

Reference number:

**ASB/LSBxxx-yy-zz series**

READ CAREFULLY BEFORE USE THE EQUIPMENT

**SECTION 1 - GENERAL DATA**

**DESCRIPTION**

Aluminium gantry crane (ASB/LSB series) is a complete, lightweight, fully customizable (modular design), portable and flexible device designed to be used in variety of lifting applications such as, drainage wells, reservoirs, wells, silos, rooftop, lift-shaft, waste water and many more. For faster device installation additional tools are not needed (device installation - Section 2).

Beam: from 2 to 7 meters.

ASB Combined Beams: 8 and 9 meters.

Support for ASB: types - A1 / B1 / C1 / C2.

Supports for LSB: types - E1 / F1 / G1 / G2.

ASB Working Load Limit (WLL): from 1500kg up to 3500kg (depends on configuration - please see ASB Technical Data Table).

LSB Working Load Limit (WLL): from 500kg up to 2000kg (depends on configuration - please see LSB Technical Data Table).

Safety factor for lifting loads: 2.1:1.

Safety factor for personal rescue: 10:1.

ASB - Protection for maximum five people at the same time. ASB Combined Beam - max two people at the same time.

LSB - Protection for maximum three people at the same time.

**DEVICE USE SCENARIOS**

**1. Lifting loads only**

ASB/LSB can be used for lifting/lowering loads up to the related Working Load Limit (WLL - which is always indicated on the beam) with chain hoists, RUP50x-CT/DT series devices and other lifting equipment. For lifting loads external trolley must be used.

Lifting loads - Section 3.

**2. Personal protection and lifting loads**

ASB/LSB device can be used for personal protection (for ASB max. 5 people at the same time and for LSB max. 3 people at the same time) during lifting/lowering loads. When Combined ASB Beams are used - max. 2 people at the same time. During both operations at the same time (personal protection and lifting/lowering loads) WLL of the device indicated on the beam must be reduced - please refer to Section 3. For personal protection internal trolley must be used.

Personal protection - Section 4. Lifting loads and personal protection at the same time - Section 5.

**3. Rescue and personal protection only.**

ASB/LSB device can be used for rescue purposes and personal protection as component of personal protective equipment against fall from height. During rescue operation lifting/lowering loads IS NOT allowed. For rescue RUP50x-C or RUP50x-D rescue lifting device must be used. For personal protection internal trolley must be used.

Rescue - Section 6.

Personal Protection - Section 4.

