

# **POWERTEX**

GB Instruction for use  
EE Kasutusjuhend

# **POWERTEX**

## **Aluminum Pulling Hoist PAPH-S1**



### User Manual

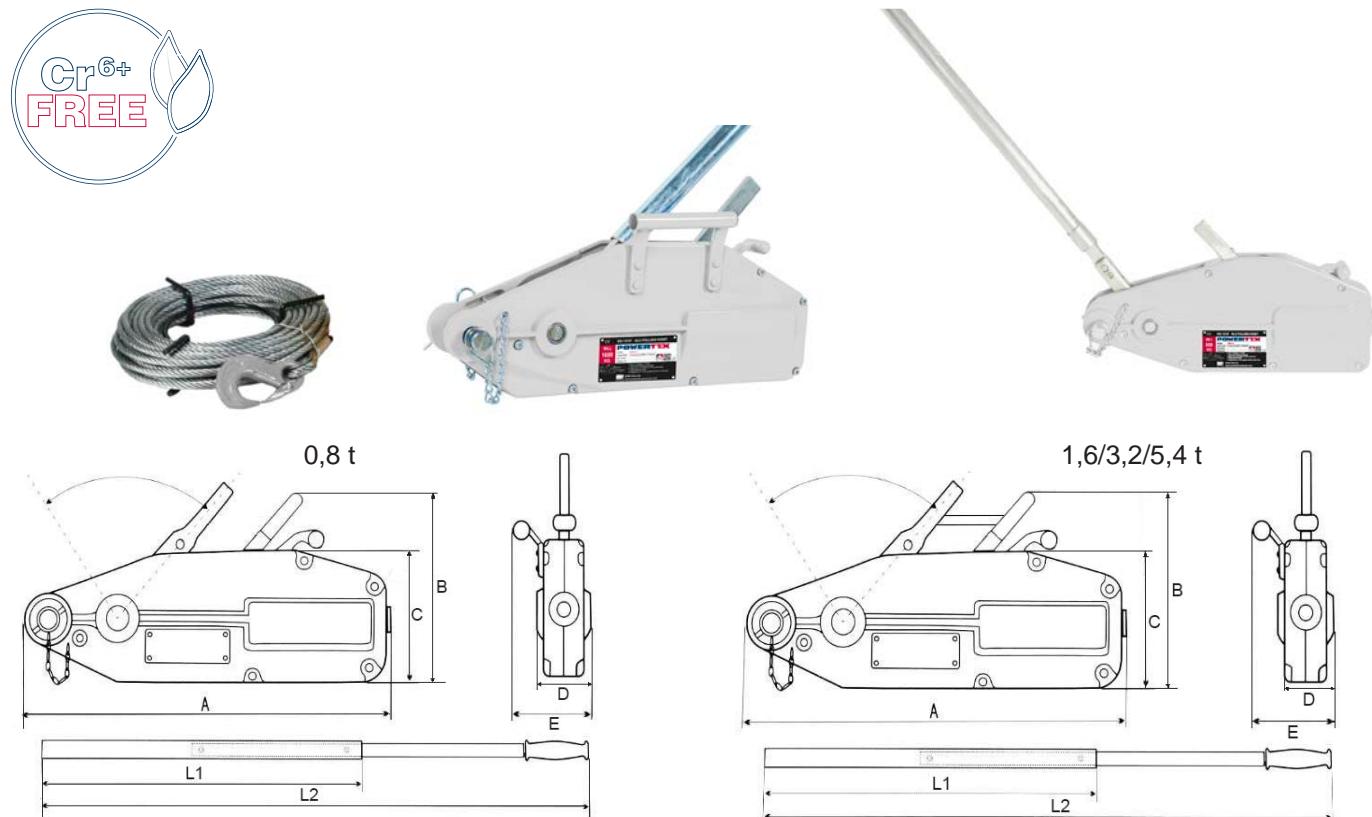


# POWERTEX Aluminum Wire Rope Pulling Hoist PAPH-S1 0,8 - 5,4 ton Instruction for use (GB) (Original instructions)

Read through these user instructions before using the wire rope hoist. Improper operation may lead to hazardous situations.

## General safety provisions

- Only to be used by trained operator.
- Do not use in explosive or corrosive environment.
- Temperature range: -10°C up to +50°C. Using the wire rope hoist in icy conditions, make sure that neither the wire rope or machinery is frozen.
- Check the function of the wire rope hoist before use.
- Do not exceed the maximum load.
- Handle the wire rope hoist with care. Do not throw the hoist about or let it fall to the ground.
- Do not use the wire rope hoist for welding work where it is exposed to welding spatter or current.
- Don't use with food, cosmetics or pharmaceutical products, and must not be subjected to severe corrosive influences (e.g. acids).
- Don't use any surface finishing that could have an impact on the material. Don't expose the hoist to heat, welding or drilling.
- Keep the wire hoist clean, dry and protected from corrosion.
- The wire rope hoist must not be used for lifting persons.



## Data

Art No	Model	WLL (ton)	Hand force max. (N)	Movement* (mm)	Wire rope dia. (mm)	Lever length (mm)	Weight (kg)
16.25PAPHS10080	PAPH-S1/800	0,8	341	>52	8,3	800	6,4
16.25PAPHS10160	PAPH-S1/1600	1,6	400	>55	11,0	1200	12
16.25PAPHS10320	PAPH-S1/3200	3,2	438	>28	16,0	1200	23
16.25PAPHS10540	PAPH-S1/5400	5,4	850	>22	20,0	1120	58

\* Wire rope movement with one back and forth movement

## Dimensions

WLL ton	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	L1 (mm)	L2 (mm)
0,8	426	235	168	60	64	-	800
1,6	545	284	190	72	97	692	1200
3,2	660	325	230	91	116	692	1200
5,4	930	390	300	110	150	692	1200

## Function

### Operating principle

The wire rope hoist works by pulling the lever back and forth when the wire rope runs through the hoist. The wire rope hoist can be used for lifting, pulling and tightening.

The wire rope hoist has two jaws that open in turns so that the wire will always stay tight and will not be able to loosen.

The safety shear pin on the wire rope hoist's lifting lever breaks at just above WLL to prevent overloading. 5 pcs of spare shear pins included in the handle.

