

# **HOLZMANN MASCHINEN GmbH**

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CZ NÁVOD NA OBSLUHU

Překlad / Translation

**EN USER MANUAL** 

**ELEKTRICKÝ LANOVÝ NAVIJÁK** 

**ELECTRIC ROTARY HOIST FRAME** 

ESZ250D

**ESZ 250D** 



**ESZ 500D** 



**ESZ 1000D** 



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vašeho obchodníka zakoupíte nový nebo podobný stroj, je tento povinen starý stroj od vás bezplatně převzít k odborné likvidaci.

# 10 PREFACE (EN)

# **Dear Customer!**

This manual contains information and important instructions for the installation and correct use of the electric rotary hoist frames ESZ 250D / ESZ 500D / ESZ 1000D.

Following the usual commercial name of the device (see cover) is substituted in this manual with the name "machine".

This manual is part of the product and shall not be stored separately from the product. Save it for later reference and if you let other people use the product, add this instruction manual to the product.



### Please read and obey the security instructions!

Before first use read this manual carefully. It eases the correct use of the product and prevents misunderstanding and damages of product and the user's health.

Due to constant advancements in product design, construction pictures and content may diverse slightly. However, if you discover any errors, inform us please.

Technical specifications are subject to changes!

Please check the product contents immediately after receipt for any eventual transport damage or missing parts.

Claims from transport damage or missing parts must be placed immediately after initial product receipt and unpacking before putting the product into operation.

Please understand that later claims cannot be accepted anymore.

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# **Customer service contact**

#### **HOLZMANN MASCHINEN GmbH**

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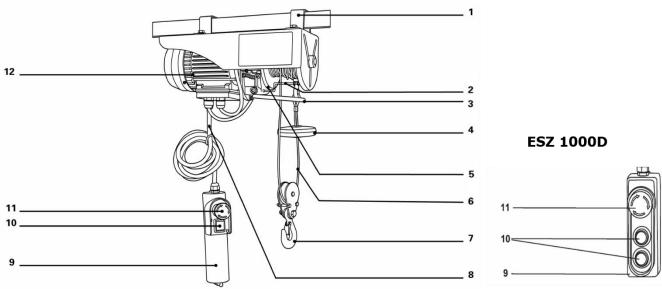
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# 11 TECHNIC

# 11.1 Components



1	Mounting bracket	7	Lifting hook
2	Down limit switch	8	Control cable
3	Up limit switch	9	Controller
4	Limit block	10	Up-down-switch
5	Rope drum	11	Emergency switch
6	Steel rope	12	Motor

# 11.2 Delivery content

Lifting hook	Deflection pulley	
Mounting screws (4x)	Mounting bracket (2x)	

# 11.3 Technical details

	ESZ 250D	ESZ 500D	ESZ 1000D	
Voltage	230 V / 50Hz	230 V / 50Hz	230 V / 50Hz	
Motor power	500 W	900 W	1600 W	
max. payload with/without deflection pulley	250 / 125 kg	500 / 250 kg	999 / 500 kg	
max. lifting height with/without deflection pulley	6 / 12 m	6 / 12 m	6 / 12 m	
Lifting speed with/without deflection pulley	4 / 8 m/min	4 / 8 m/min	4 / 8 m/min	
Steel rope diameter Ø	3 mm	4,2 mm	5,6 mm	
Rope tensile strength	≥1870 N/mm²	≥1770 N/mm²	≥1770 N/mm²	
Protection mode	IP 54	IP 54	IP 54	
Weight	10,5 kg	16,5 kg	33 kg	



#### 12.1 Intended Use

The machine must only be used for its intended purpose! Any other use is deemed to be a case of misuse.

To use the machine properly you must also observe and follow all safety regulations, the assembly instructions, operating and maintenance instructions lay down in this manual.

All people who use and service the machine have to be acquainted with this manual and must be informed about the machine's potential hazards.

It is also imperative to observe the accident prevention regulations in force in your area.

The same applies for the general rules of occupational health and safety.

The machine is used for:

Lifting fixed loads.

Any manipulation of the machine or its parts is a misuse, in this case HOLZMANN-MASCHINEN and its sales partners cannot be made liable for ANY direct or indirect damage.



#### WARNING

- The motor of the machine is protected with a thermal fuse. When the thermal fuse responses, the machine stops. The machine can be used again only after cooled down (app. 5 minutes).
- The machine is suitable for operating mode S3 (25% operating time: 2,5 min at 10 min) and not for continuous operation.

