



Via A. de Gasperi, 16
25010 Remedello (Bs) Italia
Tel. +39 030 / 95 79 011
Fax +39 030 / 95 72 44
E-mail: boxy@boxy.com
Internet: <http://www.boxy.com>



SPECIAL EQUIPMENT

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Besides metallic reels,  , located in Remedello (Bs), Italy, has been designing and manufacturing special equipment for the wire and cable industry for thirty-five years now.

This features specifically the handling of reels and wire coils.

Boxy catalogue for special equipment lists :

- **SOLMEC**
- **LIFTY**
- **BILANCINO**
- **TILTY**
- **RIBAIR**
- **ROLLER CONVEYOR BELT**
- **KOILER**
- **BOSCO 3-4 TIE RODS**
- **BOSCO WITH RING NUT**
- **BOSCO WITH CENTRAL SCREW**
- **PNEUMATIC BOSCO**
- **HYDRAULIC BOSCO**
- **BOSCO WITH CENTRAL SCREW + SOLMAT**

All the details regarding the equipment (such as, for example for the take-apart reels: strapping slots, cardboard tubes seat, lift pockets / rings, replaceable bushings, central hole size and taper, drive holes size and layout, adapters, etc.) are manufactured upon customer's specifications.

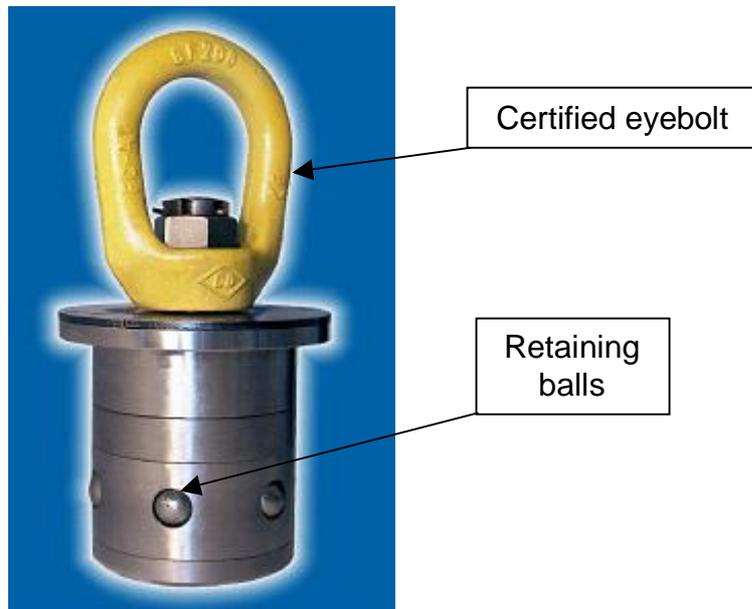
A manual with the equipment operating instructions and maintenance are supplied with the product.

BOXY SPECIAL EQUIPMENT IS CE-MARKED.

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SOLMEC

This product is used for lifting reels in vertical axis.
It is inserted into the reel central hole. By lifting it, the retaining balls expand and clamp inside the reel hub.
SOLMEC is operated automatically.