## Procedure before use

### Wire rope hoists inspection before use

A competent person should check the wire rope hoist visually and its workability before first use. By testing the wire rope hoist you make sure the wire rope hoist hasn't been damaged or broken during its transportation.

### Inspection before lift/pull

Before every use the hoist, wire rope, anchor sling and other lifting tools conditions have to be checked in case of any kind of damage. Also check that the hoist's name plate is legible. Any equipment or parts with defects must be taken out of service until it has been repaired or replaced. In addition, the jaw clamps function ability as well as the anchors durability is to be tested by lifting/pulling the load a short distance and then lowering it.

### Wire rope inspection

Check the wire rope for deformation, bending, twisting, cutting of lines, corrosion, overheating etc. before use.

### Eye sling hook inspection

Check the hook for deformation, notches, wear and corrosion or in case of any damage.

### Wire rope specification

It is allowed to use only this type of wire rope:

- Steel core
- Grade 1770 N/mm<sup>2</sup>
- Construction 6x19-IWRC
- Dry

### Use

Open the wire rope jaw clamps so that the wire rope won't bend or twist.

Push the release handle on top of the wire rope hoist in a forward position until you hear the jaws open.

Push the wire rope through the wire rope hoist so you can see it from the other side. Pull as much rope as you need and then lock the wire rope by pushing the release handle to a backwards position.

Place the lever handle extension either in the front or back peg depending if you want to lift or lower the load. Now the wire rope hoist is ready for use.

Take the anchor pin out and attach hook, shackle, sling or some other tool needed to connect the hoist to the anchor point.

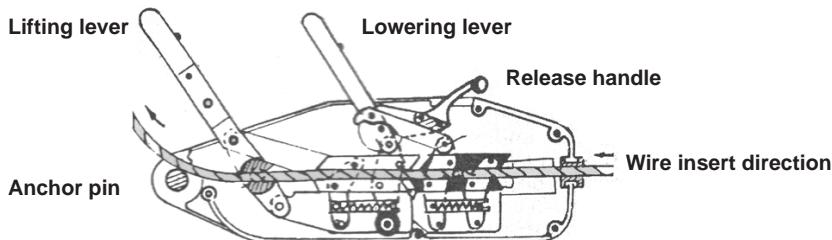


**Attention!** Check the strength of the attachment point before starting to lift or pull.

Operating the lifting lever back and forth will make the wire move through the wire rope hoist and tighten. Moving one of the levers you can make the wire rope move in or out.

When finishing the use of the wire rope hoist pull the wire out by pushing the release lever on top of the wire rope hoist into a forward position so that the wire rope get released. Clean the wire rope before releasing it through the wire rope hoist so that no dirt will get into the wire rope hoist.

After removal of the wire rope push the release handle back to the backwards position so that the spring relaxes.



### Wire rope hoist anchoring

When attaching the wire rope hoist make sure that the person who is using the wire rope hoist won't be put into dangerous situations from the load or attaching the wire rope hoist.

Mount the wire rope hoist in between the anchoring point and the load so that the wire rope hoist is set in the same direction as the wire rope and so the wire rope moves straight through the direction of the pulling direction.

In an indirect pull use only strong enough wire rope blocks.

Using lifting slings or lifting tools, make sure that they have at least the same loading capacity as the wire rope hoist that is being used.

Make sure that the anchor pin is fully locked in place with a spring pin.



### Warnings

Before use make sure all the wire rope hoist's screws are tightened. Also check the product's common condition and that the handles move freely. Check that the wire rope is clean. If the wire rope is damaged, the wire rope hoist won't work properly and must be replaced immediately.

Only use one lever at the same time. Never touch the release handle when the wire rope hoist is loaded.

Don't pull on the lifting lever too hard, since the overload safety pin will break. Don't use homemade overloading safety pins on the wire rope hoist!

Don't extend the lever length. Abort the lifting process straight away if the load needs more power for lifting or lowering it.

Never be on top of the load and make sure no one is working close or under the load that is being lifted.

Don't let the load spin during the lift. Avoid to impact, shock or swinging the load.

Only direct loading. The wire rope hoist must not be exposed to a bending load, were the wire is loaded in an improper way. Use the wire rope hoist by keeping the wire rope hoist hook and anchor peg in line with each other. Don't load on the tip of the hook. Loading with the hook is only allowed in the longitudinal direction and the load has to be directed to the middle of the hook's radius.

The working load limit which is marked on the product must not be exceeded.

Don't use other wire ropes that aren't from the distributor and accepted by the manufacturer. When the diameter of the wire has reduced more than 10% in dimension it has to be changed immediately. Don't insert the wire rope from the front of the wire rope hoist, since the hook will be on the wrong side.

Keep the wire rope hoist clean, don't let any dirt into it, mud or any other harmful substance that could break or wear down the wire rope hoist.

Lubricate the wire rope hoist frequently.

Never lift or pull people with the wire rope hoist.

Never leave the load without supervision.

Don't ever use a hammer etc. for releasing the release lever.

### **Maintenance, inspections and repairs**

**Maintenance:** The wire rope hoist and wire must be washed, dried after use in wet conditions and protected from corrosion

**Inspections:** The product must be clean when checked. The product must be checked before every use in case of visible damage. Once a year a competent person must check the product thoroughly. This time period must be shortened if the working conditions require it. When checking the product it has to be checked visually and also tested. Parts and components should be checked for damage, wear, corrosion etc. and also analyze the wire rope hoists workability as a safe lifting tool. The wire rope hoists clamps should be checked by testing them with the nominal load capacity. If you notice any deviation on the wire rope hoist it should be disassembled and inspected thoroughly by a competent person.