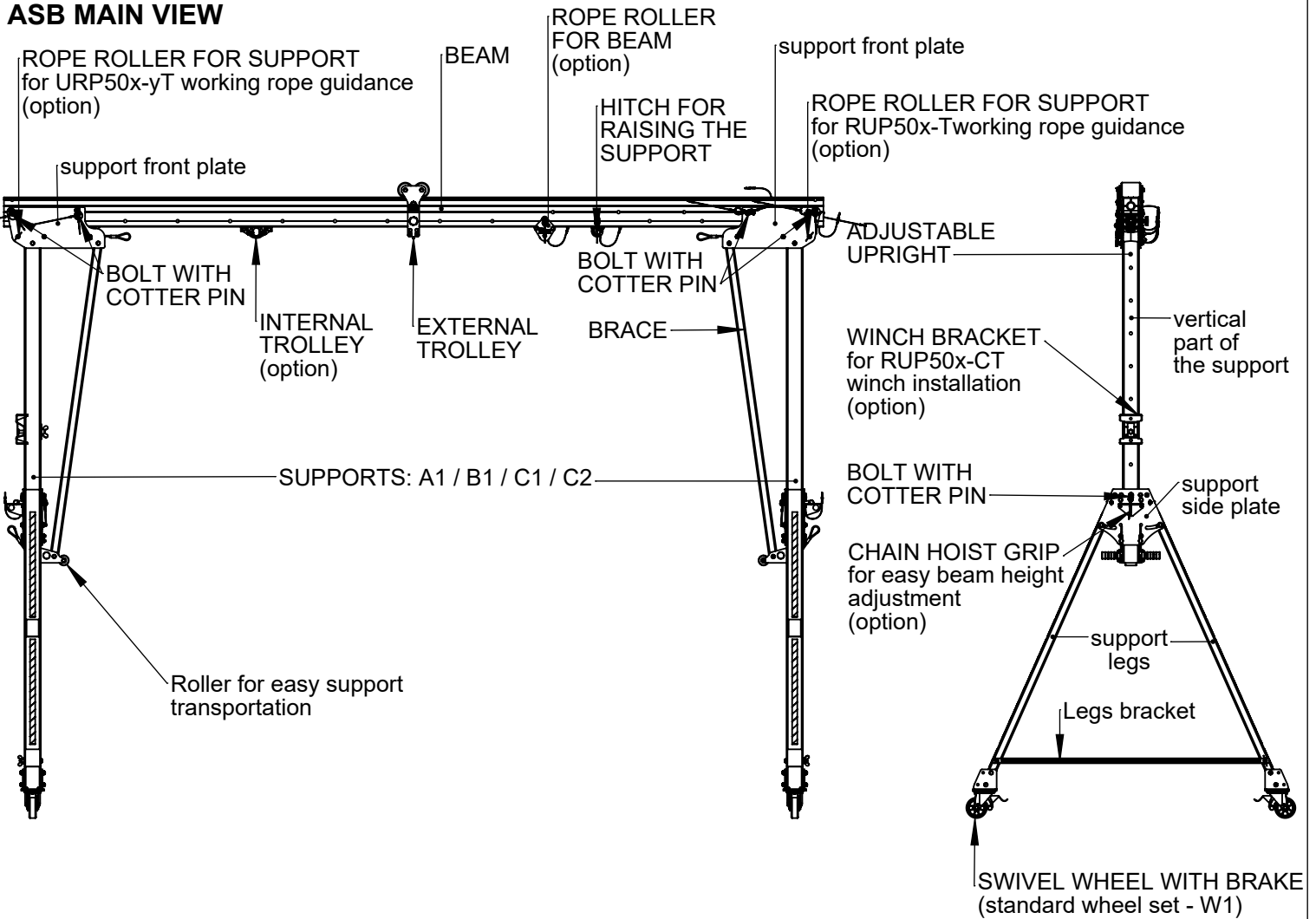
**ASB**

**LSB**

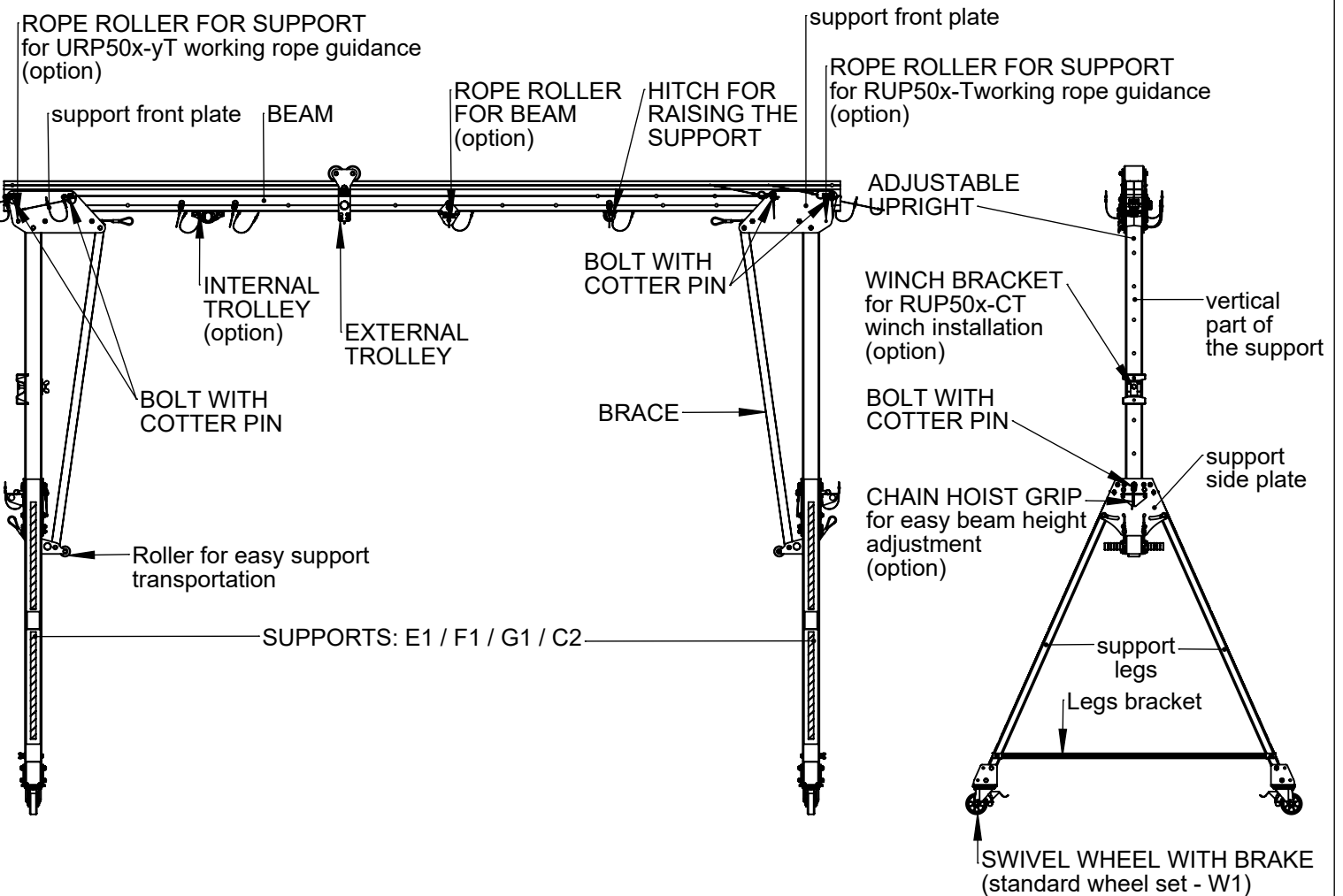


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### ASB MAIN VIEW



### LSB MAIN VIEW



## GENERAL SAFETY INSTRUCTION

### INSPECTION BEFORE FIRST USE

ASB/LSB device must be visually and functionally inspected before first use by a competent person. Inspection must establish that all parts of the device are safe and has not been damaged by incorrect assembly, transport or storage. Inspections are carried out by the user.

### INSPECTION BEFORE WORKING

Before each use it is obligatory to carry out a pre-use check of the equipment, to ensure that it is in a serviceable condition and operates correctly before it is used. During pre-use check it is necessary to inspect all elements of the equipment in respect of any damages, excessive wear, corrosion, abrasion, cutting or incorrect acting. Especially take into consideration:

- components visual defects,
- test the trolleys for free movement along the beam,
- ensure that WLL of the device is sufficient for the application and will not be exceeded.

Inspections are carried out by the user.

### MAXIMUM LIFESPAN / PERIODIC INSPECTION / WARRANTY

Maximum lifespan of the ASB/LSB device is unlimited but its depends on the intensity of usage and the environment of use. Using the device in rough environment, marine, contact with sharp edges, exposure to extreme temperatures or aggressive substances, etc. can lead to the withdrawal from use even after one use.

After every 12 months of utilization, equipment must be withdrawn from use to carry out periodical detailed inspection.

Periodic inspections must only be carried out by:

**FOR PERSONAL PROTECTION EQUIPMENT (PPE):** a competent person who has the knowledge and training required for personal protective equipment periodic inspections OR manufacturer OR manufacturer's authorized representative.

**FOR LIFTING EQUIPMENT (NON PPE):** a competent person responsible in the workplace for the interim inspection of lifting equipment.

Depending upon the type and environment of work, inspections may be needed to be carried out more frequently than once every 12 months.

During periodic inspection will be established admissible time of the device use till next periodic inspection.

The result of the periodic inspection must be recorded in Identity Card.

Regular periodic inspections are the essential for equipment maintenance and the safety of the users which depends upon the continued efficiency and durability of the equipment.

During periodic inspection it is necessary to check the legibility of the equipment marking.

**ASB / LSB standard warranty period counted from purchase date: 3-years. Additional warranty can be purchased.**

### MAINTENANCE / STORAGE / REPAIR

If during the inspection any defects or damages are detected ASB/LSB device should be immediately withdraw from the use. Do not change the device design, repair or replace elements included in the kit.

When using the device, protect it against mechanical, chemical and thermal damage. Do not use a damaged or malfunctioning parts. Clean a dirty device with a damp cloth. Store the device indoors, away from moisture and sources of heat.

### WITHDRAWAL FROM THE USE

Device must be withdrawn from use immediately when any doubt arise about its condition for safe use and not used again until confirmed in writing by equipment manufacturer or his representative after carried out the detailed inspection.

