UWU-200
Winder / Unwinder device 2200mm.

IMPORTANT:

Read this user manual and follow the instructions and warnings before operating this device.

Any modification or transformation performed on this machine may cause loss of the manufacturer's guarantee and liability.

This manual must always remain near to the machine and visible to all the operating and maintenance staff, for any future consultation, forming part of the equipment.

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2022 October

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EC Declaration of conformity:

WE DECLARE, under our responsibility, NOTWITHSTANDING HIGHER AUTHORISED CRITERIA, that the machine:

-Model: UWU-200
-Serial no.: 92122
-Manufacturer date: 2022

Complies with the design and construction specifications of the European Standards on General Machine Safety:

EN 292-1. General Machine Safety.
EN 292-2. General Machine Safety.
EN 60204-1 General Machine Safety. Electrical specifications.
EN 418. Emergency Device Specifications.
EN 294. General Safety. Higher Members.

Inspired by the directives of the Official Journal of the European Communities:

89/392/EEC General Machine Safety Directive.
73/23/EEC Low Voltage Directive.
89/336/EEC Electromagnetic Compatibility Directive.

Authorised by: Eduardo Ramos Martínez

Date: 2022/10 Signature:

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Description:

Motorised expansion axle 148mm. diameter to wind and unwind the cut belt, housed in folding safety chucks and driven by variable speed and torque motor activated by electric pedal.

Technical Characteristics:

Dimensions	3250 x 740 x 1100 (l x w x h) mm.
Total Weight	354 Kg.
Shaft Weight	36 Kg.
Shaft Diameter	148 mm.
Max. Slab weight	1800 Kg.
Max. Belt Width	2200 mm.
Voltage	3x400 v.
Max. slab diameter	1300 mm.
Max. cutting speed	20 Mt / min.
Power	800 w

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Installation and connection:

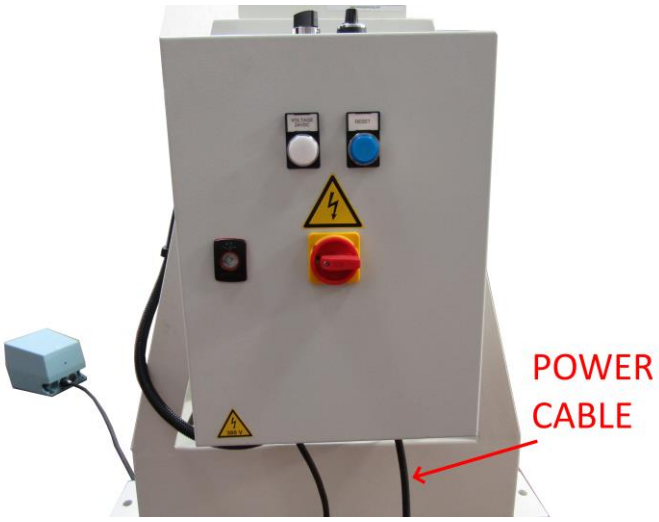
Measure the distance between shaft edges and slitter rollers to keep the parallel geometry.

Place the unit in position and fix it on the floor with metallic bolts through the feet.

Keep enough space around for loading and unloading the slab with the forklift.

Provide compressed air to inflate the pneumatic shaft through the inflate gun supplied with the unit.

Connect the power cable to 3x400V.



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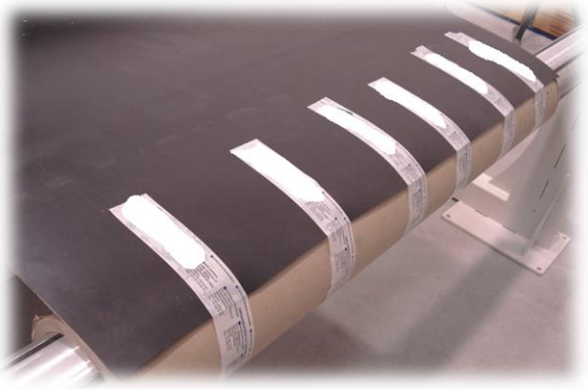
Using instructions:

- Cut the necessary cardboard mandrels 150mm. internal diameter, to the widths to be wound and put them onto the pneumatic shaft already placed on the safety chucks of the winder, placing a separation disk between each mandrel.

- Perfectly centre the mandrels with the ends of cut belt and proceed to inflate the pneumatic shaft to hold the mandrels.

- Fix the ends of the belt to the cardboard mandrels using adhesive tape or metal staples, trying to ensure all the pieces have the same tension.