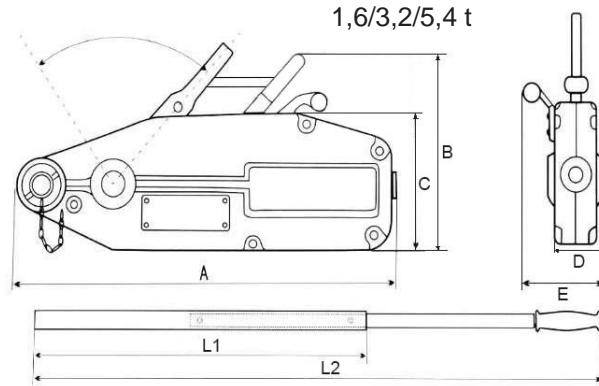
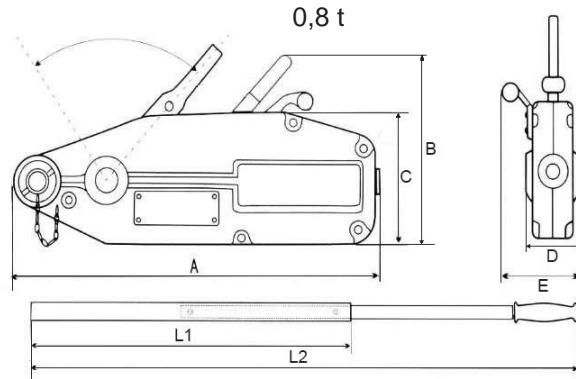
**Repairs:** All possible repairs concerning the wire rope hoist and wire rope are to be made by the seller's authorized technicians.

# POWERTEX alumiinium tross-tõmbetali PAPH-S1 0,8 - 5,4 tonni Kasutusjuhend (EE)

Enne tross-tõmbetali kasutamist lugege läbi käesolev kasutusjuhend. Väär kasutamine võib tekitada ohtlikke olukordi.

## Üldised nõuded seadme ohutuks kasutamiseks

- Seadme kasutaja peab olema selleks vastavalt koolitatud.
- Mitte kasutada plahvatusohlikus või söövitavas keskkonnas.
- Temperatuuride vahemik: -10C kuni + 50C. Kui kasutate tali jäistes oludes, siis veenduge, et tross ega tömbetali poleks jäätunud.
- Enne kasutamist kontrollige tali toimivust.
- Ärge ületage lubatud töökoormust.
- Käsitege tali hoolikalt. Ärge loopige tali ega laske talil maha kukkuda.
- Ärge kasutage trossstali keevitustöödel, kus seda ohustavad keevituspritsmed või elektrivool.
- Ärge kasutage koos toiduainete, kosmeetika või farmaatsiatoodetega. Tali ei tohi kokku puutuda tugevalt söövitava keskkonnaga (näiteks hapetega).
- Ärge kasutage pinnakatteid, mis võivad materjali kahjustada. Kaitske tali kuumuse, keevitamise ja puurimise eest. Hoidke tali puhtana, kuivana ja korroosiooni eest kaitstuna.
- Trossstali ei tohi kasutada inimeste töstmiseks.
- .



## Andmed

Tootekood	Mudel	Maksimaalne lubatud töökoormus (WLL) (tonn)	Maksimaalne käsijoud (N)	Liikuvus*	Trossi diameeter (mm)	Kangi pikkus (mm)	Kaal (kg)
16.25PAPHS10080	PAPH-S1/800	0,8	341	>52	8,3	800	6,4
16.25PAPHS10160	PAPH-S1/1600	1,6	400	>55	11,0	1200	12
16.25PAPHS10320	PAPH-S1/3200	3,2	438	>28	16,0	1200	23
16.25PAPHS10540	PAPH-S1/5400	5,4	850	>22	20,0	1120	58

\* Trossi liikuvus ühe tagasi või edasi liigutusega.

## Mõõtmed

Maksimaalne lubatud töökoormus (WLL) tonn	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	L1 (mm)	L2 (mm)
0,8	426	235	168	60	64	-	800
1,6	545	284	190	72	97	692	1200
3,2	660	325	230	91	116	692	1200
5,4	930	390	300	110	150	692	1200

## Kasutamine

### Tööpõhimõte

Trosstali töötab liigutades kangi edasi-tagasi, kui tross on asetatud talisse. Trosstali võib kasutada töstmiseks, tömbamiseks ja pingutamiseks. Trosstalil on kaks haaratsit, mis avanevad kordamööda nii, et tross on alati pingutatud ja see ei saa lõveneda. Trosstali töstehooval olev ohutus-splint puruneb WLL'i ületamisel, et vältida tali ülekoormamist. Seadme käepidemega on kaasas 5 varu ohutussplinti.

### Enne kasutamist

#### Trosstali kontroll enne kasutamist

Pädev isik peaks enne esmakordset kasutamist trosstali visuaalselt kontrollima ja selle töökindluses veenduma. Trosstali katsetades veenduge, et tali ei ole transportimise ajal kahjustatud ega purunenud.

#### Kontroll enne töstmist või tömbamist

Enne igat kasutamist tuleb tali, trossi, kinnitustropi ja muude töstevahendi elementide seisukorda kontrollida igauguste kahjustuste korral. Kontrollige ka, et tali markeering on loetav. Mis tahes seadmed või defektsed osad tuleb kasutusest körvaldada, kuni need on parandatud või asendatud. Lisaks tuleb kontrollida haaratsite klambrite funktsioneerimisvõimet ja kinnituste vastupidavust, töstes või tömmates koorma lühikese vahemaa peale ja lastes seejärel alla.

#### Trossi kontroll

Enne kasutamist kontrollige trossi deformeerumist, paindumist, keerdumist, traatide lõikamist, korrosiooni, ülekuumenemist jne.

#### Sulgurkonksu kontroll

Kontrollige, kas konksul on deformatsioone, sälke, kulumist ja korrosiooni või mis tahes kahjustusi.

#### Trossi spetsifikatsioon

Lubatud on kasutada ainult seda tüüpi trossi:

- Terassüdamik
- Klass 1770 N/mm<sup>2</sup>
- Konstruktsioon 6x19-IWRC
- Kuiv

## Kasutamine

Avage trossihaaratse klambrid nii, et tross ei paindu ega väändu.

Lükake trosstali peal olevat vabastuskäepidet ettepoole, kuni kuulete, kuidas haarats avaneb

Lükake tross läbi tali, nii et näete seda teiselt poolt. Tömmake nii palju trossi kui vaja ja lukustage tross lükates vabastuskäepidet tahapoole. Sõltuvalt sellest, kas soovite koormat tösta või langetada, asetage kangi käepide pikenduse ette või taha. Nüüd on trossitõstuk valmis kasutamiseks.

Võtke kinnitustihvt välja ja kinnitage konks, seekel, tropp või mõni muu vahend, mis on vajalik töstuki ühendamiseks kinnituspunktiga.