### TRANSPORT

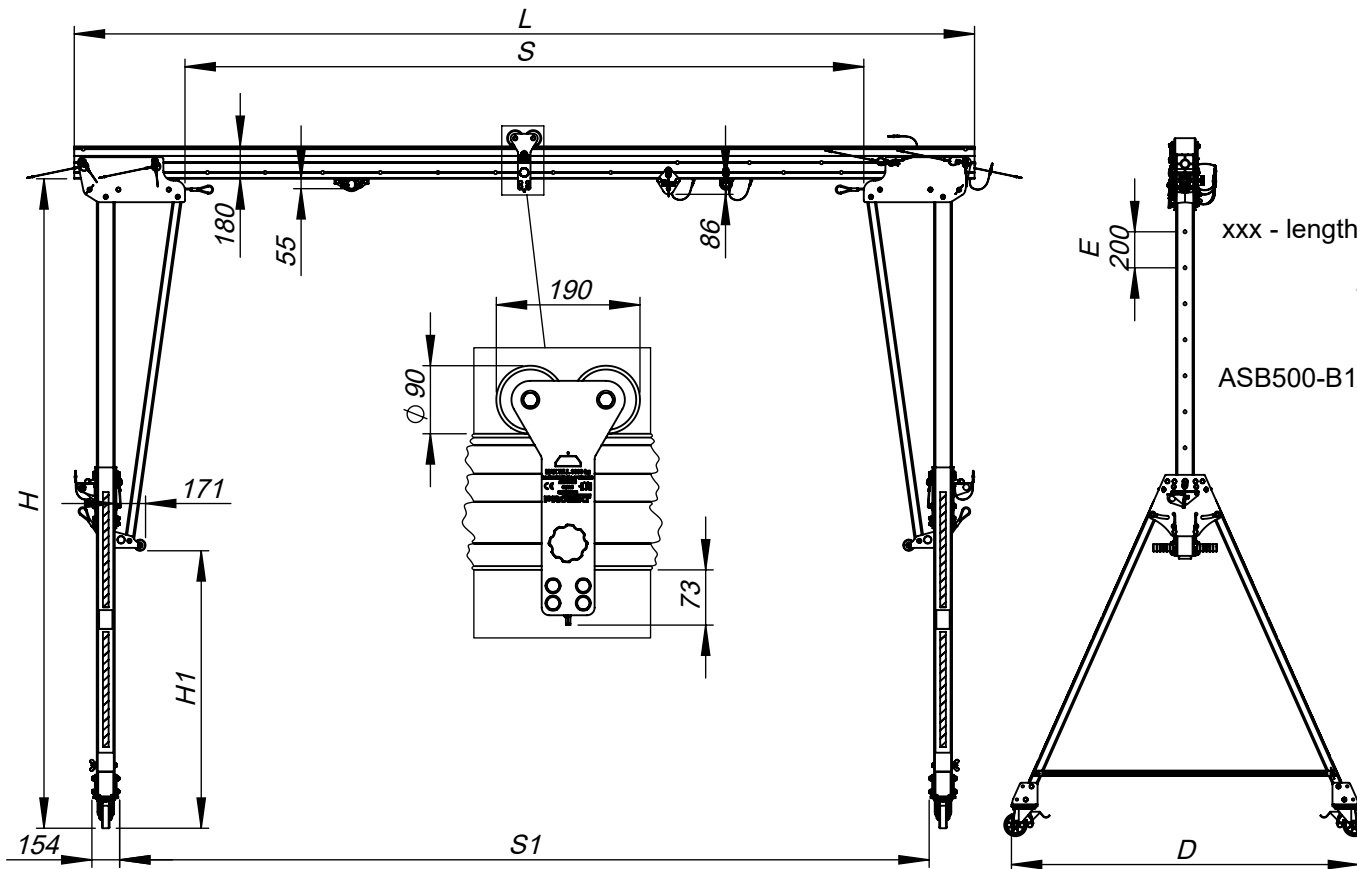
The device should be transported in packaging protecting it from damage or getting wet, e.g. bags made of impregnated fabric or in steel / plastic / waterproof wooden cases or boxes.

### GENERAL PRECAUTIONS

- ASB/LSB device must be installed in accordance with this instruction manual.
- ASB/LSB device can be used in the temperature range from -20°C to +50°C.
- **Working Load Limit (WLL) indicated on the beam MUST NOT be exceeded.**
- **Working Load Limit (WLL) indicated on the beam MUST BE REDUCED to the RWWL value when personnel is protected (attached to the internal trolley) during lifting/lowering loads in accordance with Section 5.**
- During rescue operation lifting/lowering loads IS NOT allowed - please refer to Section 6.
- Each lifting operation must be properly planned and the weight of the load to be lifted must be known by the operator.
- Before any lifting operation all wheel brakes MUST BE locked.
- Equipment for lifting loads (e.g. hoists, chains) MUST BE attached ONLY to the external trolley attachment point.
- DO NOT attach load to the internal trolley. Internal trolley is intended to be used ONLY as personal protective equipment only.
- The operator must ensure that the additional lifting equipment (e.g. hoists, chains) are properly attached and not expose him or other personnel to danger.
- **ASB/LSB device can be moved under load only when a competent person or authority approves a risk assessment and method statement for a particular reason.**
- **Risk assessment and method statement must consider additional loading in "wet lift" situation.**
- Do not allow load to swing.
- Beam must be positioned horizontally during any lifting operation.
- Avoid side loads. Lift loads only when load chain is stretched in the vertical position between load and attachment point of lifting device.
- Do not lift or transport loads while personnel are in the danger zone.
- Personnel SHOULD NOT stand or pass under a suspended load.
- Suspended load MUST NOT be left unattended for a long period of time.
- BEFORE starting lowering the load ALWAYS make sure that personnel are not stand or pass under the load.

# ASB TECHNICAL DATA TABLE

'L' TOTAL BEAM LENGTH [mm]	'S' Working span [mm]	'S1' Bottom span [mm]	Beam weight [kg]	A1 SUPPORT		B1 SUPPORT		C1 SUPPORT		C2 SUPPORT	
				WLL [T]	Total device weight [kg]	WLL [T]	Total device weight [kg]	WLL [T]	Total device weight [kg]	WLL [T]	Total device weight [kg]
<b>2000</b>	770	1496	26,7	<b>3*</b>	122	<b>3</b>	148	<b>3</b>	204	<b>1</b>	242
<b>3000</b>	1770	2496	40,1	<b>3*</b>	135	<b>3</b>	161	<b>3</b>	218	<b>1</b>	255
<b>4000</b>	2770	3496	53,4	<b>3</b>	148	<b>3</b>	174	<b>3</b>	231	<b>1</b>	269
<b>5000</b>	3770	4496	66,5	<b>2.5</b>	162	<b>2.5</b>	188	<b>2.5</b>	244	<b>1</b>	282
<b>6000</b>	4770	5496	80,1	<b>2</b>	175	<b>2</b>	201	<b>2</b>	258	<b>1</b>	295
<b>7000</b>	5770	6496	93,5	<b>1.5</b>	188	<b>1.5</b>	214	<b>1.5</b>	271	<b>1</b>	309
<b>8000**</b>	6770	7496	112	<b>0.5</b>	207	<b>0.5</b>	232	<b>0.5</b>	289	<b>0.5</b>	327
<b>9000**</b>	7770	8496	125	<b>0.5</b>	220	<b>0.5</b>	246	<b>0.5</b>	303	<b>0.5</b>	340
Support Weight [kg]				38,2		50,2		72,8		98,4	
'H' - Support height (min...max) [mm]				<b>1594...2194</b>		<b>2207...3607</b>		<b>3230...5430</b>		<b>4230...6430</b>	
'H1' - Under roller height (min...max) [mm]				34...634		141...1541		164...2364		164...2364	
'D' - Legs spacing [mm]				1115		1928		2834		2834	
'E' - Support height increment [mm]						200					



## ASB REFERENCE

### ASBxxx-yy-zz

where:

xxx - length of the beam [cm] [200 / 300 / 400 / 500 / 600 / 700 / 800 / 900]

yy - support height option [A1 / B1 / C1 / C2]

zz - wheels set type [W1 / W2 / W3 / W4 / W5 / W6]

### EXAMPLE

ASB500-B1-W2 - 5-meter beam with support B1 with  $\varnothing$ 200mm galvanized steel with solid rubber tyre wheels.