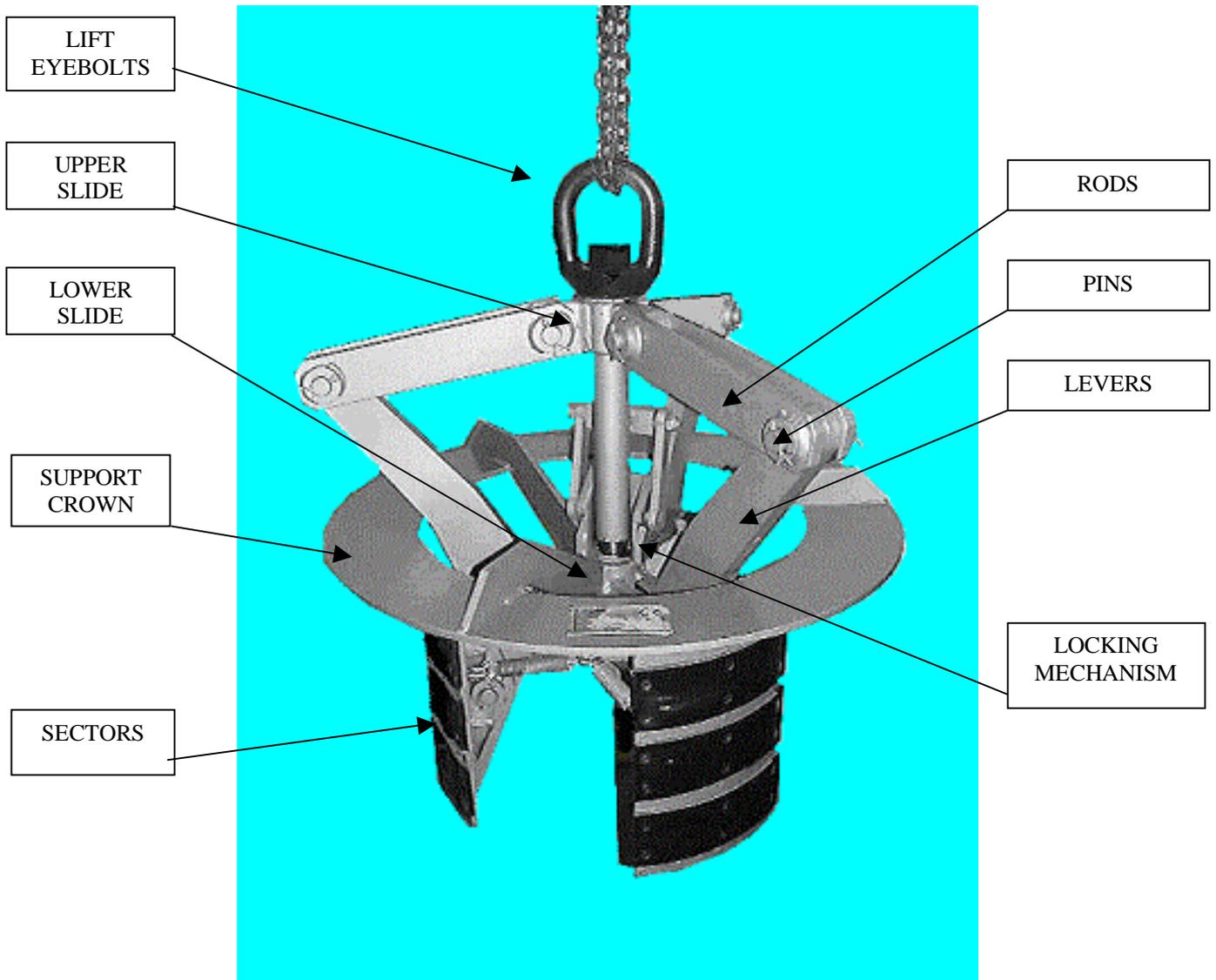


LIFTY

This product is used for lifting wire coils laid in vertical axis. It is inserted into the coil hole. By lifting it, the rubber-coated clamps expand and take hold of the coil.

LIFTY is fully automatic.

It is suitable for one coil dimensions.

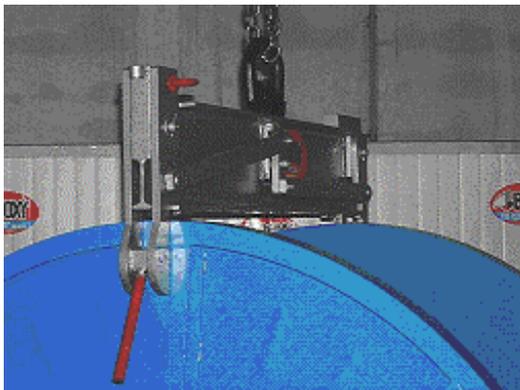


BILANCINO

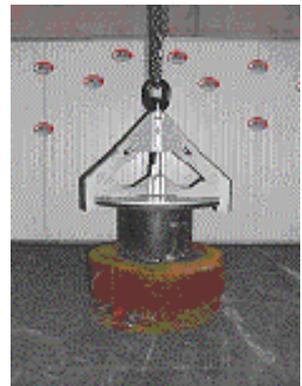
This product is used to lift full or empty reels in horizontal or vertical axis. The «Bilancino» clamps are inserted into the lift pockets or just below the rings of the outer reel flange.