#### **Ambient conditions:**

The machine may be operated:

humidity max. 70%

temperature +5°C to +40°C

The machine shall not be operated in areas exposed to increased fire or explosion hazard.

#### Prohibited use:

- The operation of the machine outside the stated technical limits described in this manual is forbidden.
- The operation of the machine without provided protective devices is prohibited
- The use of the machine not according with the required dimensions is forbidden.
- Any manipulation of the machine and parts is forbidden.
- The use of the machine for any purposes other than described in this user-manual is forbidden.
- The unattended operation on the machine during the working process is forbidden!
- It is explicitly prohibited that persons stayed or walked under or in the immediate vicinity of the suspended load!
- To lift loads connected to earth is forbidden!
- Swinging with the hung load is forbidden!
- Lifting of loads hung outside of axis of gravity is forbidden!
- To lift people or animals is explicitly forbidden!



# 12.2 Security instructions

Missing or non-readable security stickers have to be replaced immediately! The locally applicable laws and regulations may specify the minimum age of the operator and limit the use of this machine!

To avoid malfunction, machine defects and injuries, read the following security instructions!



# NOTICE

In this machine following protective equipment is in effect:

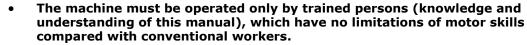
- Emergency-switch on controller
- Limit switch up and down



- Keep your work area dry and tidy! An untidy work area may cause accidents.
   Avoid slippery floor.
- Make sure the work area is lighted sufficiently



- Always stay focused when working. Reduce distortion sources in your working environment. The operation of the machine when being tired, as well as under the influence of alcohol, drugs or concentration influencing medicaments is forbidden.
- Only one person shall operate the machine.





- Make sure there is nobody present in the dangerous area. The minimum safety distance is 10 m
- Use personal safety equipment: safety shoes S1, work wear when working with or on the machine!



- Never leave the machine running unattended! Before leaving the working area switch the machine off and wait until the machine stops.
- Always disconnect the machine prior to any actions performed at the machine!



- Do not use the machine with damaged switch
- The plug of an electrical tool must strictly correspond to the socket. Do not use any adapters together with earthed electric tools



- Each time you work with an electrically operated machine, caution is advised! There is a risk of electric shock, fire
- Protect the machine from dampness (causing a short circuit)
- Check the cable regularly for damage
- Do not use the cable to carry the machine or to fix the load



- Protect the cable from heat, oil and sharp edges
- Avoid body contact with earthed components
- Keep any machine that is not being used out of reach of children



### NOTICE

#### **Emergency procedure**

A first aid kit should always be readily available for a possible accident. Initiate the violation in accordance with the necessary first aid measures. When requesting support, provide the following details::



1. Place of accident	2. Type of accident		
3. Number of injured people	4. Injury type(s)		



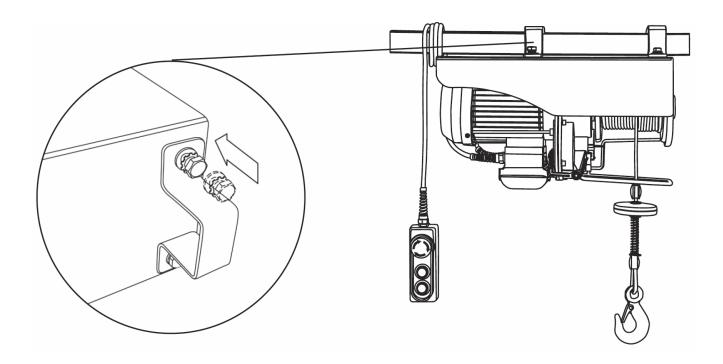
# 13 ASSEMBLY

Please check the product contents immediately after receipt for any eventual transport damage or missing parts. Claims from transport damage or missing parts must be placed immediately after initial machine receipt and unpacking before putting the machine into operation. Please understand that later claims cannot be accepted anymore.



# **ATTENTION**

- Ensure conscientious assembly of the machine.
- The structural part the machine is to be fixed to must be able to bear at least the double value of the expected payload
- Make sure the appliance is always fixed horizontally and never awry.
- Tighten firmly all bolts, using washers and snap rings.
- At regular intervals, please check the fastening clamps for any damage, cracks, etc.
- Ensure that the support, where the machine will be mounted is securely mounted.
- Never exceed the maximum payload!