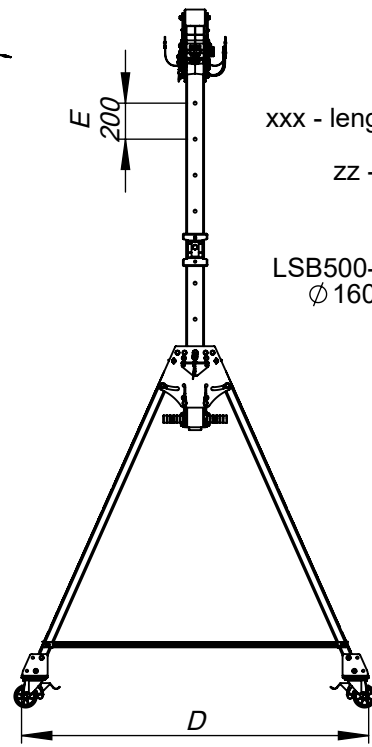
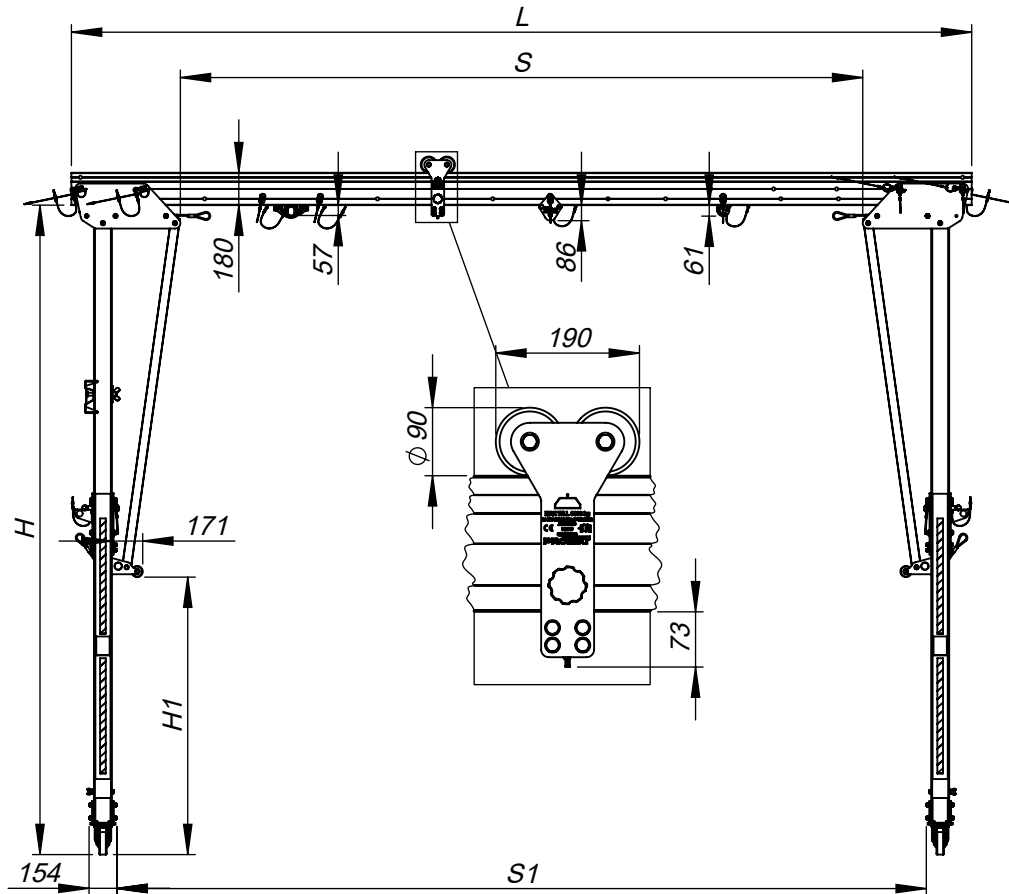
\* On special request WLL of 2 and 3 meter beam used with A1 supports can be increased to 3,5T.

\*\* Combined beams (connected using TRE200-002-000 connector).



# LSB TECHNICAL DATA TABLE

'L' Total beam length [mm]	'S' Working span [mm]	'S1' Bottom span [mm]	Beam weight [kg]	E1 SUPPORT		F1 SUPPORT		G1 SUPPORT		G2 SUPPORT	
				WLL [T]	Total device weight [kg]	WLL [T]	Total device weight [kg]	WLL [T]	Total device weight [kg]	WLL [T]	Total device weight [kg]
<b>2000</b>	770	1496	13,2	<b>1.75*</b>	98	<b>1.75</b>	122	<b>1.75</b>	155	<b>0.5</b>	167
<b>3000</b>	1770	2496	19,7	<b>1.5</b>	105	<b>1.5</b>	129	<b>1.5</b>	162	<b>0.5</b>	174
<b>4000</b>	2770	3496	26,3	<b>1.25</b>	111	<b>1.25</b>	135	<b>1.25</b>	169	<b>0.5</b>	180
<b>5000</b>	3770	4496	32,8	<b>1</b>	118	<b>1</b>	142	<b>1</b>	175	<b>0.5</b>	187
<b>6000</b>	4770	5496	39,4	<b>0.75</b>	125	<b>0.75</b>	148	<b>0.75</b>	182	<b>0.5</b>	194
<b>7000</b>	5770	6496	46,0	<b>0.5</b>	131	<b>0.5</b>	155	<b>0.5</b>	188	<b>0.5</b>	200
Support Weight [kg]				34,0		45,0		62,0		68,8	
'H' - Support height (min...max) [mm]				<b>1594...2194</b>		<b>2207...3607</b>		<b>3230...5430</b>		<b>4230...6430</b>	
'H1' - Under roller height (min...max) [mm]				34...634		141...1541		164...2364		164...2364	
'D' - Legs spacing [mm]				1115		1928		2834		2834	
'E' - Support height increment [mm]						200					