- Inflate the pneumatic shaft to a pressure between 3 and 5 bar, using the inflation gun.

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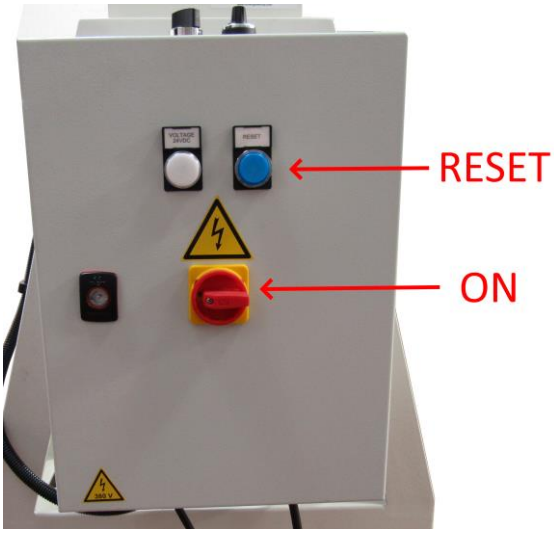
Turn ON the control box and press RESET button.



NOTE:
Check that both emergency stops are unlocked

You can choice the turn direction with button selector FORW-REVER (C).

Turn ON/OFF the magnetic clutch with the button selector (A).

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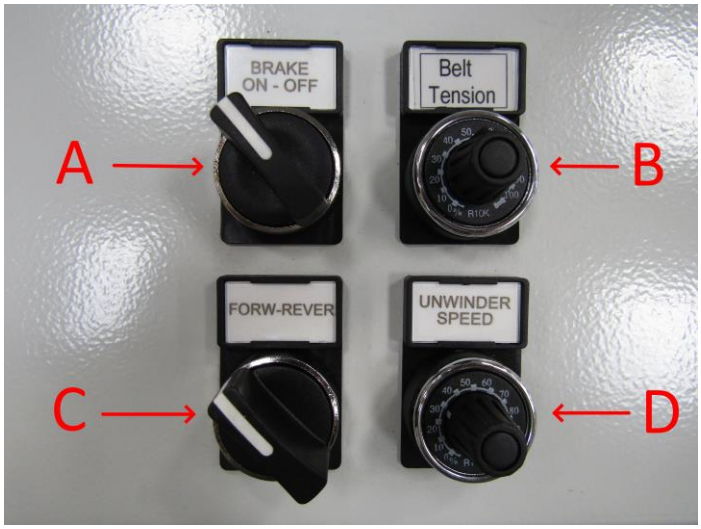
Control the speed and belt tension by two potentiometers.



A- ON- OFF Magnetic clutch
B- Belt Tension
C- Forward-Reverse direction
D- Winder Speed

NOTES:

When using the unit as a winder, you can adjust the speed, higher than the slitter's with the potentiometer (D), and control the torque with the belt tension potentiometer (B).

When using as unwinder, you can control the belt tension adjusting the potentiometer of magnetic clutch (B).

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Expanding shaft indications:

1 Basics

This user manual describes the technical data and function of the 180 PSW-F Expanding Shafts. The user manual gives detailed instructions for your safety and smooth and lasting operation. Therefore, please read this manual carefully and follow the instructions given!

2 Safety lnstructions

The basic prerequisite for safe handling and smooth operation of these Expanding Shafts is an awareness of the basic safety instructions and the safety provisions. This user manual, particularly the safety instructions, must be followed by all persons who work with the Expanding Shafts. Moreover, the regulations and provisions for prevention of accidents that apply to the place of use must be observed.

2.1 Operator Obligations

The operator must not allow persons to work on the Expanding Shafts
unless they are familiar with the basic provisions on occupational safety and prevention of accidents and have been trained in the handling of the Expanding Shafts,
and have read and understood the safety chapter and the warnings in this user manual and have confirmed this with their signature.
At regular intervals, the operator will check that staff are working in line with the safety provisions.

2.2 Staff Obligations

All persons that are tasked to work on the Expanding Shafts must
observe the basic provisions on occupational safety and accident prevention, and have read the safety chapter and the warnings in this user manual and confirmed that they will observe the same before starting work.

2.3 Dangers in Dealing with the Expanding Shafts

The PSW-F Expanding Shafts are built according to the latest technology and the recognised safety regulations. Nevertheless, use may result in danger to the life and limb of the user or third parties, or impairments to the Expanding Shafts or to other material assets. The Expanding Shafts must only be used for the proper application in a safe and technically sound conditions.
Faults that could impair safety must be remedied immediately.