## 14 OPERATION

Machine to be operated in a perfect state only. Inspect the device visually every time it is to be used. Check in particular the safety equipment, electrical controls, electric cables and screwed connection for damage and if tightened properly. Replace any damaged parts before operating the device.

# 14.1 Operation instructions



### WARNING

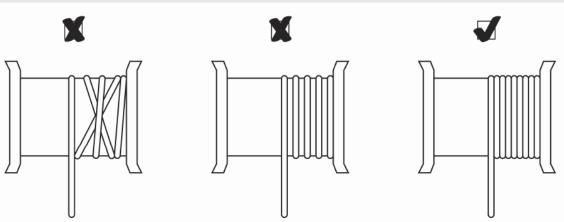


Perform all machine settings with the machine being disconnected from the power supply!



## NOTICE

- Inspect the machine visually before each use.
- The steel rope needs to be checked for any damage each time you put it into operation. It is strictly prohibited to use the machine when the steel rope is damaged!
  - Make sure the steel rope always reels up smoothly on the rope drum.



- In particular, check the perfect state of the snap hooks preventing any unintentional release of the lifting hook from slings (ropes, rings, transportation eyes, etc.).
- All lifting work is only allowed when appropriate fixing elements (ropes, rings, transport loops, etc.) are used and when in accordance with appropriate provisions and standards valid in the workplace.
- The machine can only be used for lifting of loads whose weight does not exceed the maximum payload specified by the producer in technical data and on the type label of the machine.
- Attach the load correctly.
- Lifted loads may only be lifted in a vertical position! Never pull and lift in an inclined position!!
- The steel rope must not be used for load fixing.
- When using the deflection pulley, hang the lifting hook into the hook holder of the carrier housing.

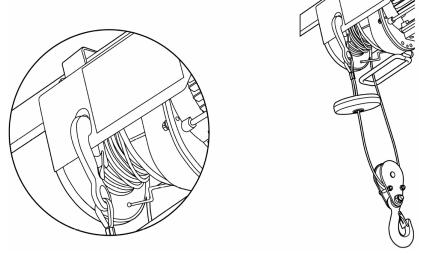


# 14.2 Operation

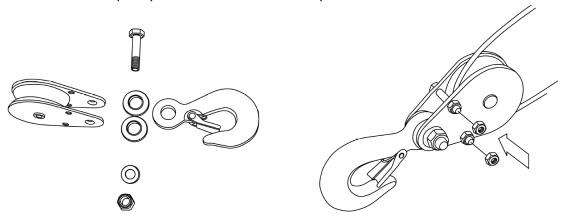
- Check, whether the emergency switch (11) is pressed. For unlocking, turn the emergency switch (1) clockwise.
- For lifting the load, press the up-down-switch ▲ (10).
- For lowering the load, press the up-down-switch ▼ (10).
- The machine is provided with up limit switch and down limit switch, which prevent that the steel rope is completely or wrongly unwound and/or the load is lifted up too high.

  Never totally unwind the rope. At least 2 windings of the rope must remain on the drum!
- In the emergency case press the emergency switch (11) immediately. The machine stops.

# 14.2.1 Use with deflection pulley



- The machine is provided with a deflection pulley and hook. When they are used correctly the machine can lift double payload.
- Mount the deflection pulley as shown on the below picture.



• When using the deflection pulley, hang the lifting hook into the hook holder of the carrier housing. With help of 2 steel ropes to lift the load the machine is now capable to lift the double load.



#### 15 MAINTENANCE





Perform all maintenance machine settings with the machine being disconnected from the power supply!





The machine does not require extensive maintenance. If malfunctions and defects occur, let it be serviced by trained persons only.

#### NOTICE

Clean your machine regularly after every usage – it prolongs the machines lifespan and is a pre-requisite for a safe working environment.

Repair jobs shall be performed by respectively trained professionals only.

Check regularly the condition of the security stickers. Replace them if required.

Check regularly the condition of the machine!

Store the machine in a closed, dry location.

# 15.1 Maintenance plan

- Check regularly the correct function of the limit switches and the emergency switch.
- Per 30 cycles check the condition of the steel rope. If there are any damages replace the steel rope in accordance with the technical details.
- Per 200 cycles lubricate the steel rope and the deflection pulley.
- Per 1000 cycles check that the screws of the mounting brackets are well tightened
- Per 1000 cycles check that the hook and the deflection pulley are in good conditions.
- Per 1000 cycles inspect the braking system. If there are abnormal noises in the motor or the machine is unable to hold the payload the braking system must be checked.