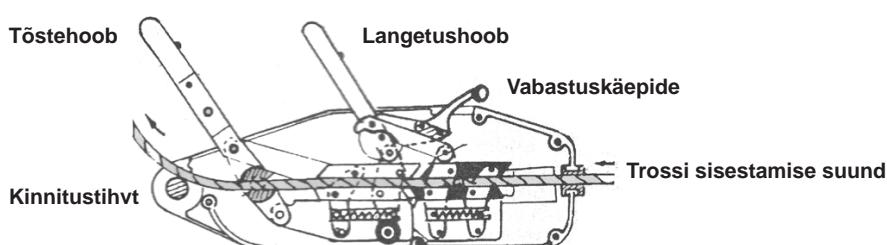


**Tähelepanu!** Kontrollige kinnituspunkt tugevust enne töstmise või tömbamise alustamist.

Töstekangi edasi-tagasi liigutamisel liigub tross läbi trosstali ja läheb pingi alla. Liigutades ühte hooba, liigub tross sisesse või välja.

Tross-tõstuki kasutamise lõpetamisel tömmake tross välja, lükates trossitõstuki peal olevat vabastushooba esiasendisse nii, et tross vabaneb. Enne trosstali vabastamist puhastage terastross nii, et talisse ei satuks mustust.

Pärast trossi eemaldamist lükake vabastuskäepide tagasi tahapoole, et vedru lõdvestuks.



### Trosstali kinnitamine

Trosstali kinnitamisel veenduge, et tali kasutav inimene ei satuks koorma töttu või trosstali kinnitamisel ohtlikesse olukordadesse.

Paigaldage trosstali kinnituspunkt ja koorma vahel nii, et tali on seatud trossiga samas suunas ja tross liigub sirgelt tõmbe suunas.

Kaudse tõmbe korral kasutage ainult piisavalt tugevaid trossiplokke.

Tõstetroppide või töstevahendite kasutamisel veenduge, et nende kandevõime oleks vähemalt sama, mis kasutataval trosstalil.

Veenduge, et kinnitustihvt oleks vedrutihiitiga täielikult lukustatud.



### Hoiatused

Enne kasutamist veenduge, et trosstali kõik kruvid on kinni. Kontrollige ka toote üldist seisukorda ja käepidemete vaba liikumist.

Kontrollige, kas tross on puhas. Kui tross on kahjustatud, ei tööta tali korralikult ja see tuleb viivitamatult välja vahetada.

Kasutage korraga ainult ühte hooba. Ärge kunagi puudutage vabastuskäepidet, kui trossitõstuk on koormatud.

Ärge tömmake töstehooba liiga tugevalt, kuna ülekoormuse ohutustihvt puruneb. Ärge kasutage talis omatehtud ülekoormamise turvakinnitusi!

Ärge pikendage kangi pikkust. Kui koorem vajab selle töstmiseks või langetamiseks rohkem jõudu, katkestage tösteprotsess kohe.

Ärge kunagi olge koorma peal ja veenduge, et keegi ei tööta töstetava koorma lähedal ega all.

Ärge lubage veosel töste ajal pööreda. Vältige koorma kokkupõrget, põrutmist ja öötsumist.

Ainult otse laadimine. Trosstali ei tohi kokku puutuda paindekoormusega, kui tross on laaditud valesti. Kasutage tali hoides selle konksu ja ankurdusnööri ühel joonel. Ärge kinnitage koormat konksu otsa külge. Konksuga laadimine on lubatud ainult pikisuunas ja koormus tuleb suunata konksu

raadiuse keskele.

Tootele märgitud töökoormuse piirmäära ei tohi ületada.

Ärge kasutage muid terastrosse, mis pole pärit tali turustajalt ja mida tootja pole heaks kiitnud. Kui trossi raadius on vähenenud rohkem kui 10% ulatuses tuleb see kohe välja vahetada. Ärge sisestage trossi tali esiküljest, kuna konks jäab valele poole.

Hoidke tali puhtana, ärge laske sellesse mustust, muda ega muid kahjulikke aineid, mis võivad trossitõstuki puruneda või kuluda.

Määrite tali sageli.

Ärge kunagi töstke ega tömmake taliga inimesi.

Ärge kunagi jätke lasti järelevavalveta.

Ärge kunagi kasutage vabastushoova vabastamiseks haamrit jms.

## **Hooldus, kontroll, parandused**

**Hooldus:** Trossstali ja trossi tuleb kaitsta korrosiooni eest ning pärast niisketes oludes kasutamist pesta ja kuivatada.