2.4 Proper Use

The PSW-F Expanding Shafts are only intended to be used to coil or uncoil suitable rolls at coiling stations. Other or deviating use is improper. 1 BD Wickeltechnik GmbH is not liable for any damage that results from improper use. Proper use also includes following the instructions in the user manual and complying with inspection and maintenance work.

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2.5 Warranty and Liability

In principle, our "general terms and conditions of sale and delivery" apply, which are available to the operator. All claims for liability and guarantee with personal injuries or damage to property are excluded if these result from one or more of the following causes:
Improper use of the Expanding Shafts
Improper fitting, start-up, servicing and maintenance of the Expanding Shafts
Operation of the Expanding Shafts with improperly applied or faulty safety and protection equipment for the plant
Non-compliance with the instructions in the user manual with regard to transport, fitting, start-up, operation, maintenance and set-up of the Expanding Shafts
Independent structural changes to the Expanding Shafts
Independent changes to the max. permissible roll weight and the max. permissible torque
Substandard monitoring of parts in the Expanding Shafts that are subject to wear
Improperly performed repairs
Disaster situations that have been caused by foreign objects or are beyond control.

3 Safety Provisions

3.1 Liability Declaration

The following terms and symbols are used for risks in this user manual:

DANGER!
This instruction means directly threatening danger to people's life and health. Non-compliance with these instructions will result in severe affects to health, up to life-threatening injuries.

WARNING!
This instruction means possibly threatening danger to people's life and health. Non- compliance with these instructions may result in severe affects to health, up to life- threatening injuries.

ATTENTION!
This instruction means a possibly dangerous situation.
Non-compliance with these instructions may lead to light injuries or to material damage.

CAUTION!
This instruction is an important prerequisite for proper use of the Expanding Shafts Non-compliance with these instructions may lead to faults on the Expanding Shafts or in the adjacent area.

3.2 Protective Eguipment

IBD Expanding Shafts are constructed in such a way that they fulfil the applicable safety and health requirements and, therefore, do not have special protective equipment.
Safety shoes must be worn when working with or on the Expanding Shafts as personal protective equipment.

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Further protective equipment and fittings may be required depending on the specific conditions, for example requirements of the coiling station or the material to be coiled. Please read the section on materials in the user manual.

3.3 Informal Safety Measures

The user manual must always be stored where the Expanding Shafts are used. In addition to the user manual the general and local regulations on accident prevention and environmental protection must be provided and observed.

3.4 Staff Training

Only trained and instructed staff may work with or on the Expanding Shafts. Staff responsibilities for installation, start-up, servicing, maintenance and repair must be clearly specified.
Staff in training may only work on or with the Expanding Shafts under the supervision of an experienced person.

3.5 Safety Measures during Operation

Only operate Expanding Shafts when all safety equipment for the plant where the Expanding Shafts are installed is working properly.
Before switching on the drive ensure that nobody will be endangered by the running Expanding Shafts.
-The Expanding Shafts must be checked at least once per shift for any visible external damage.

3.6 Maintenance, Servicing and Remedying Faults

Perform the prescribed adjustments, maintenance and inspection work within the time limits.
Inform operating staff before starting maintenance and servicing work. Secure all plant parts and operating media up and downstream of the Expanding Shafts, such as pressurised air and hydraulics, against unauthorised start-up.
Disconnect the plant from the power supply far all maintenance, inspection and repair work and ensure the main switch cannot be reconnected:
-Clase the main switch and remove the key
-Attach a warning sign to prevent reconnection Check that screws are fastened tightly.
Check that safety equipment is working after completion of the maintenance work.

3.7 Structural Changes to the Expanding Shafts

Undertake no changes, fittings or rebuilds to the Expanding Shafts without the approval of IBD Wickeltechnik GmbH.
-All rebuilding measures must be confirmed in writing by IBD Wickeltechnik GmbH.
Replace coiling shaft parts immediately that are not in good condition. Only use original replacement parts. We cannot guarantee that externally procured parts have been constructed to meet safety requirements and operational demands.

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3.8 Cleaning the Expanding Shafts and Disposal

Handle and dispose of substances and materials used properly, particularly lubricants and solvents.

