

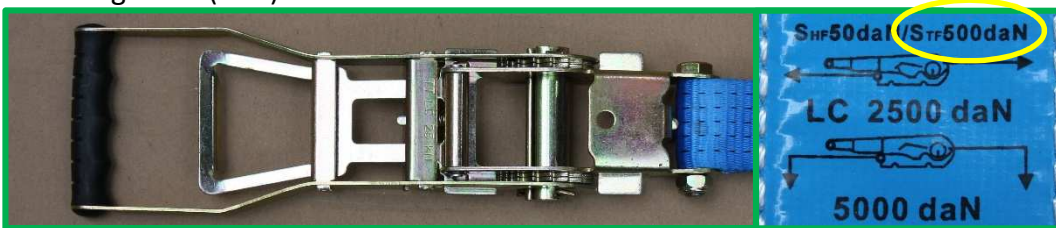
# 1 Tools for cargo securing / cargo securing material

## Belts and ratchets

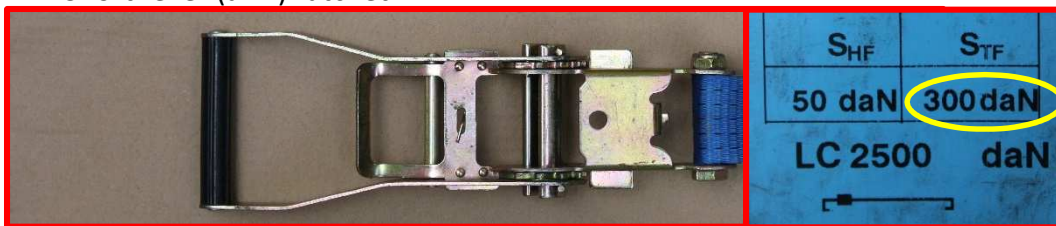
These should have the following properties

- Long-lever (arm) ratchet / EN 12195
- Standard tension force (STF) = 500 daN
- Lashing capacity LC  $\geq$  2500 daN
- Elongation  $\leq$  7%

Long-lever (arm) ratchet



Short-lever (arm) ratchet



The following photos shows material which can no longer be used for load securing.



Every belt and ratchet must have a label with technical specifications and product features. These labels has to be undamaged and readable. Otherwise the belt or ratchet can no longer be used for cargo securing.

## Edge protectors

The six different edge protectors below listed are mandatory for all paper reels transports with trailers in Europe. No other edge protectors will be accepted until further notice. The list has been compiled by UPM drawing upon the knowledge built up over many years of cargo securing and damage prevention. UPM reserves the right to remove or to add further products!

### TRANSPORT-TECHNIK GÜNTHER

Product name:

**Kantenschützer KS ABS/ PC 185 x 145 x 150 mm**

Art.no: KS 1000

Contact details for commercial contacts:

Transport-Technik Günther GmbH & Co. KG

Derchinger Str. 125

86165 Augsburg, Germany

Email: [info@transport-technik.de](mailto:info@transport-technik.de)

Phone: + 49 821 543 788 40

[www.transport-technik.de](http://www.transport-technik.de)



### MIKO PLAST AS

Product name:

**Miko Edge Protector HD™**

Art.no: KB-374-003

Contact details for commercial contacts:

Miko Plast AS

Kongsvein 94

1177 Oslo, Norway

Email: [post@miko-plast.com](mailto:post@miko-plast.com)

Phone: + 47 23 38 47 73



### TRANSPORT-TECHNIK GÜNTHER

Product name:

**Kantenschützer KS PP 185 x 145 x 150 mm**

Art.no: KS 1005

Contact details for commercial contacts:

Transport-Technik Günther GmbH & Co. KG

Derchinger Str. 125

86165 Augsburg, Germany

Email: [info@transport-technik.de](mailto:info@transport-technik.de)

Phone: + 49 821 543 788 40

[www.transport-technik.de](http://www.transport-technik.de)



### TRANSPORT-TECHNIK GÜNTHER

Product name:

**Kantenschützer KS PP 190 x 150 x 160 mm**

Art.no: KS 1015

Contact details for commercial contacts:

Transport-Technik Günther GmbH & Co. KG

Derchinger Str. 125

86165 Augsburg, Germany

Email: [info@transport-technik.de](mailto:info@transport-technik.de)

Phone: + 49 821 543 788 40

[www.transport-technik.de](http://www.transport-technik.de)



### SANUBE

Product name: **PaperMAX**

Art.no: 14216011

Contact details for commercial contacts:

Sallaberger Nutzfahrzeugbedarf

Hartwagen 12

4776 Diersbach, Austria

Email: [office@sanube.at](mailto:office@sanube.at)

Phone: +43.7766/ 20500

[www.papermax.info](http://www.papermax.info)



### SPANSET GMBH & Co. KG

Product name: **KaSIPlus**

Art.no: D055985

Contact details for commercial contacts:

SpanSet GmbH & Co. KG

Attn.: Hans-Jürgen Weisbecker

Jülicher Str. 49-51

D-52531 Übach-Palenberg, Germany

Email: [jweisbecker@spanset.de](mailto:jweisbecker@spanset.de)

Phone: + 49 (0)2451-4831-133

[www.spanset.de](http://www.spanset.de)



## Non-slip materials

These should have the following properties

- A certified sliding friction coefficient  $\geq 0,6 \mu$
- Dimensions
  - Length = adapted to the reel diameter
  - Width  $\geq 150 \text{ mm}$
  - Height = 3 mm
- undamaged and clean

The multiple use of non-slip materials must be certified by the manufacturer.