## LSB REFERENCE

### LSBxxx-yy-zz

where:  
 xxx - length of the beam [cm] [200 / 300 / 400 / 500 / 600 / 700]  
 yy - support height option [E1 / F1 / G1 / G2]  
 zz - wheels set type [W1 / W2 / W3 / W4 / W5 / W6]

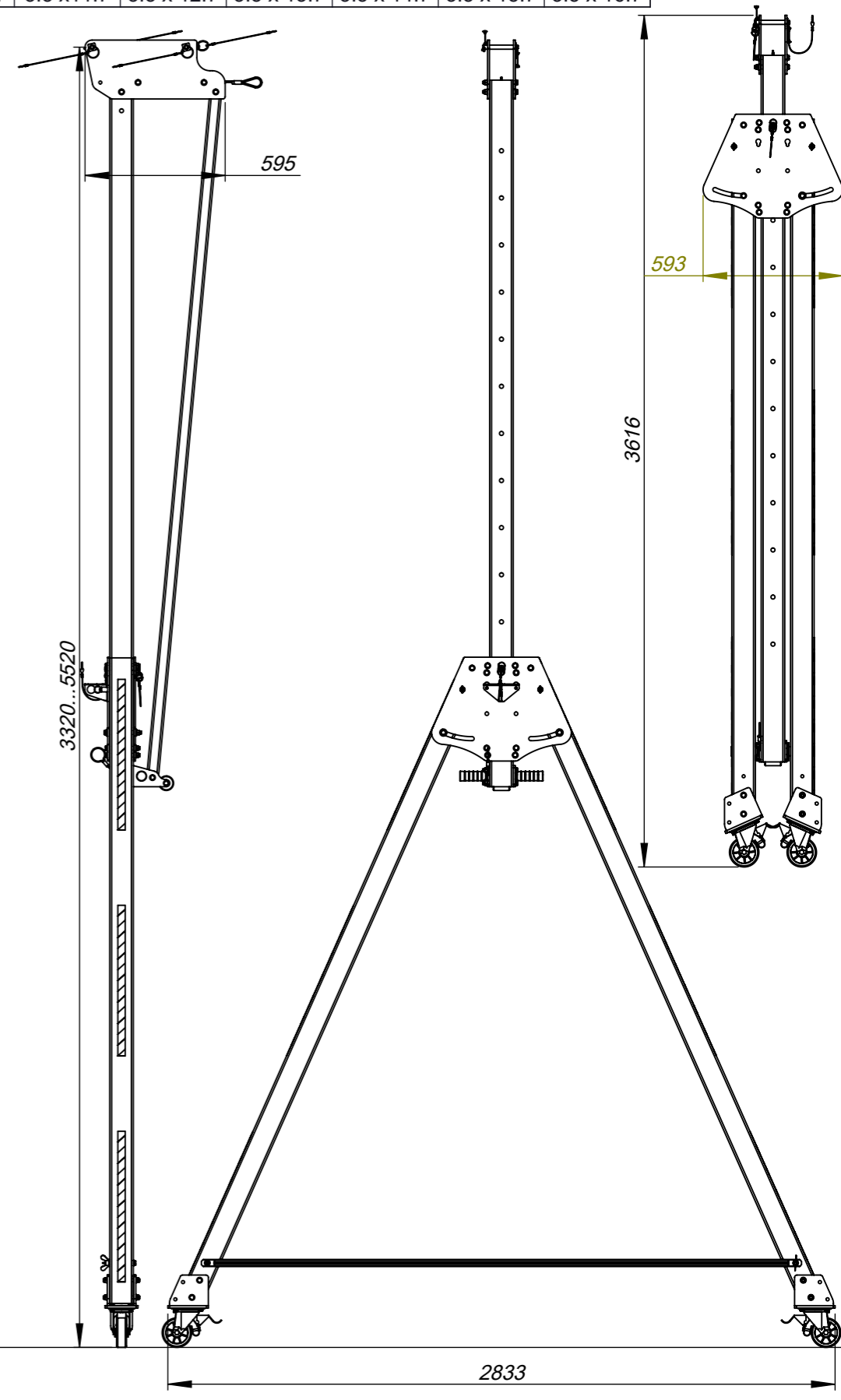
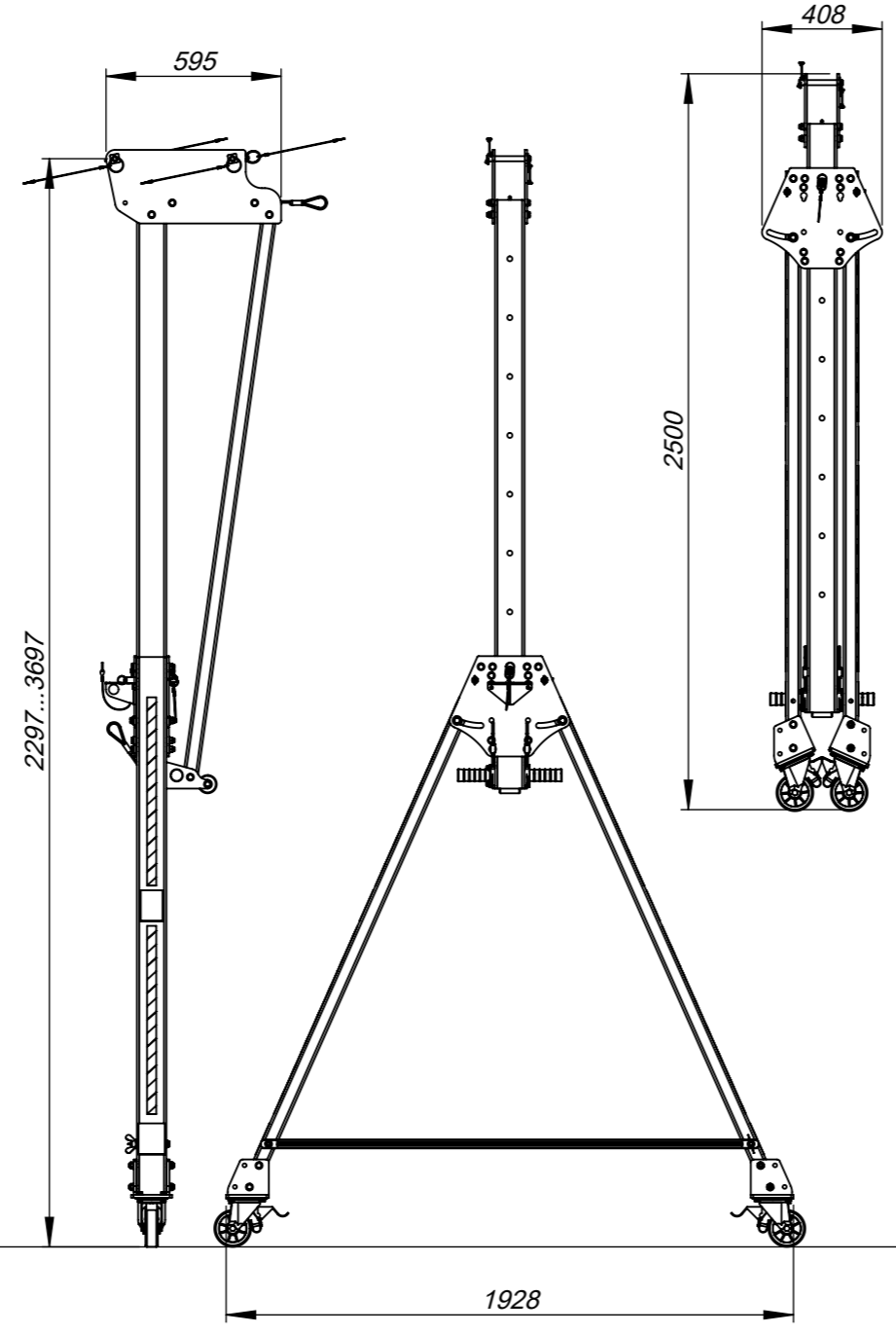