Per cycle means that the operator operates the load up and down for one time.

#### 15.2 Cleaning



#### HINWEIS

The usage of certain solutions containing ingredients damaging metal surfaces as well as the use of scrubbing agents will damage the machine surface!

Never spray water on the machine or submerge it to any liquid.

# 15.3 Disposal

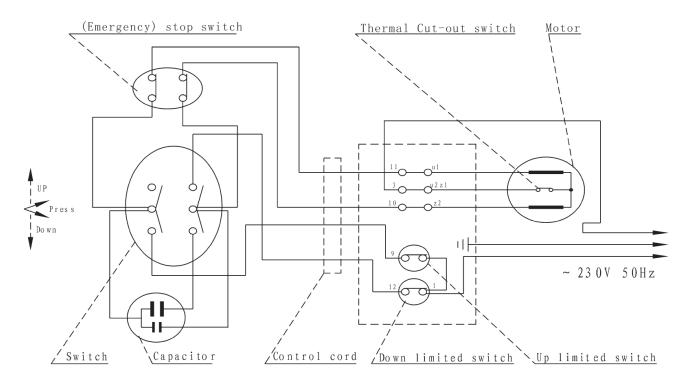
Do not dispose the machine in residual waste. Contact your local authorities for information regarding the available disposal options. When you buy at your local dealer for a replacement unit, the latter is obliged to exchange your old.



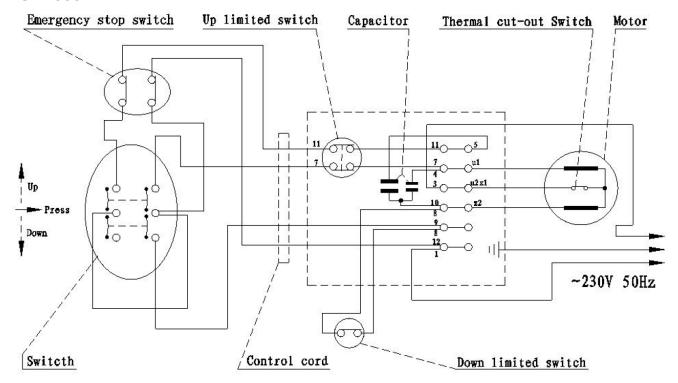


# 16 SCHÉMA ZAPOJENÍ / WIRING DIAGRAM

## **ESZ 250D, ESZ 500D:**



#### **ESZ 1000D:**





# 17 NÁHRADNÍ DÍLY / SPARE PARTS

# 17.1 Objednávky náhradních dílů / spare parts order

Použitím originálních dílů od společnosti Holzmann používáte díly, které spolu dokonale sedí a jejich montáž je časově méně náročná. Originální náhradní díly zajišťují delší životnost stroje.

## POKYN

# Použití jiných než originálních náhradních dílů má za následek ztrátu záruky!

Platí: Při výměně komponent/dílů používejte pouze originální náhradní díly

Při objednávání dílů použijte servisní formulář, který najdete na konci tohoto návodu na obsluhu. Vždy uvádějte typ stroje, číslo náhradního dílu a jeho název. Aby se předešlo neshodám, doporučujeme společně s objednávkou zaslat i kopii výkresu rozpadu náhradních dílů, na kterém Vámi požadované díly označíte.

Adresu pro objednání dílů naleznete v kontaktech na zákaznický servis.

With original HOLZMANN spare parts you use parts that are attuned to each other shorten the installation time and elongate your products lifespan.