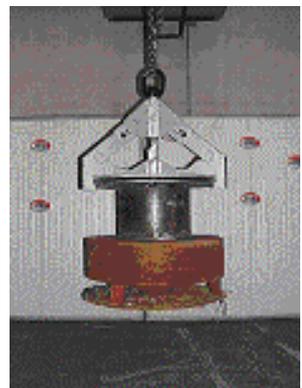
(positioning)



(inserting)



(lifting)



TILTY

This product is used to tilt reels or coils, from horizontal to vertical axis and vice-versa.

Regardless of the weight to tilt, TILTY can be electro-mechanical, electro-hydraulic or manual.

On request, the unit can be provided with rollers for the coil strapping operation. TILTY can be used laid on the floor or buried in the ground.

If TILTY is buried in the ground, its loading cradle is flush with the floor, therefore the reel can simply be rolled onto the platform.

The loading/unloading side is protected by photoelectric cells for maximum safety.

- **ELECTRO-MECHANICAL TILTY**

It is used to turn reels with the flange diameter bigger than 800mm and weight below 3500 Kg.

It is suitable for various reel types sizes.



Detector

Control panel



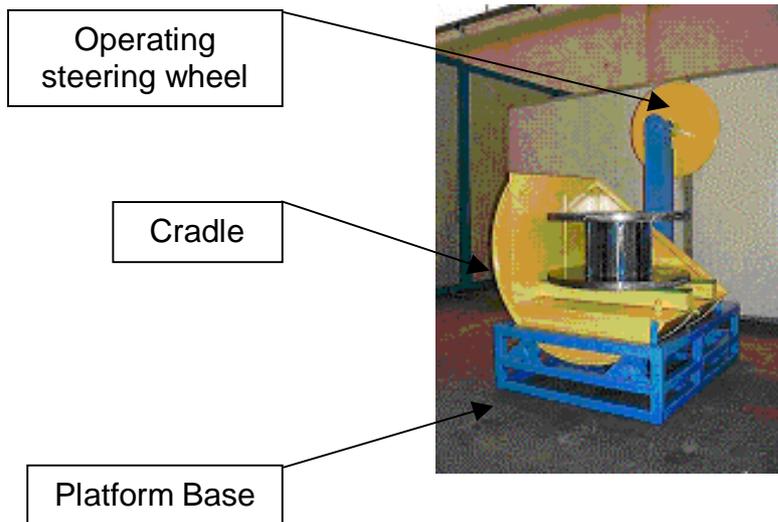
Platform base

Cradle

1. The reel comes out of the take-up / winding machine in horizontal axis.
2. The reel is then positioned on the TILTY.
3. By simply pressing a button the reel is turned from horizontal to vertical axis and vice-versa.
4. Once the tilting process is finished the reel is ready to be dismantled or removed.

- MANUAL TILTY

This product is used to tilt reels with flange diameter below 800mm and weight below 1000 Kg from a vertical axis to its horizontal one and vice-versa. It fits just one type of reel.