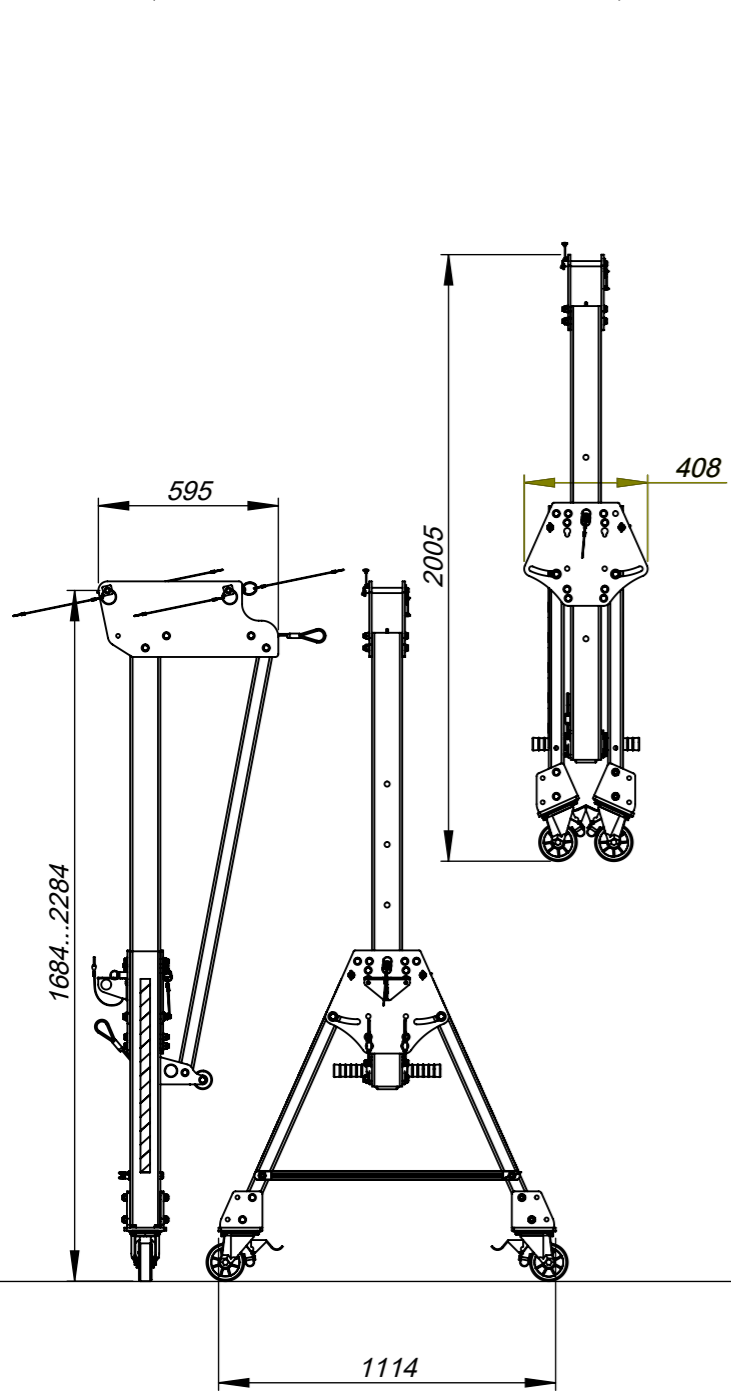
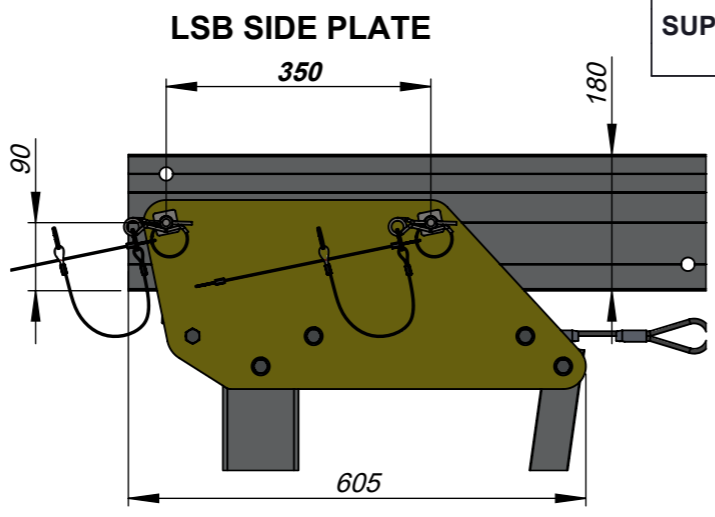
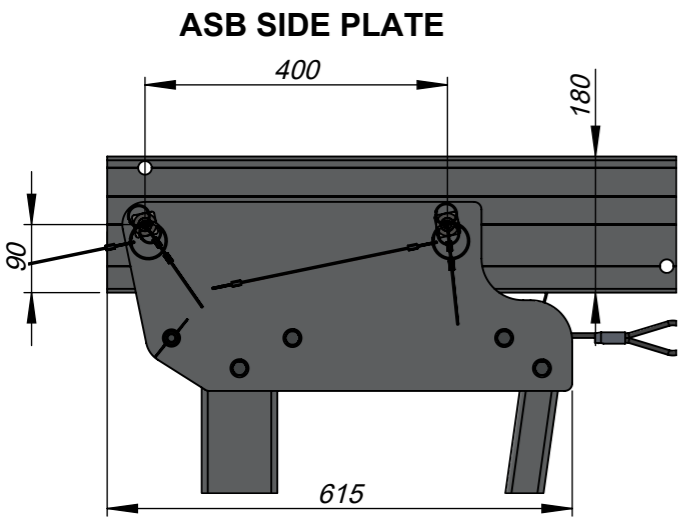
### EXAMPLE

LSB500-F1-W1 - 5-meter beam with support F1 with standard  $\varnothing$  160mm galvanized steel with solid rubber tyre wheels.

