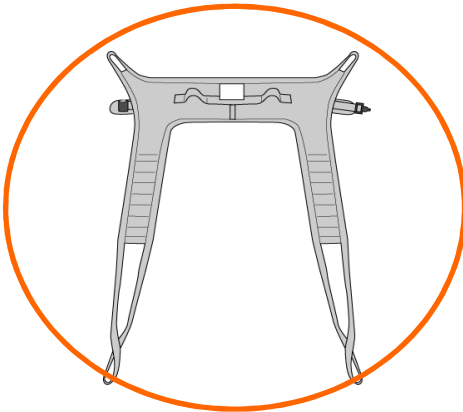
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Inspection Protocol


7. Seams

Check that threads and seams are intact



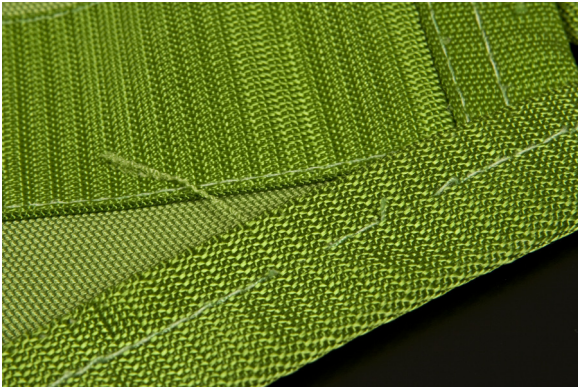
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7. Seams



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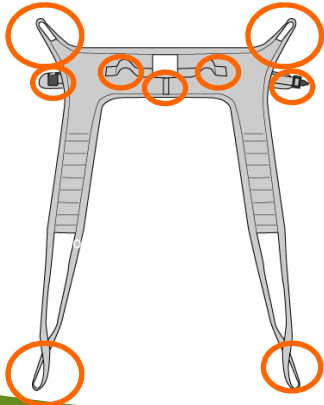
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8. Reinforcement seams (bartacks)

Check that threads and seams are intact/undamaged



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8. Reinforcement seams (bartacks)



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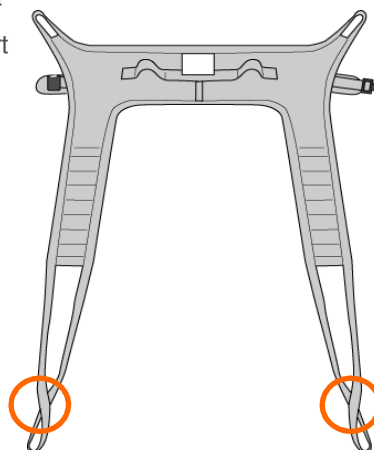
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9. Shortening Position

If the shortening position has damaged seams and a shortening of the leg support loop is desired, a knot can be tied in the loop. This will make the leg support loop approx. 10 cm (4") shorter



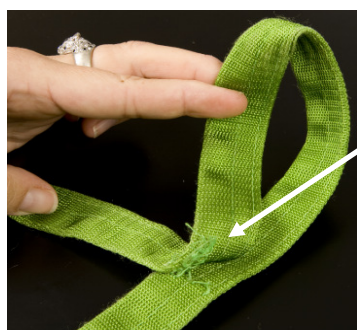
Page 33
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9. Shortening Position



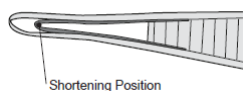
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Action Shortening Position



9. Shortening Position



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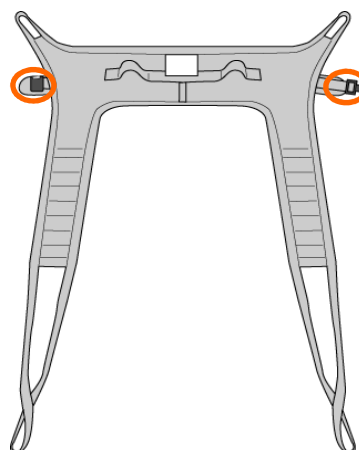
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10. Buckle

Check the function of the belt buckle by closing it and then pulling on the belt to ensure that the buckle does not open. If the buckle opens, the assessment would be "Not approved" or "To be actioned"



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Inspection Protocol

11. Laths: If the product is not completely functioning due to missing laths, we recommend that they be completed



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12. Documentation

Check that the current instruction guide is available
Instruction guides can be downloaded free of charge from www.liko.com