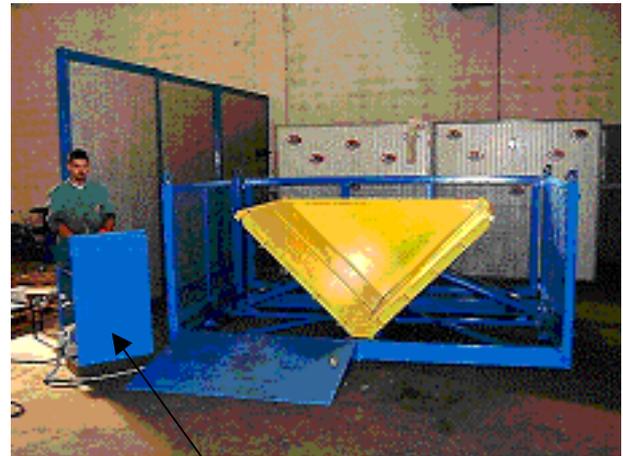
1. The reel comes out of the take-up / drawing machine in horizontal axis.
2. The reel is then placed on TILTY.
3. With the simple use of a steering wheel the tilting of the reel is obtained.
4. Once the tilting process is finished the reel is ready to be dismantled or removed

- ELECTRO-HYDRAULIC TILTY

It is used to turn reels with the flange diameter bigger than 800mm and weight below 3500 Kg.

It is suitable for various reel types sizes.

ELECTRO-HYDRAULIC TILTY is ideal when used laid on the ground, owing to its reduced volume in height.



Cradle

Control panel

Platform Base

1. The reel comes out of the take-up / drawing machine in horizontal axis.
2. The reel is then positioned on TILTY.
3. By simply pressing a button the reel is turned from horizontal to vertical axis and viceversa.
4. Once the tilting process is finished the reel is ready to be dismantled or removed.

- ELECTRO-MECHANICAL TILTY WITH ROLLERS

Its features are similar to those of the ELECTRO-MECHANICAL TILTY.



(strapping)



(tilting)



(dismounting)

Cradle

Control panel

Rollers

Platform Base

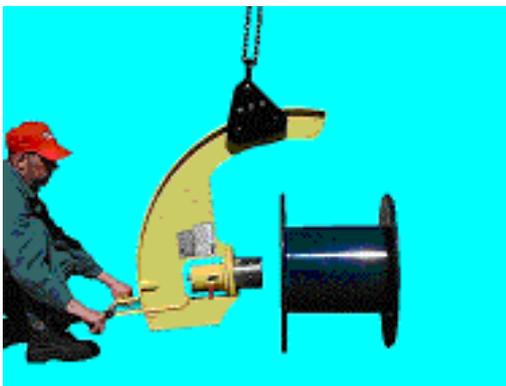
1. The reel comes out of the machine in horizontal axis.
2. The reel is then placed on rollers (which can be, on request, powered or operated by pedals) and the coil is strapped.
3. The reel in horizontal axis is pushed on TILTY.
4. Once the tilting process is finished the reel is ready to be dismantled or removed.

RIBAIR

This product is used to tilt reels with a flange diameter lower than 800mm and a maximum total weight below 800 Kg.

By releasing the handle RIBAIR locks itself into the position taken at that particular moment.

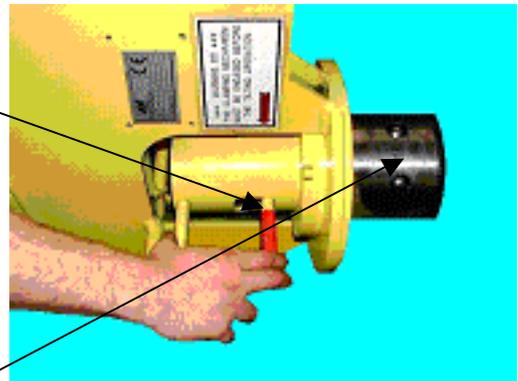
It fits to one reel size.