\* On special request WLL of 2 meter beam used with E1 supports can be increased to 2T.

**ASB/LSB BASIC SUPPORT TYPES**  
**NOTICE - HOLE SPACING FOR BEAM-SUPPORT CONNECTION IS DIFFERENT FOR ASB (400mm) AND LSB (350mm).**

		ASB / LSB - REQUIRED INSTALLATION AREA [m x m]						ONLY ASB COMBINED BEAMS	
		BEAM LENGTH [m]						8m	9m
SUPPORT	A1 / E1	1.5 x 6.4	1.5 x 7.4	1.5 x 8.4	1.5 x 9.4	1.5 x 10.4	1.5 x 11.4	1.5 x 12.4	1.5 x 13.4
	B1 / F1	2.5 x 7.5	2.5 x 8.5	2.5 x 9.5	2.5 x 10.5	2.5 x 11.5	2.5 x 12.5	2.5 x 13.5	2.5 x 14.5
	C1 / G1	3.5 x 9.7	3.5 x 10.7	3.5 x 11.7	3.5 x 12.7	3.5 x 13.7	3.5 x 14.7	3.5 x 15.7	3.5 x 16.7



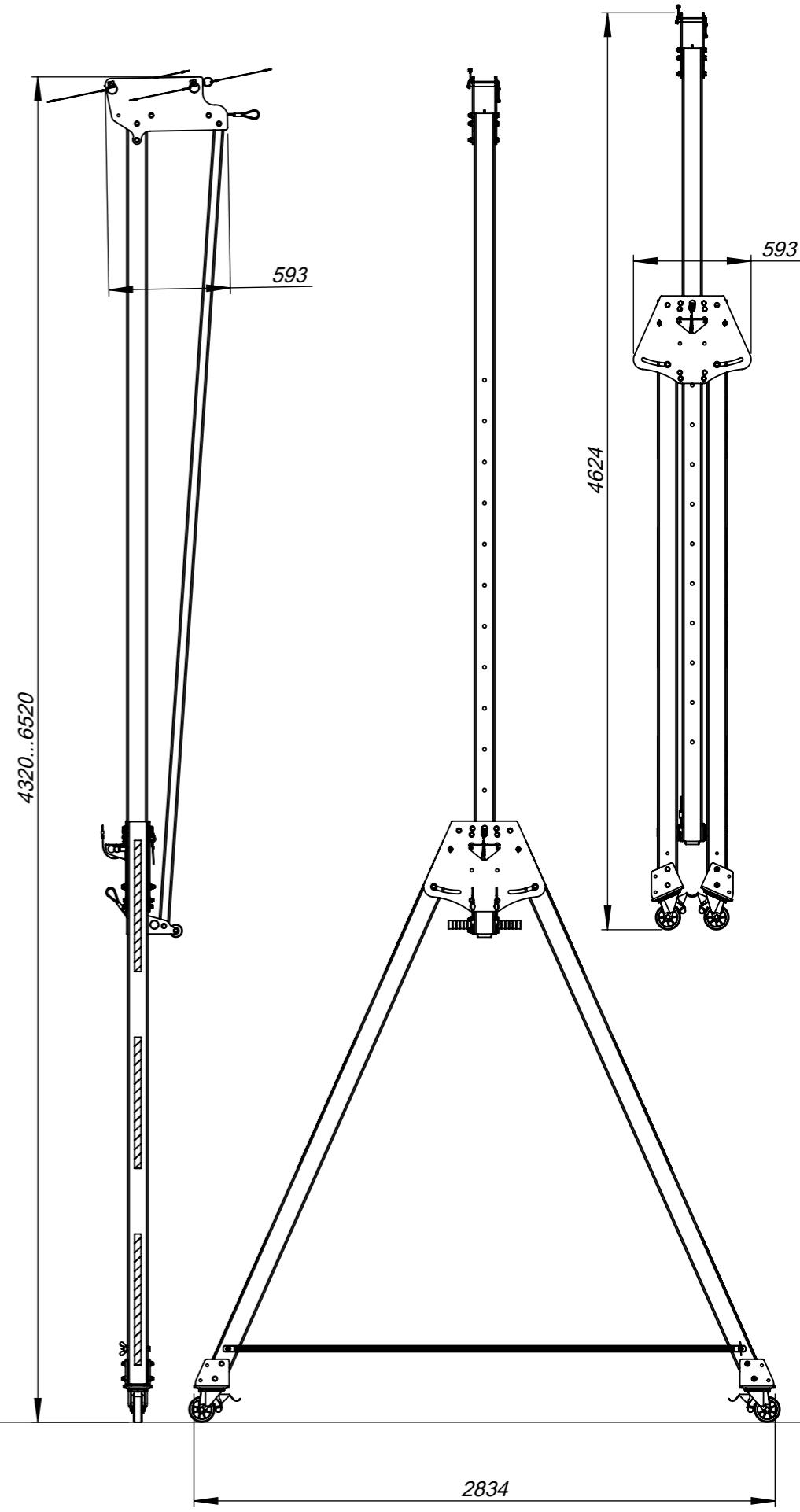
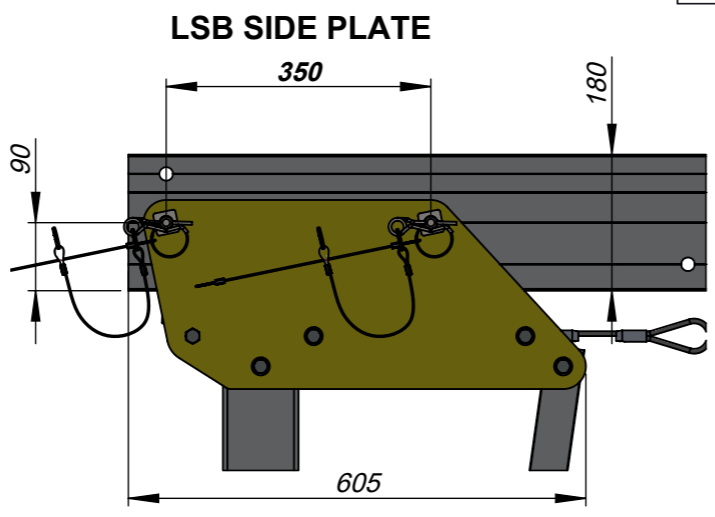
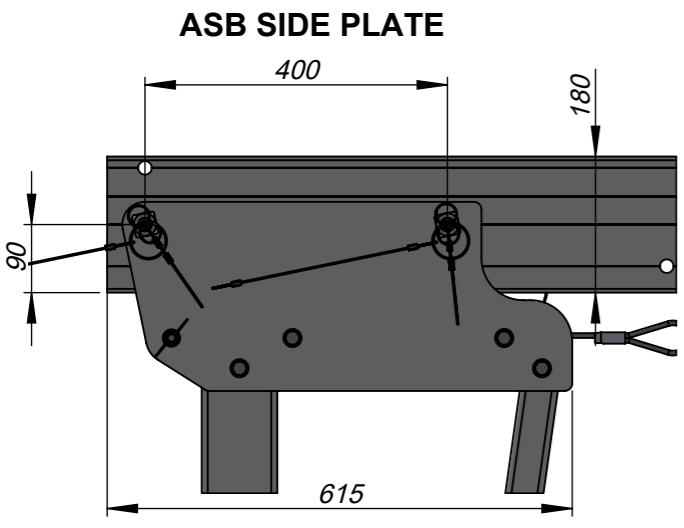
**SMALL**  
 ASB SUPPORT "A1" weight: 38,2 kg  
 LSB SUPPORT "E1" weight: 34,0 kg