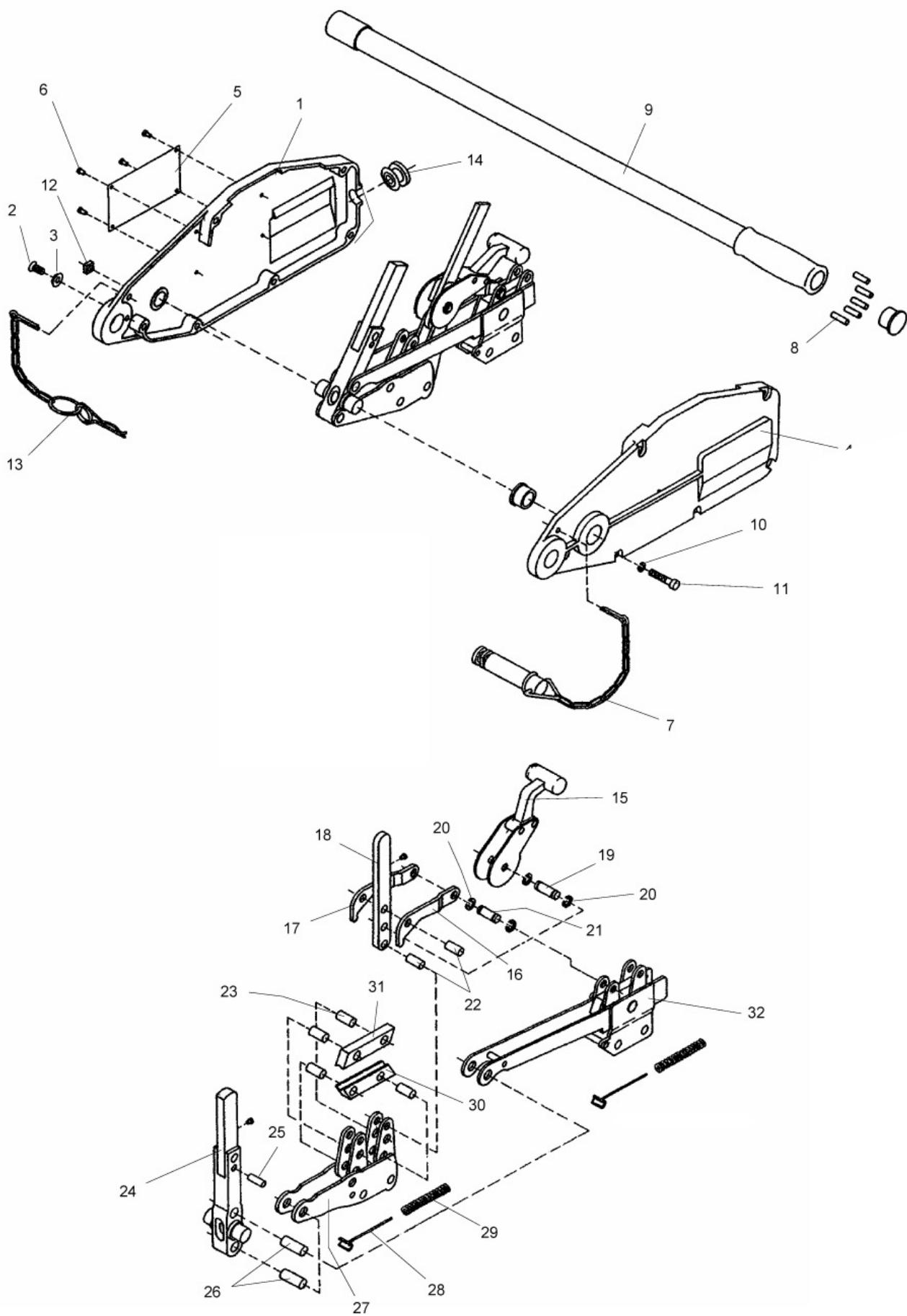
**Kontroll:** Toode peab kontrollimisel olema puhas. Enne iga kasutamist tuleb toodet nähtava kahjustuse korral kontrollida. Kord aastas peab pädev isik peab toodet põhjalikult kontrollima. Seda ajavahemikku tuleb lühendada, kui töötингimused seda nõuavad. Toote kontrollimisel tuleb seda visuaalselt kontrollida ja ka testida. Osade ja komponentide kahjustusi, kulumist, korrosiooni jms tuleks kontrollida ning samuti analüüsida tali kasutatavust ohutu töstevahendina. Trossstali klambreid tuleks kontrollida, katsetades neid nominaalse kandevõimega.

Kui märkate trossitõstuki kõrvalekaldeid, peaks pädev isik selle lahti võtma ja põhjalikult kontrollima.

**Parandused:** Köiki tali ja trossiga seotud parandusi peavad tegema müüja volitatud tehnikud.

**POWERTEX Aluminium Pulling Hoist PAPH-S1 – Spare parts 0,8 t**

When ordering spare parts, specify model, WLL, part number and the quantity needed.

