Technical Information

Triglav
Page 1

Installation instructions EN 1176-1
Maintenance instructions EN 1176-1

17.03.15

General

The work described is to be carried out by specialist personnel.

Dimensions (Measurements of the system / figure 2)

Overall size	3.0 x 3.0 m
Clearance	2.5 m
Minimum space	7.2 x 7.2 m
Height	3.0 m

Age suitability
From 4 years

Number of users
Approx. 25 children

Maximum height of fall
3.0 m

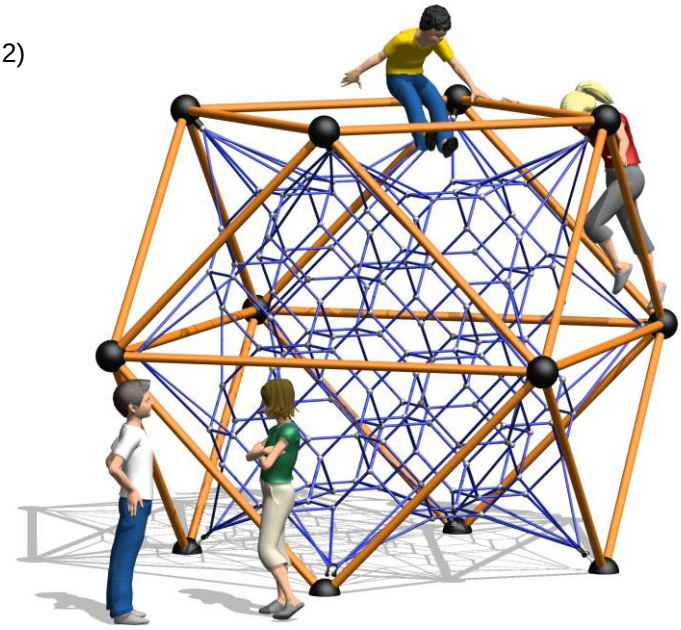


Figure 1 Triglav

Ground quality

Please refer to EN 1176-1 for ground conditions in the play area. Sand, wood chips, gravel and synthetic safety ground coverings with HIC inspection are permitted by this Standard. We recommend a minimum thickness of 400 mm of gravel (grain size 2 – 8 mm) or sand (grain size 0.2 – 2 mm). If you use a synthetic protective surface, it must be sure that all relevant parts for the maintenance (see maintenance instruction on page 8) are every time accessibly. If necessary consult smb.

Installation Tools

Tools supplied:

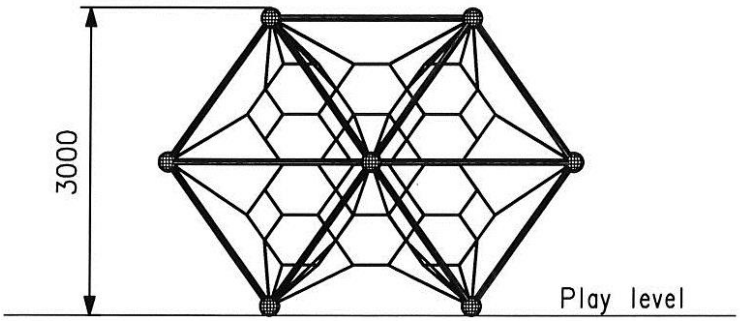
1 off	Special socket spanner, size 32, with angled extension
1 off	Socket spanner, size 32, with extension
1 off	Socket spanner, size 30
1 off	Allen key, size 10, with extension rope roll

Additional tools required:

Usual assembly tools

1 off	Double ladder, approx 4.0 m long
1 off	open jawed spanner size 32
2 off	open jawed spanner size 24 (if mounted with anchorage frame)

smb
Seilspielgeräte GmbH Berlin
Technikerstraße 6/8
15366 Hoppegarten
Germany
Phone +49 (0)3342 50837 20
Fax +49 (0)3342 50837 80