(Inserting)

Reel lifting
lever

Expander



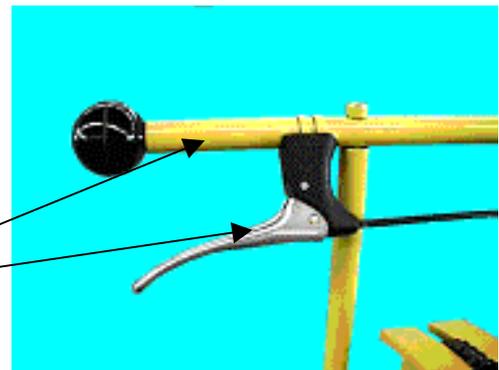
(Tilting)

Trolley

Cradle

Handlebar

Reel clamping
lever



1. The expander is inserted into the reel central bore. By acting on the clamping levers the reel is secured on to the tilting parts.
2. The whole system is lifted up to a convenient height for tilting.
3. By acting on the handle the lock is removed and the turning begins
4. Locking handle

ROLLER CONVEYOR BELT

This product is used to rotate the reels around their axis, thus easing the strapping operations. The rollers can be powered or manually operated, depending on the reel size and weight



(positioning)



(rotation)



(rotation)

KOILER

Take-apart reel with central through tube.

The dismantling process is carried out by removing the locking screw and by lifting the top flange through the eyebolts.



Locking screw

Eyebolts

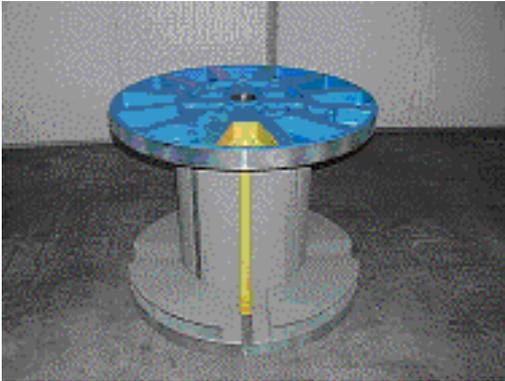


1. The reel comes out of the machine fully loaded, then the coil is strapped.
2. The reel is placed on its vertical axis with the eyebolts facing upwards.
3. The locking screw is unscrewed.
4. The lifting hooks are inserted into the eyebolts.
5. By lifting the reel this gets dismantled - the top flange and the drum are removed as a single unit; the bottom flange remains on the floor with the coil laid on it.
6. The coil is removed.
7. The two parts of the reel are put back together.
8. By inserting and screwing the safety screw the reel is reassembled.

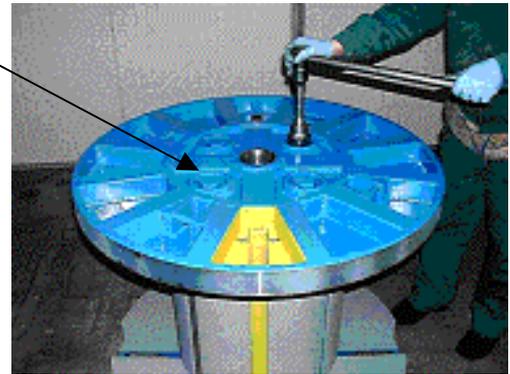
BOSCO 3-4 TIE RODS

Reel with central through bore.

The dismounting operation is carried out by slowly releasing the tie rods; in order to ease this operation it is recommended to use a pneumatic gun or a lever.



Tie rods



1. The reel comes out of the machine fully loaded and the coil gets strapped.
2. The reel is placed in vertical axis with the tie rods facing upwards.
3. The tie rods are slowly released, making sure this is done following a cross pattern.
4. The lift hooks are placed into the inserts.
5. The reel gets dismounted by lifting it up, the top flange and the drum separate; the bottom flange remains on the floor with the coil on it.
6. The coil is then removed.
7. The two parts of the reel are put back together.
8. By screwing the tie rods the reel gets reassembled.

BOSCO WITH RING NUT

Reel with central through bore.

This product is used with a paperboard tube. During the loading operation the tube acts as a kernel for the coil while during the strapping operations it gets tied together with the wire. Dismounting can be achieved by loosening the central ring nut. In order to ease this process it is recommended to use a pneumatic gun or a lever.

In order to avoid that the central ring nut gets loose during the loading phase as a consequence of the vibrations (therefore causing the opening of the reel on the machine) the reel is supplied with a mechanical lock. This lock fits into the grooves of the central ring nut and it is secured by using its special screw.



(Removal of the safety lock)



(Removal of the ring nut)



(Dismounting)

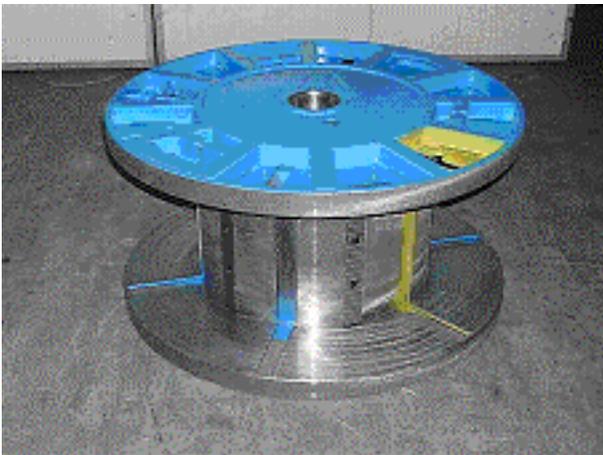


1. The reel comes out of the machine fully loaded, then the coil gets strapped.
2. The reel is placed on its vertical axis with the central ring nut facing upwards.
3. The central safety lock is removed.
4. The central ring nut is then unscrewed.
5. The lifting hooks are placed into the inserts.
6. By lifting it up, the reel gets dismounted, the top flange as a single unit and the bottom flange stays on the ground with the coil on it.
7. The coil is then removed.
8. A new paperboard tube is inserted.
9. The two parts of the reel put back together.
10. The reel is reassembled by screwing the central ring nut.
11. The safety lock is put back into place.

BOSCO WITH CENTRAL SCREW

The dismounting operation is carried out by unscrewing the central screw; in order to ease this phase the use of a pneumatic gun or a lever is recommended. In order to avoid that the central ring nut gets loose during the loading phase as a consequence of the vibrations (therefore causing the opening of the reel on the machine) the reel is supplied with a mechanical lock.

This lock is placed on the head of the central screw and is secured using its special screw.



(Removal of safety lock)



(Removal of central screw)



1. The reel comes out of the machine fully loaded, then the coil gets strapped.
2. The reel is placed on its vertical axis with the central screw facing upwards.
3. The central safety lock is removed.
4. The central tie rod is unscrewed.
5. The lifting hooks are placed into the inserts.
6. By lifting it up, the reel gets dismounted, the top flange and the barrel as a single unit - the bottom flange remains on the ground with the coil on it.
7. The coil is then removed.
8. The two parts of the reel are put back together.
9. The reel is reassembled by screwing the tie rod.
10. The safety lock is put back into place.

PNEUMATIC BOSCO

Take-apart reel with a pneumatic jack inside.

In order to operate the opening or closing of the reel, quick pneumatic coupling to the equipment must be connected. Pressing on the control pedals supplied does the job.

This reel is indicated only for low to average size (max flange diameter 800mm). The reel is supplied with a safety system to avoid its opening during the process.



(Removal of the lock)



.....(Connecting the pedals)



(Dismounting)