## **IMPORTANT**

## The installation of other than original spare parts voids the warranty!

So you always have to use original spare parts

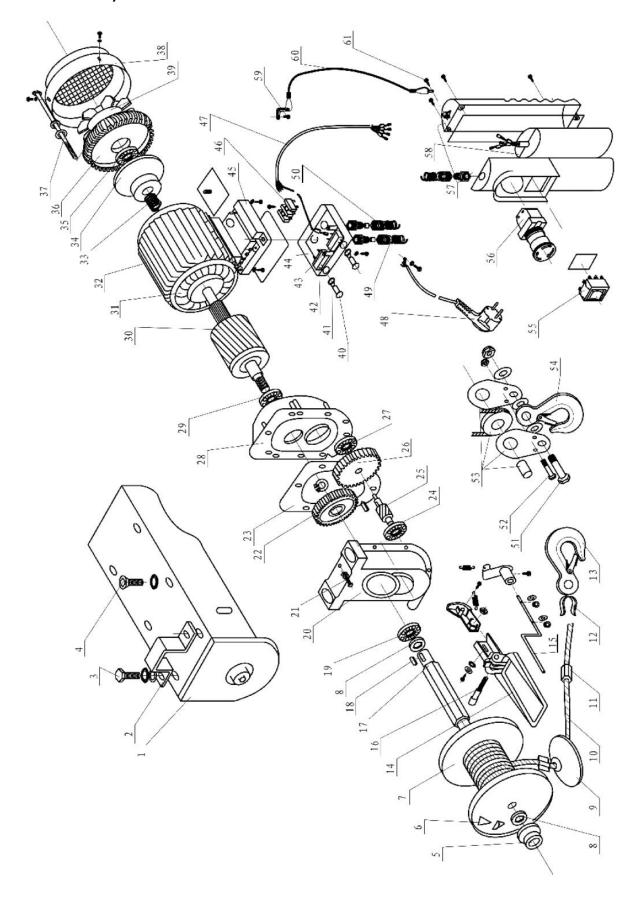
When you place a spare parts order please use the service formular you can find in the last chapter of this manual. Always take a note of the machine type, spare parts number and partname. We recommend to copy the spare parts diagram and mark the spare part you need.

You find the order address in the preface of this operation manual.



# 17.2 Rozpadový výkres / explosion drawing

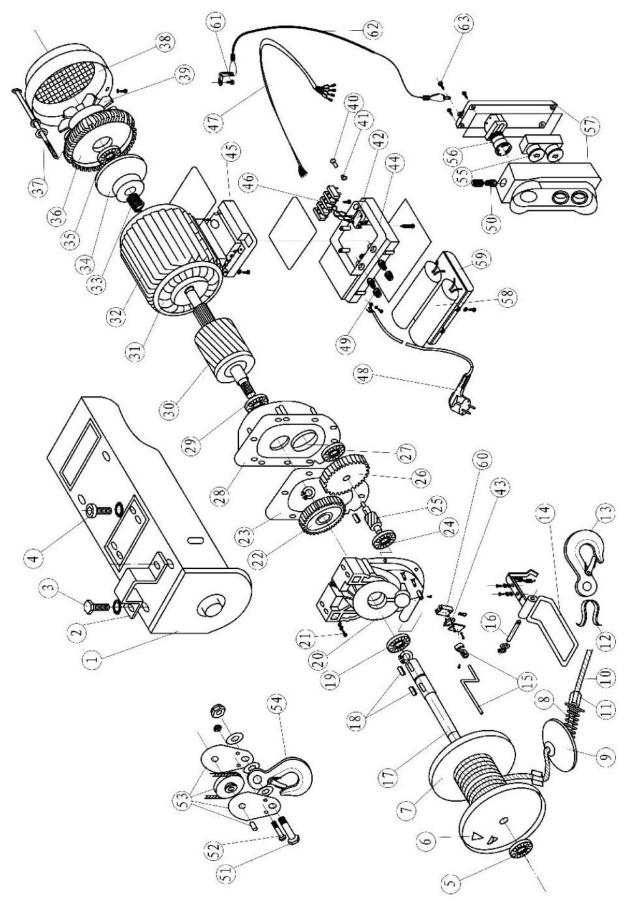
# 17.2.1 ESZ 250D / ESZ 500D





No.	Part name	Qty.	No.	Part name	Qty.
1	Bracket	1	32	Chassis	1
2	Fixing ring	2	33	Brake spring	1
3	Hexagon bolt	4	34	Brake assembling	1
4	Socket cap screw	2	35	Bearing	1
5	Cradle	1	36	Motor cover	1
6	Embed pin	2	37	Extra long hexagon bolt	4
7	Rope drum	1	38	Fan cover	1
8	Drum washer	2	39	Fan blade	1
9	Limit block	1	40	Limit switch contactor	2
10	Steel cable	1	41	Limit shaft seal	2
11	Fastening sleeve of rope	2	42	Up limit switch	1
12	Shrink-Ring of rope	1	43	Down limit switch	1
13	Hook	1	44	Connection box	1
14	Limit lever Assy.	1	45	Base of connection box	1
15	Down limit pole	1	46	Terminal Block	1
16	Inner hexagon screw	1	47	Four -core cable	1
17	Rope drum shaft	1	48	Plug	1
18	Flat pin	1	49	Cord clip (Small)	1
19	Bearing	1	50	Cord clip (Big)	2
20	Gear box	1	51	Hook shaft	2
21	Cap screw	8	52	Anti-slip screw	2
22	Second stage gear	1	53	Pulley assembling	1
23	Paper seal	1	54	Hook for pulley	1
24	Bearing	1	55	Positive and negative switch	1
25	Middle shaft	1	56	Emergency stop switch	1
26	First stage gear	1	57	Handle	1
27	Bearing	1	58	Capacitor	1
28	Front cover	1	59	Cross recessed pan head screws	1
29	Bearing	1	60	Hand steel cable Assy.	1
30	Rotor	1	61	Cross recessed pan head tapping screws	1
31	Stator	1			