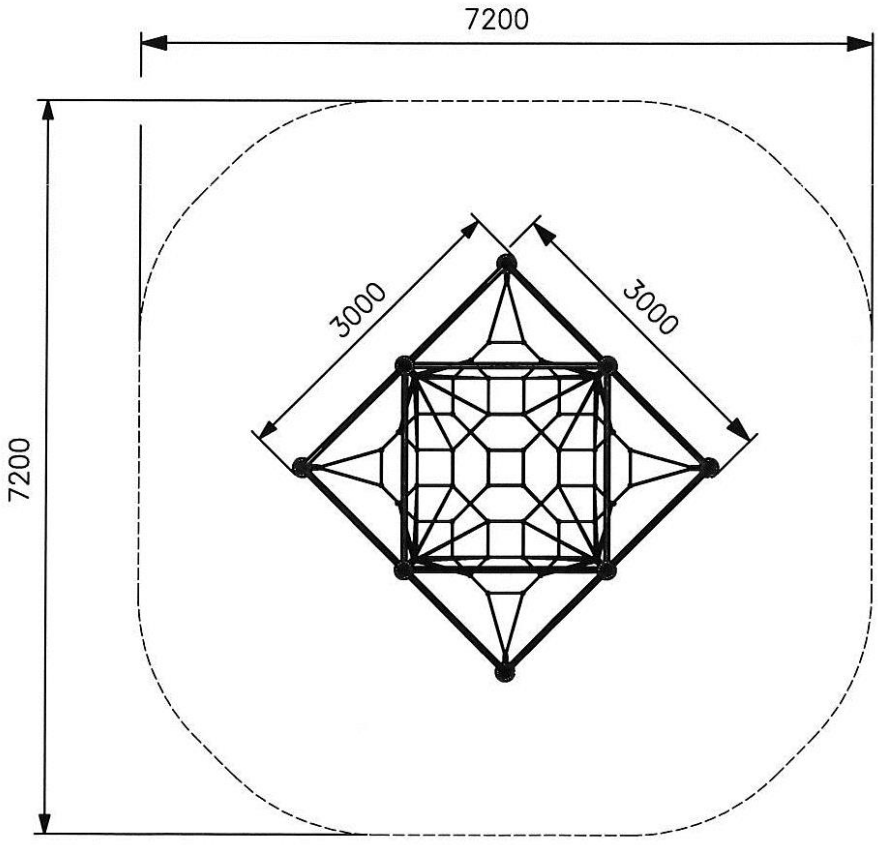


Figure 2 **Side view /**
Top view with safety area
M 1:75

smb
Seilspielgeräte GmbH Berlin
Technikerstraße 6/8
15366 Hoppegarten
Germany
Phone +49 (0)3342 50837 20
Fax +49 (0)3342 50837 80

Assembling with foundations

To make the foundations, the spherical connection joint **K 11** and four pipes (length 1810 mm) are used, from which an initial foundation framework is made **figure 3**.

Note: As the parts are to be used again, care must be taken when handling

The **K11** connection joints are screwed together to form a square with the aperture facing upwards across four pipes. The concrete anchors are fixed below the connection joints. The framework is to be aligned in a **balanced** manner and **at the appropriate height**. The concrete anchors are to be of such a length that they exceed the height of the foundations and find a hold in the earth when the foundation framework is temporarily constructed **(Figure 3)**. The concrete can then be poured.

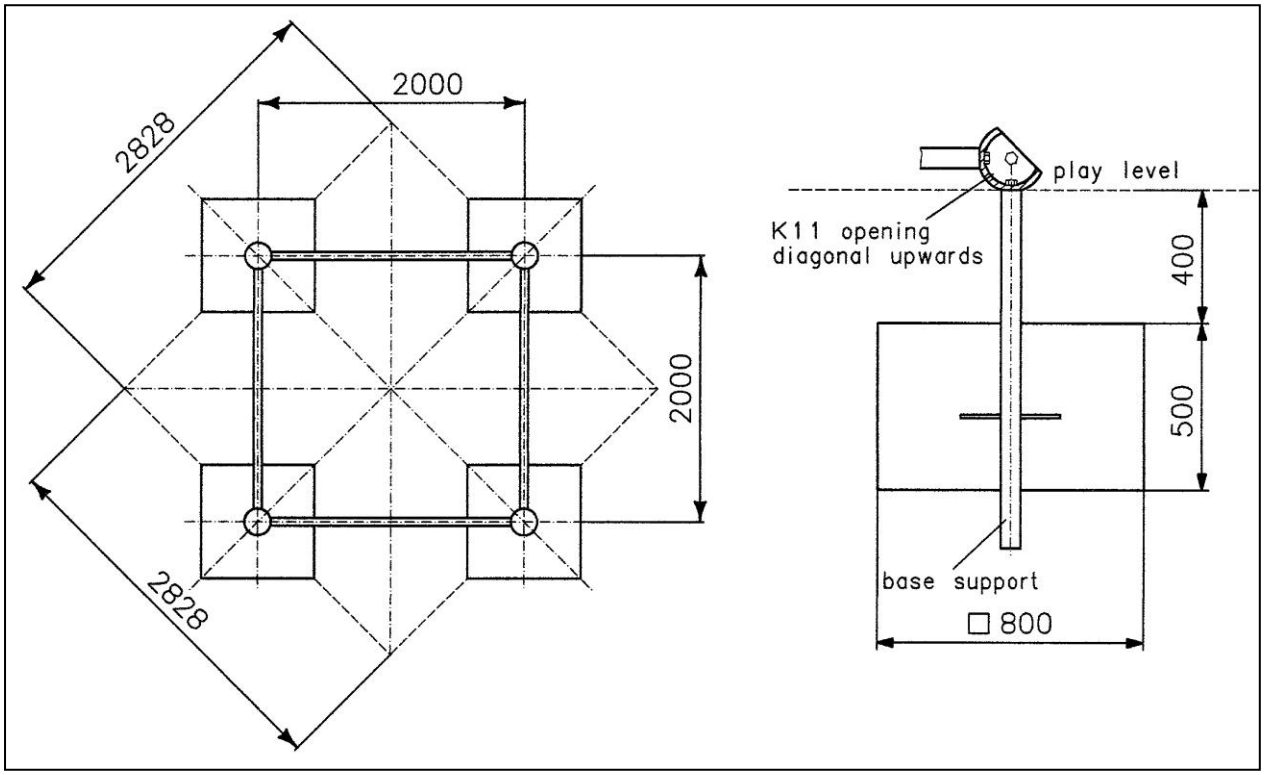


Figure 3 **Arrangement of the foundations**

- Minimum grade of concrete for the foundations: **C20/25 (B25)**
- Quantity of concrete required: **about 1.3 m³**
- We are working on the assumption that the base is grown soil. If this is not the case, please consult us as the foundation dimensions may need to be changed.

smb
Seilspielgeräte GmbH Berlin
Technikerstraße 6/8
15366 Hoppegarten
Germany
Phone +49 (0)3342 50837 20
Fax +49 (0)3342 50837 80

Assembling with an anchoring frame

Screw down the hot dip galvanised square tubular frame with the plug-in system as shown in **figure 4**. This frame must be placed in the soil at a depth of 470 mm below the play level, and must be level and square. This framework ensures that the frame tubes and the hollow balls can be screwed in correctly.