3.9 Noise from the Expanding Shafts

- The continuous sound level emitted by the Expanding Shafts is less than 70 db
[Al.
-A higher sound level may be emitted by the plant depending on the local conditions in which the Expanding Shafts are installed, which may cause hearing difficulties. In this event, the operating staff must be issued with appropriate protective equipment.

3.10 Copyright

The copyright to this user manual remains with IBD Wickeltechnik GmbH. This user manual is only intended for the operator and his staff. It contains provisions and instructions that may neither be wholly nor partially duplicated divulged or otherwise communicated.
Non-compliance will result in damage compensation.

4 Product Details

IBD Expanding Shafts are operated with pressurised air. The pressurised air expands a flexible hose, which pushes the clamping strips from the shaft and, in so doing, tensions the rolls [the casing]. The release is effected by discharging the pressurised air, which relaxes the hose again. Safe and smooth operation can only be guaranteed on adherence to the technical data and limit values. Please take the technical details from the enclosed data sheet.

5 Installation and Start-Up WARNING!

The Expanding Shafts may only be installed by qualified personnel! Use suitable
lifting equipment if necessary!

DANGER!
The Expanding Shafts may only be installed on machines and equipment, which correspond to the specified technical data! Observe the permissible roll weight.
Ensure that the machine cannot be switched on during installation. Check that the Expanding Shafts have been installed correctly.

WARNING!
If rolls are not fully tensioned they produce an irregular run. There is a risk that the roll will disconnect from the shaft.
Check that the roll is tightly tensioned and is running around in standby and on the test run.

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Check that the roll is secure after a reasonable period.

6 Operation

Expanding Shafts are easy-to-operate devices that represents clear assistance. For your safety, the safety of others and for smooth operation please observe the following instructions:

DANGER!
Do not tension any rolls and coils that are irregular! Any imbalance in the roll leads to high loads on the Expanding Shafts depending on the speed. This can break the Expanding Shafts even though the permissible overall weight has not been exceeded.

DANGER!
Wear protective glasses when working with pressurised air!

6.1 Tensioning a core

Check whether the inner diameter of the core casing is permitted for the shaft.
Place the core on the supporting tube of the Expanding Shaft.
Place the right filling gun on the filling valve and fill the expansion hose to a pressure of at least 6 bar.
Filling the shaft depends on the length and diameter of the shaft.
- The pressure in the shaft can be checked using the manometer on the filling gun.

6.2 Releasing the roll

Ensure the roll cannot fall off.
Let the pressurised air out from the Expanding Shaft by opening the filling valve. The filling gun or a suitable tool may be used for this purpose.

7 Servicing

IBD Expanding Shafts are built with care and will work smoothly with the necessary care. However, as with all mechanical-pneumatic components, they also require a little cares described in this chapter.

7.1 Maintenance

The Expanding Shafts must be cleaned and inspected at least after 5000 operating hours. This may require the Expanding Shafts to be dismantled.

Dismantling the Coiling Station DANGER!
The expansion unit of the Expanding Shafts is under pneumatic pressure. To avoid injury, ensure that the pressure is completely released from the roll shaft.

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Ensure that the machine cannot be switched on during dismantling. Secure the roll shaft against falling with a suitable lifting device or similar.

Dismantling the Expanding Shaft PSW-F ...

The following dismantling instructions relate to the attached explosion diagram

-Let out the pressurised air by opening the filling valve. The filling gun or a suitable tool can be used for this purpose.

-Unscrew the filling valve (item 4] from the bearing pins (item 11] and replace if necessary.

-Twist the M8 headless screws (item 13] out of the supporting tube (item 1] and remove the bearing pins (item 51. Insert an M1O threaded bar into the pins to remove the bearing pins and pull out the pins with a shock lug.

-Once the bearing pins are cleaned the O-rings (item 14] can be checked and replaced with new ones if required.

-In order to remove the clamping pieces (item 7 + 8] together with the retention spring (item 9] from the groove, the M6 headless screws (item 11 + 12] must first be removed.

-You can now remove the clamping strip (item 3] from the groove and replace if necessary.

-Remove the back clamping pieces (item 7 + 8] from the groove as described above and pull out the flat hose (item 2] together with the protective belt (item 1 O]. If the hose or the protective belt are damaged they should be re placed with new ones.

Inspection

Check all parts for sound condition. Replace defect parts. Remove any sharp edges created during operation.

Cleaning and Lubrication

Clean all parts thoroughly with a lint-free cloth and greaseless agent and regrease the bearing pins and seals well. Recommended lubricant: Turmogrease LT 182 from Lubcon.