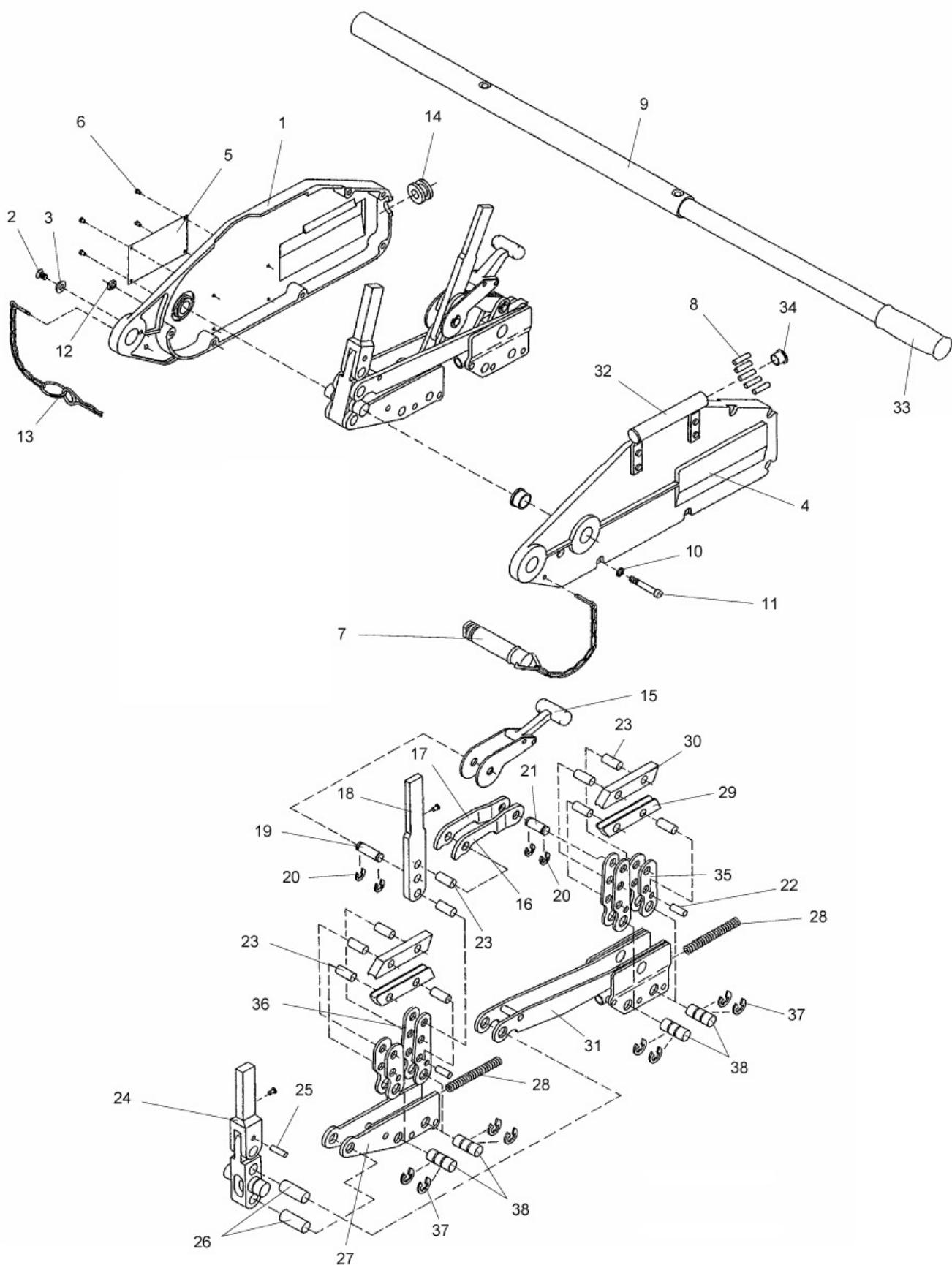


**Spare parts list 0,8 t**

<b>Pos</b>	<b>Description</b>	<b>Qty.</b>
1-3	Case right, assy.	
2	Cylindric-head tapping screw	
3	Washer	
4	Case left, assy	
5	Name plate	
6	Rivet	
7	Fastening bolt, assy.	
8	Shearing bolt	
9	Action lever, assy.	
10	Retaining ring	
11	Cylindric-head screw	
12	Nut with square	
13	Spring cutter, assy.	
14	Guide sleeve of wire rope	
15	Release handle for jaw clamps, assy.	
16	Push lever left	
17	Push lever right	
18	Lowering lever backwards	
19	Bolt	
20	Lock washer	
21	Bolt	
22	Bolt	
23	Thrust bolt	
24	Lifting lever forward, assy.	
25	Shearing bolt	
26	Axle	
27	Front slide, assy.	
28	Spring giude	
29	Spring	
30	Jaw clamp under	
31	Clamp upper	
32	Back slide, assy.	

**POWERTEX Aluminium Pulling Hoist PAPH-S1 – Spare parts 1,6 t**

When ordering spare parts, specify model, WLL, part number and the quantity needed.

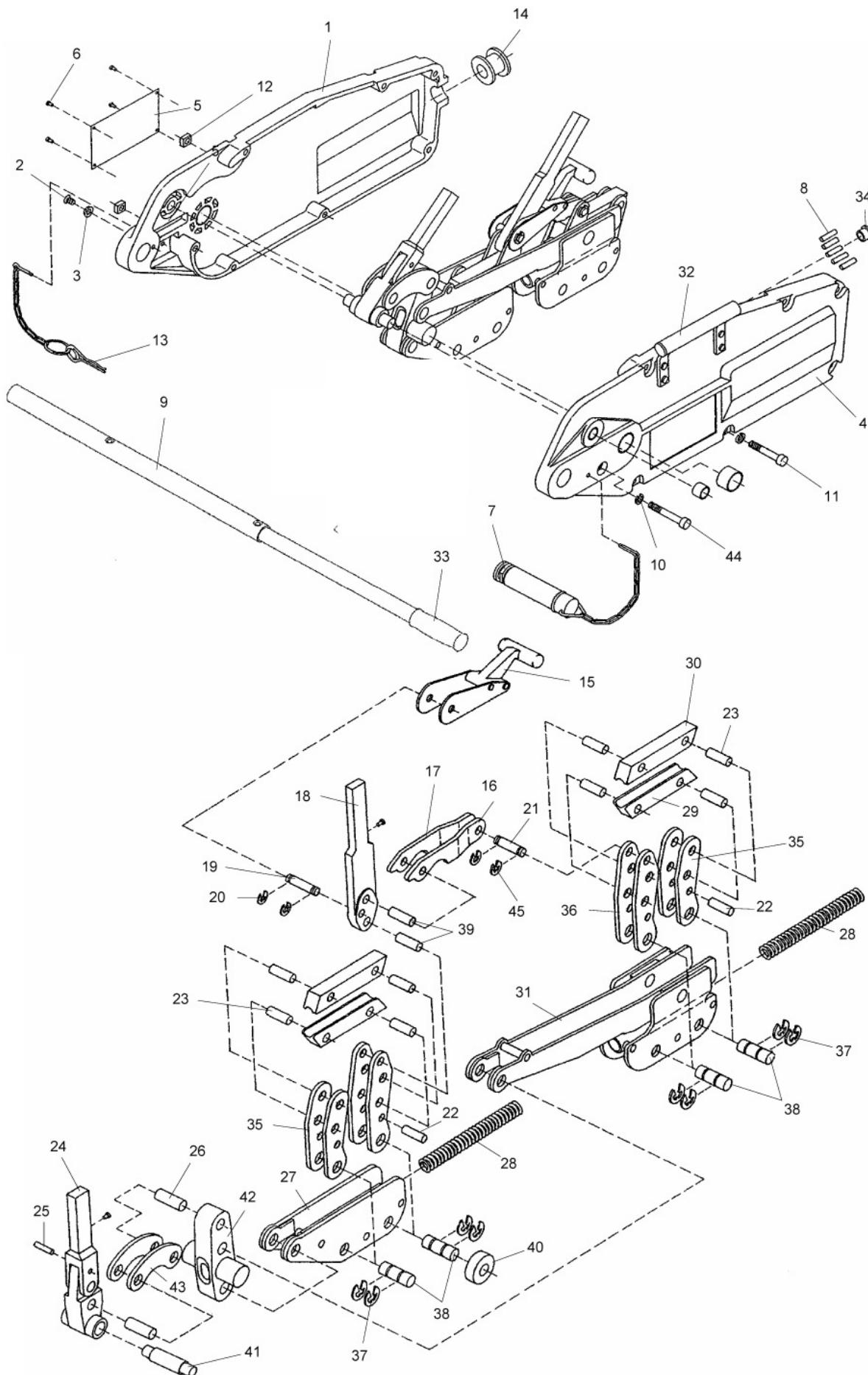


**Spare parts list 1,6 t**

<b>Pos</b>	<b>Description</b>	<b>Qty.</b>
1-3	Case right, assy.	
2	Cylindric-head tapping screw	
3	Washer	
4	Case left, assy	
5	Name plate	
6	Rivet	
7	Fastening bolt, assy.	
8	Shearing bolt	
9	Telescopic action lever, assy.	
10	Retaining ring	
11	Cylindric-head screw	
12	Nut with square	
13	Spring cutter, assy.	
14	Guide sleeve of wire rope	
15	Release handle for jaw clamps, assy.	
16	Push lever left	
17	Push lever right	
18	Lowering lever backwards	
19	Bolt	
20	Lock washer	
21	Bolt	
22	Spring bolt	
23	Thrust bolt	
24	Lifting lever forward, assy.	
25	Shearing bolt	
26	Axle	
27	Front slide	
28	Spring	
29	Jaw clamp under	
30	Jaw clamp upper	
31	Back slide, assy.	
32	Handgrip, assy	
33	Rubber handgrip	
34	Cap	
35	Lever for clamp, short	
36	Lever for clamp, long	
37	Lock washer	