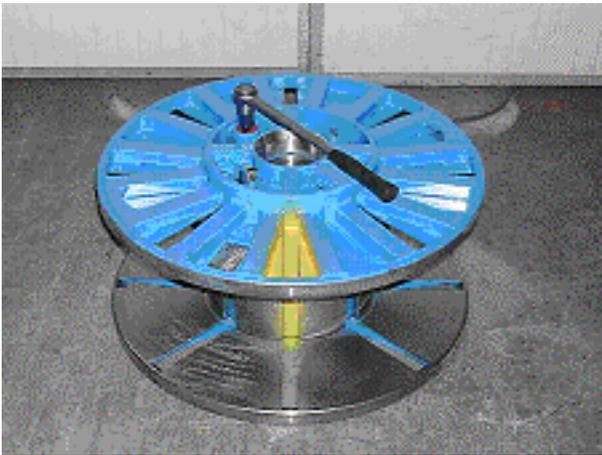
1. The reel comes out of the machine fully loaded, then the coil gets strapped.
2. The reel is positioned on its vertical axis with the quick coupling facing upwards.
3. The safety lock is removed.
4. The reel is connected to the control pedals. By acting on the commands the reel opens and the tubes are removed.
5. The lifting hooks are placed into the inserts.
6. By lifting it up, the reel gets dismounted, the top flange and the barrel as a single unit – the bottom flange remains on the ground with the coil on it.
7. The coil is then removed.
8. The two parts of the reel are put back together.
9. The reel is then connected to the control pedals. By acting on the controls the reel closes itself up and the tubes are finally removed.
10. The safety lock is put back into place.

HYDRAULIC BOSCO

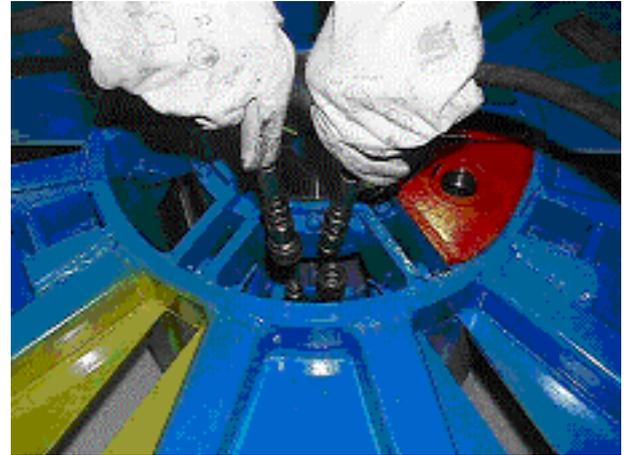
This reel is similar to the pneumatic type, its only difference being the replacement of the pneumatic jack with a hydraulic one.

This change allows the production of larger and more resistant coils than with the pneumatic type.

The operating procedure is the as for the pneumatic take-apart reel.



(Removal of the safety lock)



(Connecting the control unit)



(Hydraulic unit)



(Dismounting)

1. The reel comes out of the machine fully loaded, then the coil gets strapped.
2. The reel is positioned on its vertical axis with the quick coupling facing upwards.
3. The safety lock is removed.
4. The reel is connected to the control unit. Acting on the commands the reel opens and the tubes are removed.
5. The lifting hooks are placed into the inserts.
6. By lifting it up, the reel gets dismounted, the top flange and the barrel as a single unit - the bottom flange remains on the ground with the coil on it.
7. The coil is then removed.
8. The two parts of the reel are put back together.
9. The reel is then connected to the control unit. Acting on the controls the reel closes itself up and the tubes are finally removed.
10. The safety lock is put back into place.

BOSCO WITH CENTRAL SCREW + COIL LIFTING UNIT

This reel is similar to Bosco with central screw. Once dismantled, this version can be used as a coil lifting unit.



(dismounting)

Adapter



(lifting with expansion)



(lifting with coil release)

1. The reel comes out of the machine fully loaded, then the coil gets strapped.
2. The reel is placed on its vertical axis with the central screw facing upwards.
3. The central safety lock is removed.
4. The central tie rod is unscrewed.
5. The lifting hooks are placed into the special points of the reel.
6. By lifting it up, the reel dismounts itself, the barrel expands and the coil may therefore be lifted and transported. The bottom flange stays on the ground.
7. The coil is transferred to the desired place.
8. The lifting hooks are moved to their set positions.
9. Lifting takes place with the top flange and the barrel coming out as a single unit and the coil stays on the ground.
10. The two parts of the reel are put back together.
11. The reel is reassembled by screwing the tie rod.
12. The safety lock is placed back into place.