No.	Description	Qua.	No.	Description	Qua.
1	Bracket	1	33	Brake Spring	1
2	Fixing Ring	2	34	Brake Assembly	1
3	Hexagon Bolt	4	35	Bearing	1
4	Socket cap Screws	2	36	Motor Cover	1
5	Bearing	1	37	Extra long Hexagon Bolt	4
6	Embed Pin	2	38	Fan Cover	1
7	Rope Drum	1	39	Fan Blade	1
8	Spring Buffer Assy.	1	40	Limit Switch Contactor	2
9	Limit Block	1	41	Limit Shaft Seal	2
10	Steel Cable	1	42	Up Limit Switch	1
11	Fastening Sleeve of Rope	2	43	Down Limit Switch	1
12	Shrink-Ring of Rope	1	44	Connection Box	1
13	Hook	1	45	Base of Connection Box	1
14	Limit Lever Assy.	1	46	Terminal Block	1
15	Down Limit Pole	1	47	Four Core Cable	1
16	Socket Cap Screws	1	48	Plug	1
17	Rope Drum Shaft	1	49	Cord Clip (Small)	1
18	Flat Pin	1	50	Cord Clip (Big)	2
19	Bearing	1	51	Hook Shaft	2
20	Gear Box	1	52	Anti-Slip Screw	2
21	Cap Screws	8	53	Pulley Assembly	1
22	Second Stage Gear	1	54	Hook for Pulley	1
23	Paper Seal	1	55	Positive and Negative Switch	1
24	Bearing	1	56	Emergency Stop Switch	1
25	Middle Shaft	1	57	Handle	1
26	First Stage Gear	1	58	Capacitor	1
27	Bearing	1	59	Connecting Housing Cover	1
28	Front Cover	1	60	Down Limit Box	1
29	Bearing	1	61	Cross Recessed Pan Head Screws	1
30	Rotor	1	62	Hand Steel Cable Assy.	1
31	Stator	1	63	Cross Recessed Pan Head Tapping Screws	1
32	Chassis	1			



# 18 PROHLÁŠENÍ O SHODĚ / CE-CERTIFICATE OF CONFORMITY



#### Dovozce / Distributor

HOLZMANN MASCHINEN®

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#### Název / name

#### ELEKTRICKÝ LANOVÝ NAVIJÁK / ELECTRIC ROTARY HOIST FRAME

#### Typ / model

**ESZ 250D, ESZ 500D, ESZ 1000D** 

#### Směrnice ES / EC-directives

-2006/42/EG; -2014/30/EU, -2011/65/EU

#### Použité normy / applicable Standards

•EN 14492-2:2006+A1, •EN 60204-32:2008, •EN 55014-1:2006+A1+A2, •EN 55014-2:2015, •EN 61000-3-2:2014, •EN 61000-3-3:2013, IEC 62321:2008

Tímto prohlašujeme, že výše uvedený typ stroje splňuje bezpečnostní a zdravotní požadavky norem EU. Toto prohlášení ztrácí svou platnost, pokud by došlo ke změnám nebo úpravám stroje, které námi nebyly odsouhlaseny.

Hereby we declare that the above mentioned machines meet the essential safety and health requirements of the above stated EC directives. Any manipulation or change of the machine not being explicitly authorized by us in advance renders this document null and void.

Technische Dokumentation HOLZMANN-MASCHINEN GmbH 4170 Haslach, Marktplatz 4

Haslach, 30.11.2016 Místo/Datum place/date MANN. HOLZMANN MASCHINEN
GmbH

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Jednatel / Director

DI (FH) Daniel Schörgenhuber