Assembly

Assembly of the roll shaft is effected in reverse order. You must ensure that all screws have locking devices (Loctite 243] and the air diffuser (item 6] is inserted cleanly into the borings on the supporting tube.

7.2 Replacement Parts List

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see enclosed piece list and construction diagram

8 Disposal

The cleaning agent and lubricant used must be disposed of in accordance with the information on the data sheet. The Expanding Shafts may only be manufactured from uncritical materials. They can be disposed of or recycled easily.

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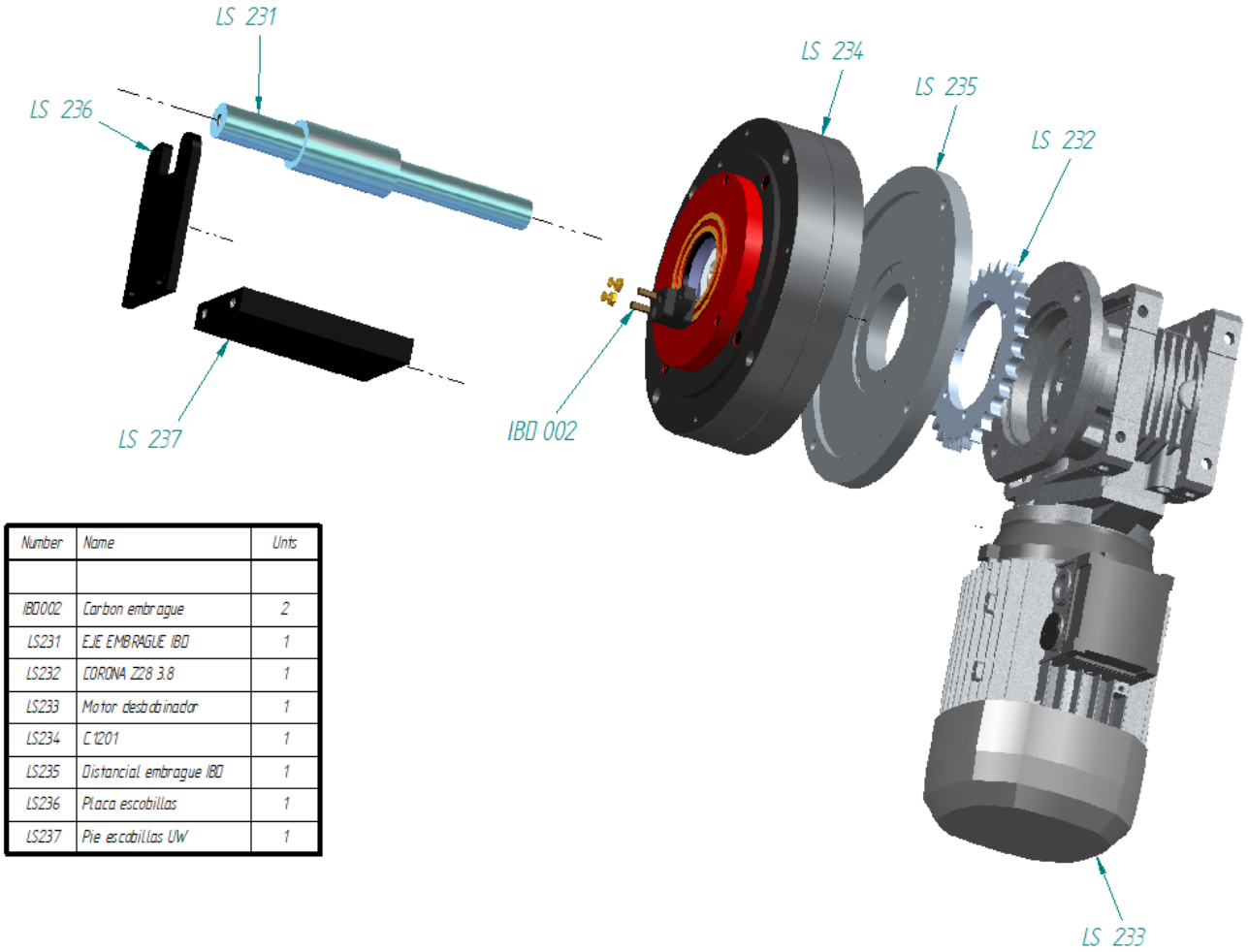
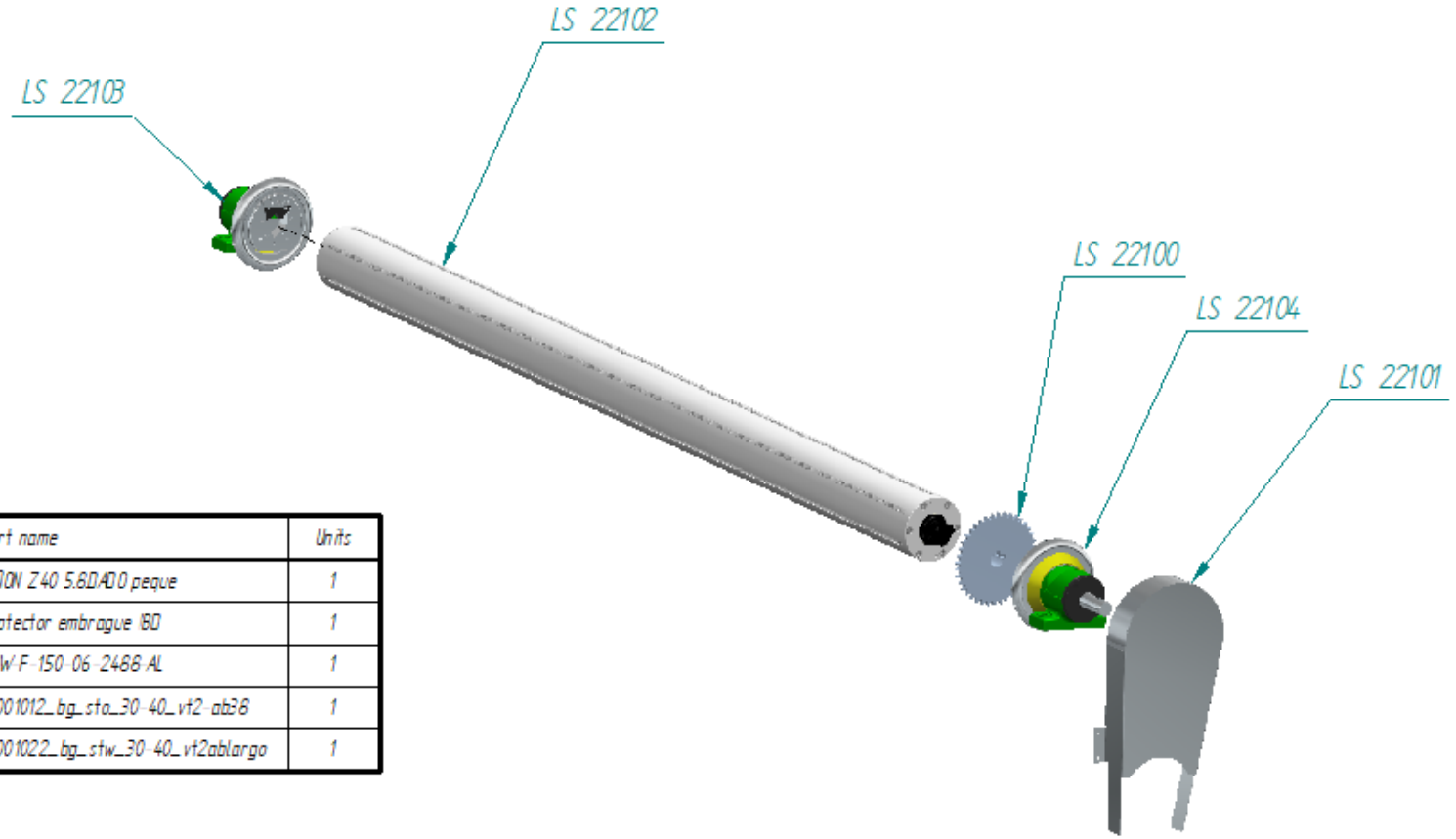
Spare parts:



Number	Name	Units
IBD002	Carbon embrague	2
LS231	EJE EMBRAGUE IBD	1
LS232	CORONA Z28 3.8	1
LS233	Motor desbobinador	1
LS234	C 1201	1
LS235	Distancial embrague IBD	1
LS236	Placa escobillas	1
LS237	Pie escobillas UW	1



Number	Part name	Units
22100	PIÑON Z40 5.8DA00 peque	1
22101	Protector embrague 160	1
22102	PSW F-150-06-2488-AL	1
22103	13001012_bg_sta_30-40_vt2-ab36	1
22104	13001022_bg_stw_30-40_vt2ablargo	1

Electrical drawing: