



Fig. 1

Parts list

Safety instructions:

- Do not place your feet under the reeling head when mounting or removing reeling heads.*
- When assembling the reel to the reel bracket, ensure that the reeling heads are intact and the reel will fit between the reeling heads.*
- Check that the reeling heads are inside the core. However, do not press the reeling heads against the core using too much force, but rather leave a gap of 2 mm between the core end and thrust ring.*
- Do not place your hands between the reeling head and core when pushing the core or reel in place.*
- Do not place your hands between the reeling head and sensor ring when pushing the core or reel in place.*
- Do not place your feet under the reeling head when mounting or removing the reel.*
- General safety regulations of the plant must always be observed.*

Function description

Before starting the reel-up operation the reeling heads are pushed horizontally into the openings of the core ends.
 By the action of rotational moment, the reeling head clamps to the core end.
 The clamping force depends on the tightness of the web and ends as the pull ceases.
 Upon completion of the reel-up operation the reeling heads are pulled out of the core ends.
 To ensure good operational reliability, the reeling heads must be kept in good condition by regular inspections and maintenance.

Product description

When the Combination Reeling head KILL 76.2/150 is used, changing from core size 76.2 mm to core size 150 mm is done by placing the KILL 150 part onto the KILL 76.2 part using the centre screw.

Pulling action of the KILL 150 reeling head takes place by means of the 3rd claw of the draw flange (item 10).

Changing from 150 mm core size to core size 76.2 mm is done by unscrewing the centre screw and removing the KILL 150 part from the KILL 76.2 part together with the centre screw.

The KILL Combination Reeling head is composed of parts described in Fig. 1. In this construction a guided pin and key assembly, by the action of rotational moment, pushes the sector plates (item 4 or 13) outwards against the wall the core opening, clamping the reeling head to the core.

The reeling head is made of tampered high quality alloy steel and protected by black finishing.

Mounting and Putting into Use

The reeling head is delivered from the manufacturer completely assembled and protected against corrosion.

Before using the reeling head the first time, the protective agents should be removed by wiping the surfaces with a clean cloth or a paper towel. If necessary, some solvent can be used.

The reeling head is pre-lubricated for the first use.

Mounting the KILL reeling head to the reeling station.

The reeling head is mounted to the reeling station by fitting the back plate (item 1) of the reeling head to the mounting flange fitted to the reeling station shaft. The guide and mounting surfaces must be cleaned before mounting the reeling head.

Unscrew the reeling head screws (item 20) and remove the auxiliary flange (item 9).

Align the holes for the mounting screws (item 23) located in the outer body (item 3) and in the thrust bearing (item 16) with the holes for the back plate (item 1) mounting screws and install the screws (item 23) so that the screw heads are flush with the rear surface of the back plate.

In a spring-return reeling head the outer body tends to stay in the middle position.

Lift the reeling head locating it into the guide in the reeling station mounting flange and install the mounting screws.

The tightening torques of the back plate mounting screws (item 23) are:

M12	135 N
M14	250 Nm
M16	330 Nm

Mount the auxiliary flange (item 9) in place and install the screws (item 20).

The outer body (item 3) and the sector plates (item 13) must turn without resistance when they are rotated back and forth by hand. In a spring-return reeling head the springs keep the outer body with the sector plates in the middle position. The reeling head is now ready for use.

Cleaning during operation

In connection with each core change, the reeling head should be cleaned by blowing air through the air hole in the cover (item 5) to remove e.g. fibre dust released from the core from inside the reeling head.

When air is blown into the head, the sector plates (item 13) are pushed outwards and the air comes out between the edges of the sector plates (item 13). After cleaning, the outer body (item 3) and the sector plates (item 13) must turn without resistance when they are rotated back and forth by hand. Repeat the blowing operation, if necessary. Note: Spring-return reeling head.

Maintenance

After approx. 3 months of use the following cleaning and maintenance operations shall be carried out:

Detach the reeling head from the reeling station mounting flange by first unscrewing the screws (item 20) and by removing the auxiliary flange (item 9). Align the holes for the mounting screws (item 23) in the thrust bearing with the ones in the outer body.

Unscrew the mounting screws (item 23) and bring the reeling head with its parts to the maintenance location.

Place the reeling head on a work bench in vertical position for maintenance.

First unscrew the cover (item 5) mounting screws (item 19), wedge up the outer body and remove the cover carefully from the slot in the outer body. The return mechanism of the spring-return reeling head fitted to the cover (item 5) will come off together with the cover.

Lift off the outer body (item 3) with the sector plates (item 13) while supporting the pins (item 15).

Remove the pins (item 15) and lift off the guide bushing (item 6) and the thrust bearing (item 16).

Wash the parts and clean the air holes.

Inspect the lifting and bearing surfaces of the sector plates (item 13) and the lifting body (item 2). Check the condition of the pins (item 15).

Inspect the bearing and guide surfaces of the guide bushing (item 6) and the outer body (item 3).

The minimum thickness of the thrust bearing (item 16) = 2.5 mm.

If other parts are worn more than 0.2 mm, such parts may have to be changed.

If any cracks are found in the parts, such parts must absolutely be changed.

The assembly is done primarily in reverse order.

Ensure that the sector plates (item 13) are aligned with the openings in the guide bushing (item 6) and, in the case of the spring-return head, "the whisker" in the spring seat (item 10) is in place in the hole in the outer body (item 3) and lifting body (item 2).

- Lubricate the following items
- Thrust bearing (item 16) and its counter surfaces
 - Guide bushing (item 6) sliding surfaces
 - Pin (item 15) rolling surfaces
 - Sector plate (item 13) rolling surfaces
 - Lifting body (item 2) rolling surfaces
 - Outer body (item 3) gliding surfaces

It is recommended to use synthetic lubricants (grease) with the following properties:

- high corrosion resistance, adherence and lubricating capacity
- heat resistance exceeding 230 °C
- high pressure and shock resistance

After mounting, check that the parts are moving without resistance. Any malfunction found in the spring-return mechanism must be remedied by the supplier only.

Malfunction

The reeling head cannot be inserted into the core

- Check that the head fits the core. The diameter of the outer body (3) must be less than 0.3 mm the inner diameter of the core opening.
- Remove the possible damages from the edges of the core end.
- Check the operation of the reeling head. If the sector plates (item 13) do not move loosely and are not flush with the outer surface of the outer body, tap on the reeling head with a soft hammer and blow it clean. Repeat this procedure, if necessary.

The reeling head slips inside the core

- The core end is damaged. Change the core.
- The core is soft and gives in (one of the sector plates (item 13) is pressed into the core wall).
- Check the tightness of the web.
- Check that the head fits the core.
- The reeling head is dirty or worn. Check the operation of the reeling head and carry out maintenance operations according to instructions, as necessary.
- Poor grip. Replace the sector plates (item 13) with grooved plates. *NOTE! Grooved sector plates (item 4) are not included in the standard delivery.*
- For soft, worn or slippery cores, so-called extended reeling heads are available.

The reeling head does not come off the core

- A sector plate (item 13) has been pressed into the core wall (the core is soft). Check the condition of the cores before using them and check the tightness of the web.
- The reeling head is dirty or worn. Carry out maintenance operations according to instructions.

Abnormal noise from the reeling head

- Inspect the reeling head. Carry out maintenance operations according to instructions.

If you unable to remedy a malfunction, please call Oy Klim-ko Ltd's service.

Contact information

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