**POWERTEX Aluminium Pulling Hoist PAPH-S1 – Spare parts 3,2 t**

When ordering spare parts, specify model, WLL, part number and the quantity needed.

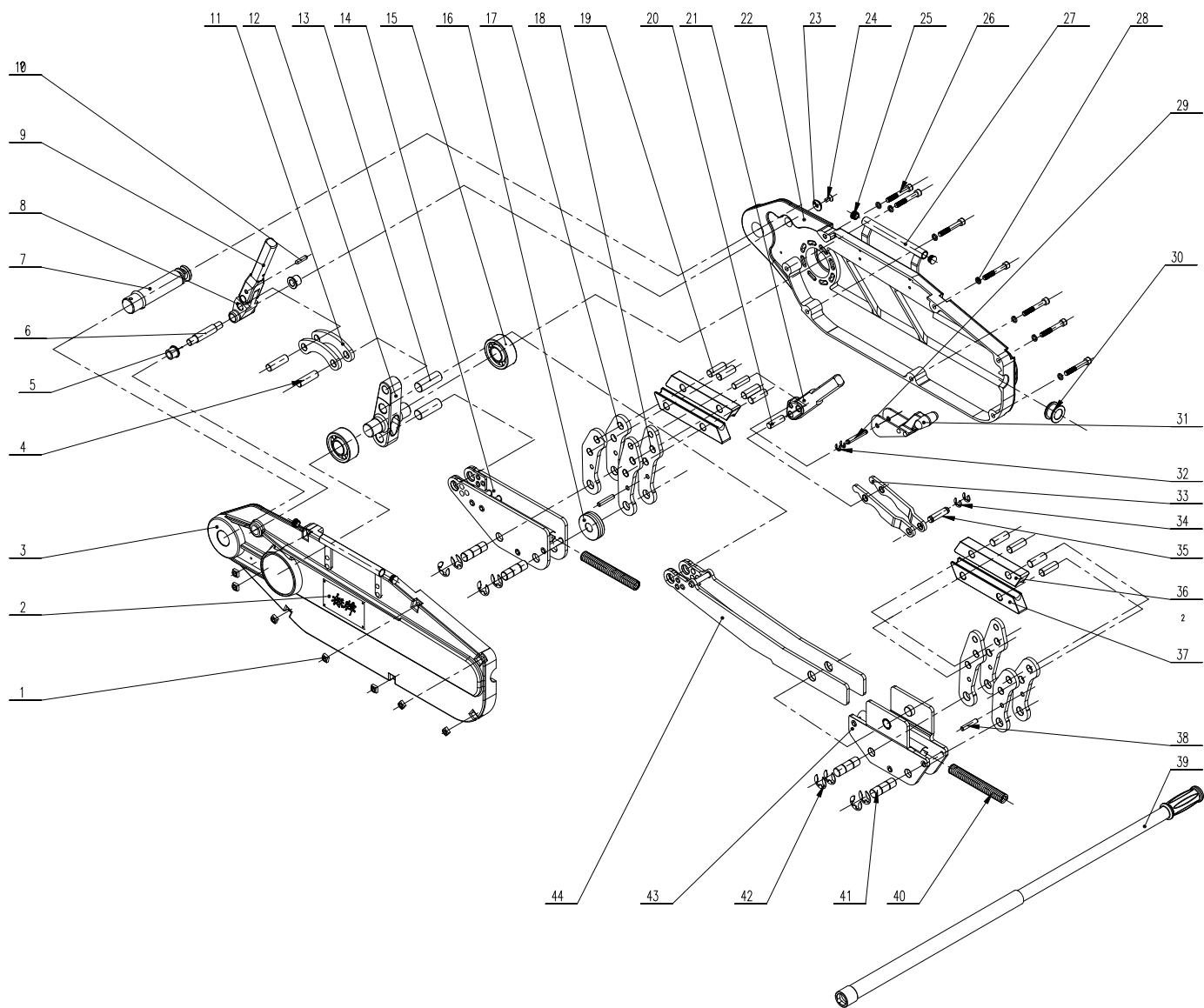


**Spare parts list 3,2 t**

<b>Pos</b>	<b>Description</b>	<b>Qty.</b>
1-3	Case right, assy.	
2	Cylindric-head tapping screw	
3	Washer	
4	Case left, assy	
5	Name plate	
6	Rivet	
7	Fastening bolt, assy.	
8	Shearing bolt	
9	Telescopic action lever, assy.	
10	Retaining ring	
11	Cylindric-head screw	
12	Nut with square	
13	Spring cutter, assy.	
14	Guide sleeve of wire rope	
15	Release handle for jaw clamps, assy.	
16	Push lever left	
17	Push lever right	
18	Lowering lever backwards	
19	Bolt	
20	Lock washer	
21	Bolt	
22	Spring bolt	
23	Thrust bolt	
24	Lifting lever forward, assy.	
25	Shearing bolt	
26	Axle	
27	Front slide	
28	Spring	
29	Jaw clamp under	
30	Jaw clamp upper	
31	Back slide, assy.	
32	Handgrip, assy	
33	Rubber handgrip	
34	Cap	
35	Lever for clamp, short	
36	Lever for clamp, long	
37	Lock washer	
38	Bearing bolt	
39	Bolt	
40	Roll	
41	Bolt	
42	Centering shaft	
43	Intermediate actuating lever	
44	Cylindric-head screw	
45	Lock washer	

**POWERTEX Aluminium Pulling Hoist PAPH-S1 – Spare parts 5,4 t**

When ordering spare parts, specify model, WLL, part number and the quantity needed.



**Spare parts list 5,4 t**

<b>Pos</b>	<b>Description</b>	<b>Qty.</b>
1	Square nut M10	7
2	Name plate	2
3	Case left	1
4	Axle	2
5	Sleeve	2
6	Shaft	1
7	Fastening bolt assembly	1
8	Action lever forwardassy 1	1
9	Action lever forwardassy 2	1
10	Shearing bolt	5
11	Intermediate actuating lever	2
12	Centering shaft	1
13	Rocker shaft	2
14	Front slide	2
15	Bearing NU2307	2
16	Roller	1
17	Lever for clamp short	4
18	Lever for clamp long	4
19	Thrust bolt	8
20	Bolt	2
21	Action lever backwards	1
22	Case right	1
23	Washer	1
24	Flat head screw M8	1
25	Cap	4
26	Cylindrec-head screw M10	7
27	Handgrip assy	2
28	Retaining ring M10	7
29	Shaft	1
30	Wire rope guide sleeve	1
31	Release handle for clamps assy	1
32	Lock washer Ø8	2
33	Push lever	2
34	Lock washer Ø12	2
35	Bolt	1
36	Bottom clamp	2
37	Top clamp	2
38	Spring bolt	2
39	Telescopic action lever assy	1
40	Spring	2
41	Bearing bolt	4
42	Lock washer Ø19	4
43	Back slide	2
44	Side assy.	2



## CertMax+

The CertMax+ system is a unique leading edge certification management system which is ideal for managing a single asset or large equipment portfolio across multiple sites. Designed by the Lifting Solutions Group, to deliver optimum asset integrity, quality assurance and traceability, the system also improves safety and risk management levels.



## Marking

The POWERTEX Aluminium Wire Rope Hoist is equipped with a RFID (Radio-Frequency IDentification) tag, which is a small electronic device, that consist of a small chip and an antenna. It provides a unique identifier for the block.

The POWERTEX Aluminium Wire Rope Hoist is **CE** marked

Standard: EN 13157



## User Manuals

You can always find the valid and updated User Manuals on the web. The manual is updated continuously and valid only in the latest version.

**NB!** The English version is the Original instruction.

The manual is available as a download under the following link:  
[www.powertex-products.com/manuals](http://www.powertex-products.com/manuals)

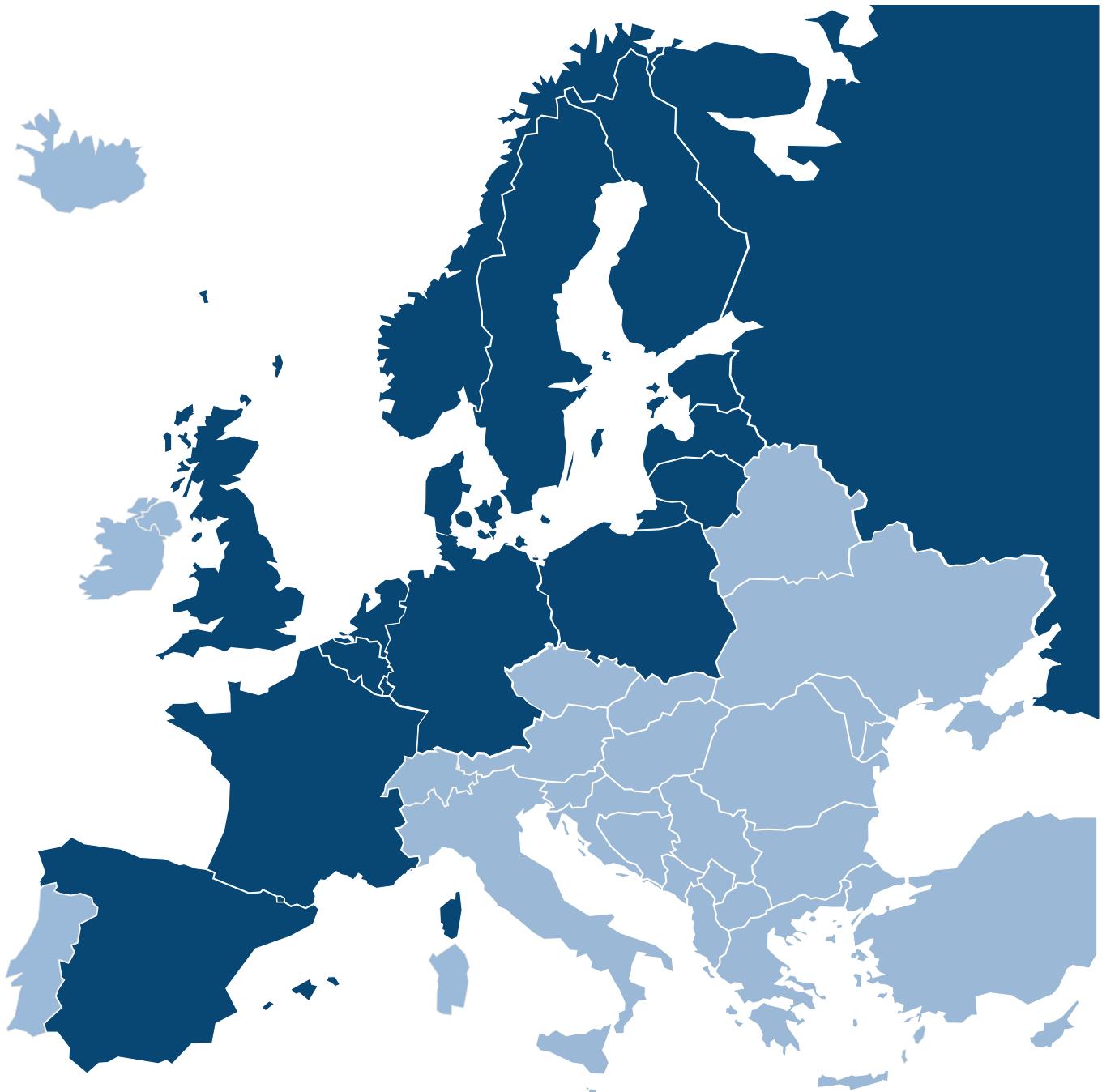


### Product compliance and conformity

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# POWERTEX



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