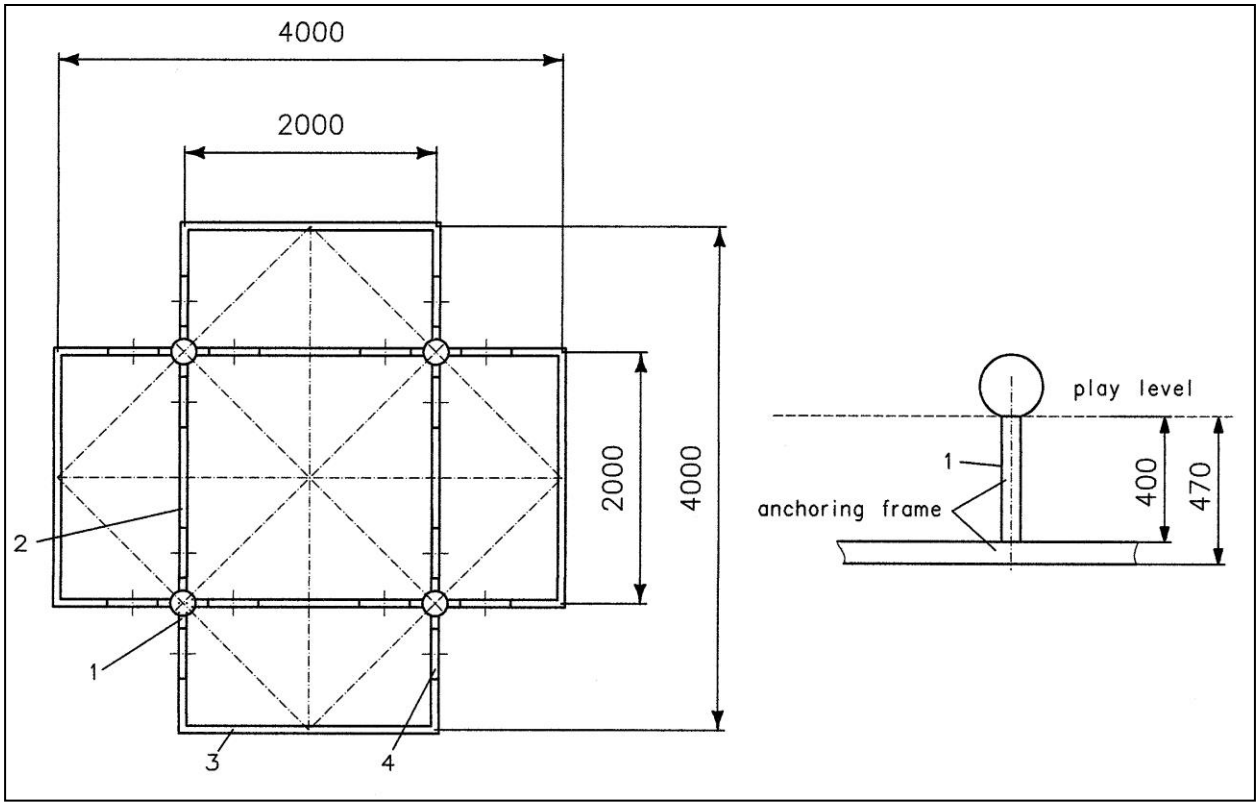


Figure 4 anchoring frame

no. 1 x4 tube anchor
no. 2 x4
no. 3 x4
no. 4 x16 connecting tube

smb
Seilspielgeräte GmbH Berlin
Technikerstraße 6/8
15366 Hoppegarten
Germany
Phone +49 (0)3342 50837 20
Fax +49 (0)3342 50837 80

Assembling the frame

First of all, the foundation framework is to be taken down and the parts are to be used again. The structural arrangement of the pipes and connection joints may be seen in **figure 5.** The assembling of the frame goes first up to level 1. It is important to watch the arrangement of the 4 horizontal tubes.
The code number which is stamped onto the hollow balls (11, 12, 13) is always facing upwards.

The framework is then to be assembled up to **level 1**. **The spherical apertures face outwards.** The screw connections (lock washer and HV nut M20, SW32) are initially to be fastened hand tight and, after completion up to **level 1**, finally tightened firmly.

Further construction now takes place, in a corresponding fashion, up to level 2. In order to have a safe working platform for the next level, it is recommended that wooden planks are to apply onto the completed level.

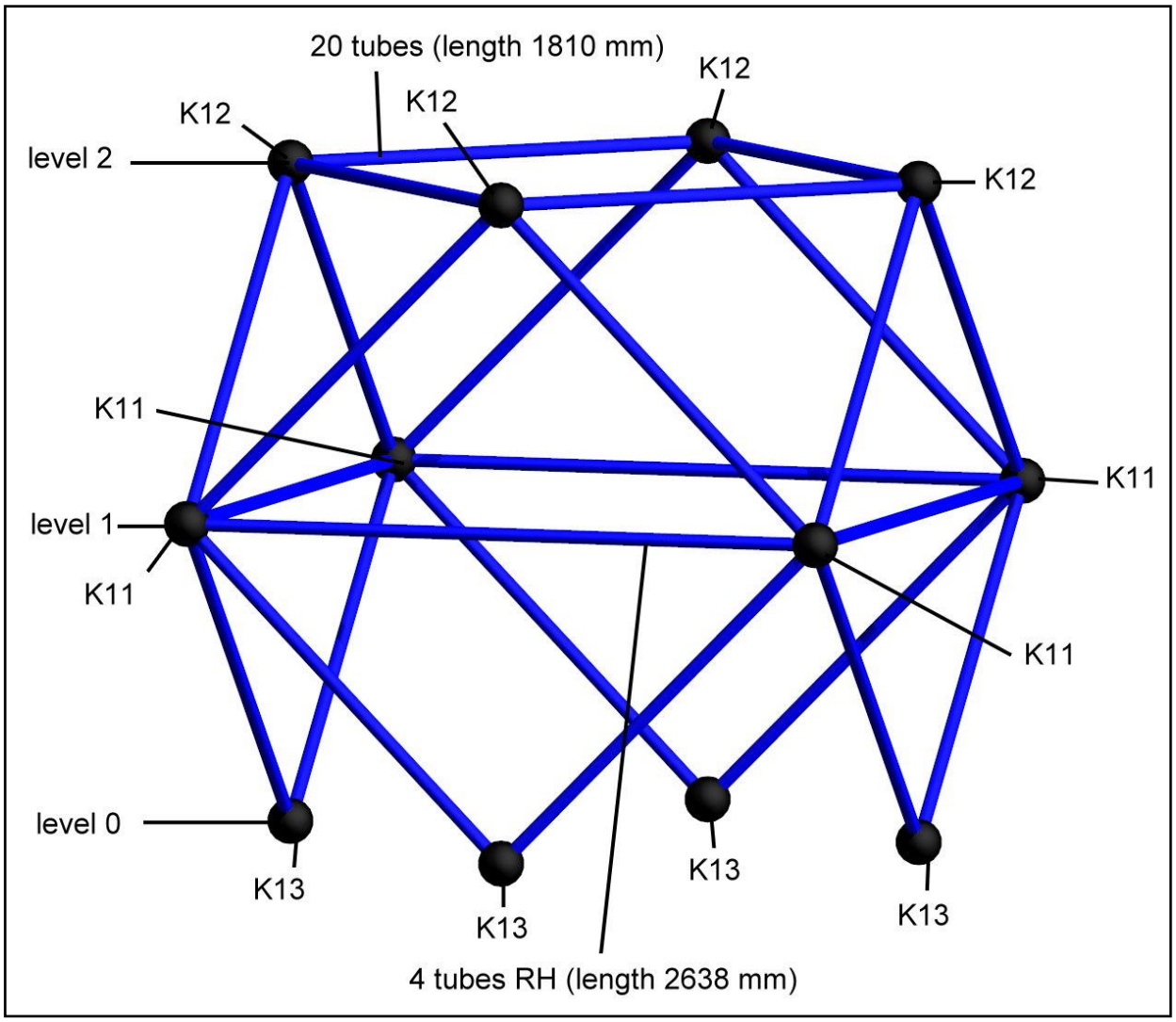


Figure 5 **Arrangement of the hollow balls and the tubes.**

smb
Seilspielgeräte GmbH Berlin
Technikerstraße 6/8
15366 Hoppegarten
Germany
Phone +49 (0)3342 50837 20
Fax +49 (0)3342 50837 80

Assembling the space netting

The space netting is provided with appropriate markings on the straining screws for the joints which are used for tightening. First place the four straining screws with the marking **K 12** into the uppermost joints **(level 2),** at first only tightening to the mark on the tensioning cylinder **(figure 6).** The tensioning is to be carried out with a clamping nut and the special socket key SW 32.

Now tighten at the four tightening points for joints **K 13 (level 0).** At this point the tensioning points have to be tensioned to the respective check nut **(figure 7).**

Now the tensioning of the hollow ball **K 11 (level 1)** can follow, but this has to happen in same manner to the mark on the tensioning cylinder.

Caution:
Please note, that at all clamping points **the ropes are not distorted** when you tensioning the net.
If necessary hold it firm with a practical tool.

After tensioning are the clamping nuts of all hollow balls K11 and K12 with the delivered check nuts M20 SW32 and a snap ring to secure.

To tighten the check nuts can on the respective thread bolt M20 an Allen key SW 10 (figure 6) to be used to hold against it.

At last the open hollow balls have to be closed. The caps have to get screwed onto the hollow balls (K11, K12 and K13) with the binder connection (figure 6).

Please make sure that the caps are placed even, so that our company logo is readable. Thank you!

smb
Seilspielgeräte GmbH Berlin
Technikerstraße 6/8
15366 Hoppegarten
Germany
Phone +49 (0)3342 50837 20
Fax +49 (0)3342 50837 80

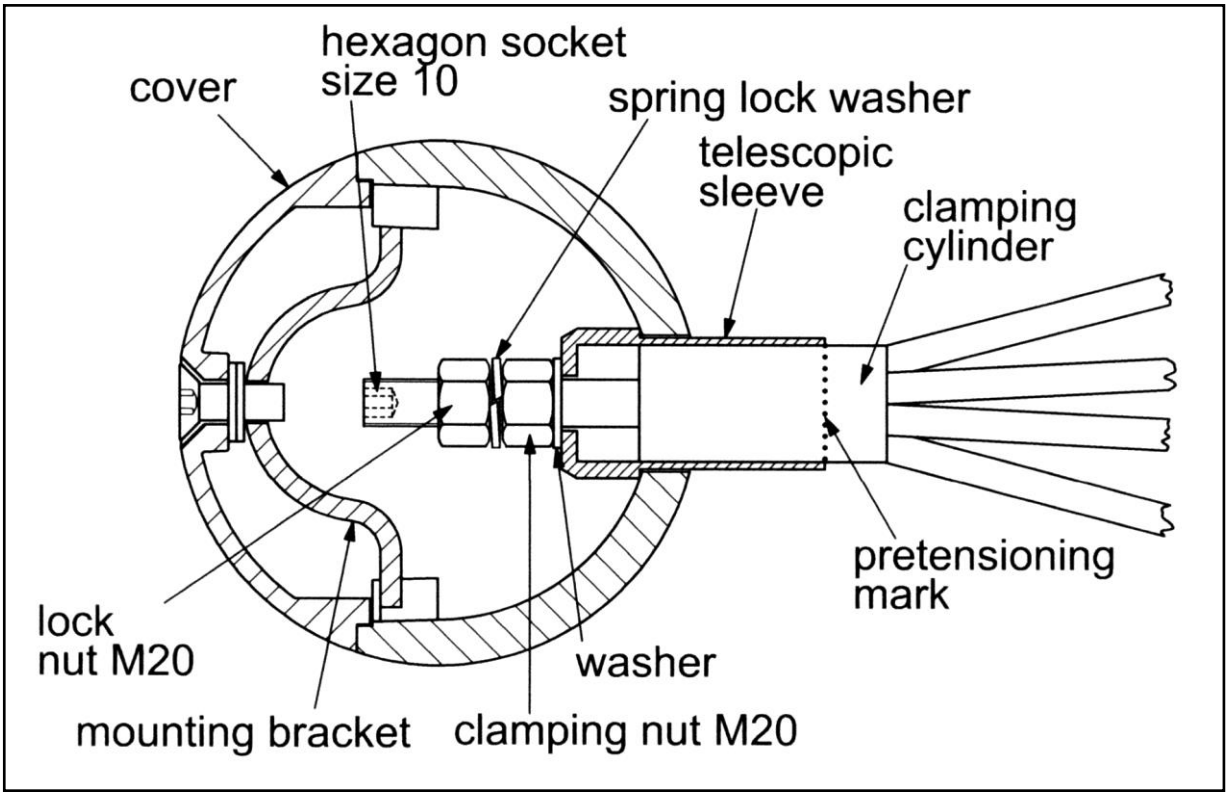


Figure 6 **Secucope tensioning system**

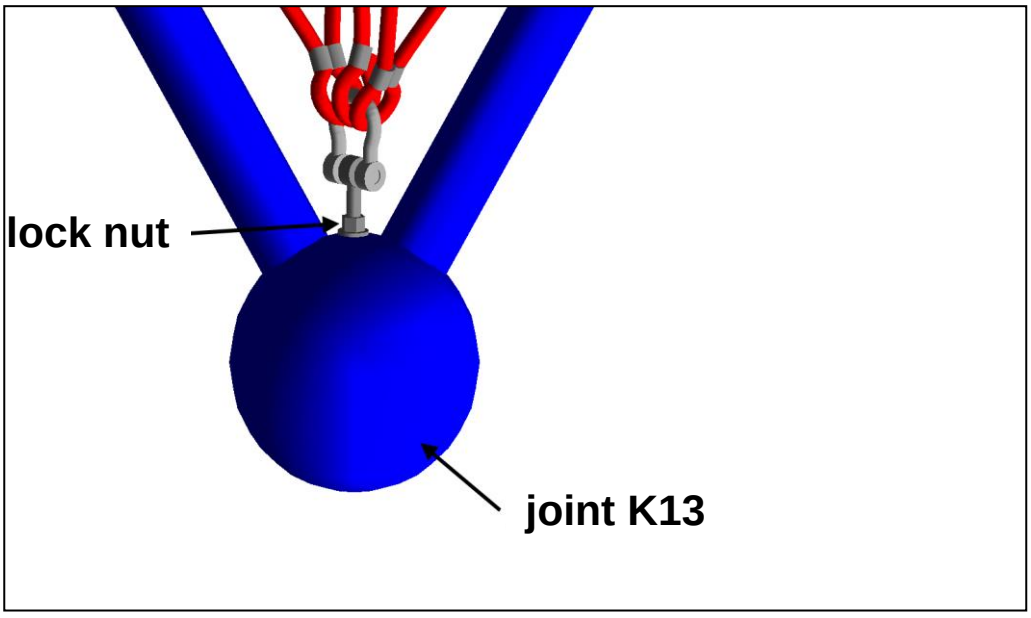


Figure 7 **Hollow ball K13**

smb
Seilspielgeräte GmbH Berlin
Technikerstraße 6/8
15366 Hoppegarten
Germany
Phone +49 (0)3342 50837 20
Fax +49 (0)3342 50837 80

The first re-tensioning oft he space netting:

!! Initial re-tensioning should be carried out after one tot wo weeks of use (reference „operational inspection“ for more details) !!

Maintenance instructions EN 1176-1

Routine visual inspection

The frequency of this inspection depends on local conditions (high/low usage, vandalism, air contamination, effects of the weather).

The net is to be checked for damage, particularly for line breaks. Care must be taken to ensure that the hollow balls are sealed.

Operational inspection (every 6 months)

- The first re-tensioning of the equipment must be carried out after it has been used for between 1 and 2 weeks. Re-tensioning is done using the clamping nuts M20 which are situated in the hollow spheres of the **level 1 and 2 (K 11 and K 12)**. After removing the cover, using a size 10 Allen key, the locking nut M20 SW32 is to loosen at first. The re-tensioning is carried out on clamping nut SW 32 **beyond the pretensioning mark**. All connection joints of **levels 1 and 2** should be re-tensioned in a uniform fashion. After being tensioned, lock the clamping nuts with the locking nuts which you are removed beforehand **(figure 6). Please note the right position of the spring lock washer between the two nuts**. **When you tightened the lock nut, you can hold up the M20 bolt with an Allen key size 10 (figure 6).** Now the hollow spheres are locked with the prepared ball covers via the retaining bolt in the cover. Please fix all the covers that our logo is readable. Thank you.

Caution:
Please note, that at all clamping points **the ropes are not distorted** when you tensioning the net. If necessary hold it firm with a practical tool.

- Re-tensioning must be carried out once or twice again until the lengths of rope are gone.

Main inspection (every 12 months)

In addition to the visual and operational inspection:

- Check the anchor pipes or the anchor frame for signs of excessive corrosion, especially at the transition of the concrete foundation and the anchor pipe (when foundation anchoring).
- Check to see that the pipe connections are sealed tightly in the hollow spheres. If a screwed connection has become loose, it is to be tightened inside the sphere.
- Check the clamping systems for damage.