**MEDIUM**  
 ASB SUPPORT "B1" weight: 50,2 kg  
 LSB SUPPORT "F1" weight: 45,0 kg

**LARGE**  
 ASB SUPPORT "C1" weight: 72,8 kg  
 LSB SUPPORT "G1" weight: 62,0 kg

**ASB/LSB SPECIAL SUPPORT TYPES**  
**NOTICE - HOLE SPACING FOR BEAM-SUPPORT CONNECTION IS DIFFERENT FOR ASB (400mm) AND LSB (350mm).**

		ASB / LSB - REQUIRED INSTALLATION AREA [m x m]						ONLY ASB COMBINED BEAMS	
		BEAM LENGTH [m]						8m	9m
SUPPORT	C2 / G2	2m	3m	4m	5m	6m	7m	8m	9m
		3.5 x 11.7	3.5 x 12.7	3.5 x 13.7	3.5 x 14.7	3.5 x 15.7	3.5 x 16.7	3.5 x 17.7	3.5 x 18.7

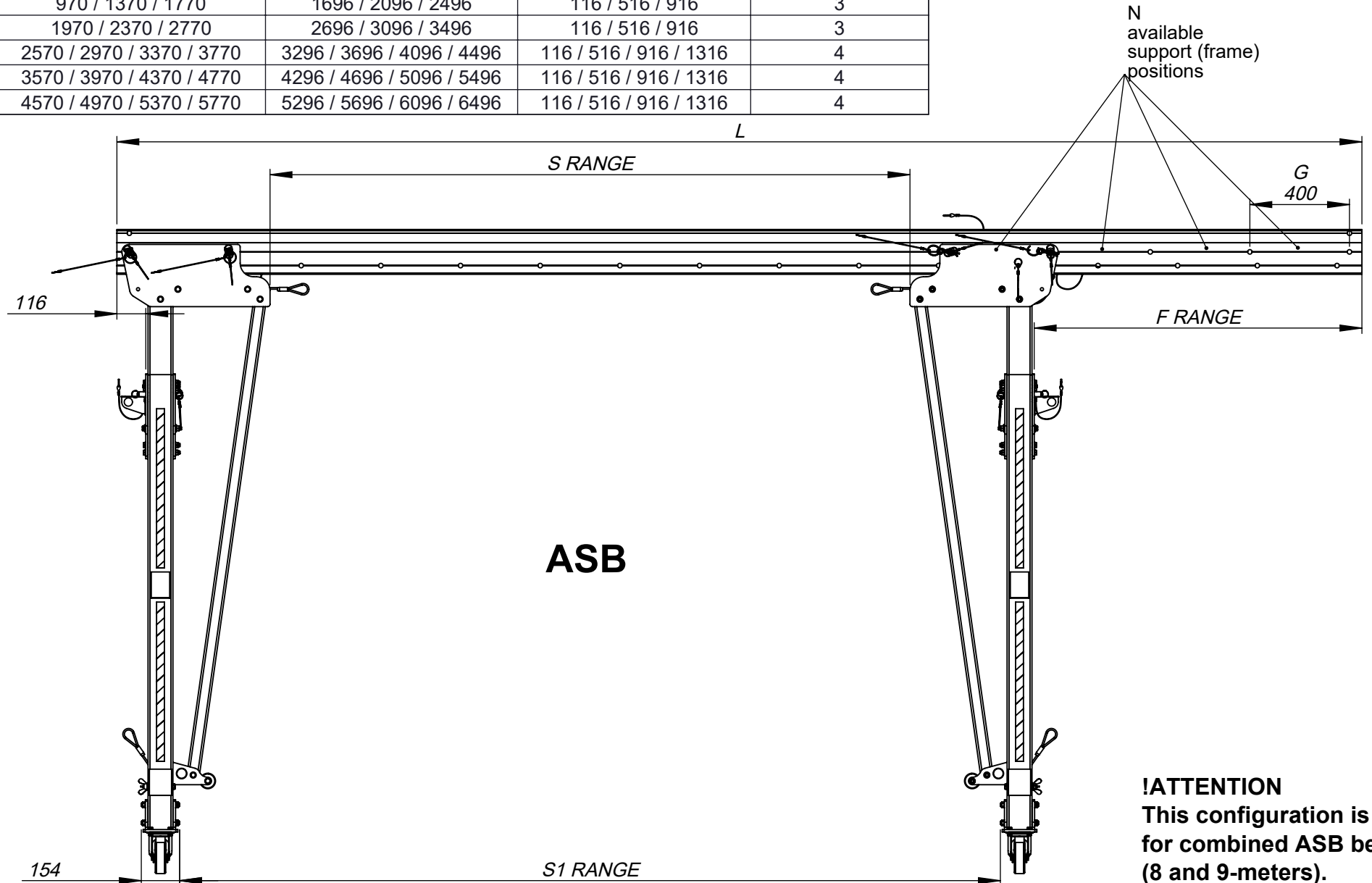


**LARGE - SPECIAL**  
**ASB SUPPORT "C2" weight: 98,4 kg**  
**LSB SUPPORT "G2" weight: 68,8 kg**

# ASB FRAME SPAN REGULATION

One support (frame) can be installed to the beam in alternative positions. Regulation step "G" for ASB is always 400mm. Number of steps depends on beam length.

'L' Total beam length [mm]	'S RANGE' Working span range [mm]	'S1 RANGE' Working span range [mm]	'F range' Outreach [mm]	'N' Number of available support positions [pcs]
2000	770	1496	116	1
3000	970 / 1370 / 1770	1696 / 2096 / 2496	116 / 516 / 916	3
4000	1970 / 2370 / 2770	2696 / 3096 / 3496	116 / 516 / 916	3
5000	2570 / 2970 / 3370 / 3770	3296 / 3696 / 4096 / 4496	116 / 516 / 916 / 1316	4
6000	3570 / 3970 / 4370 / 4770	4296 / 4696 / 5096 / 5496	116 / 516 / 916 / 1316	4
7000	4570 / 4970 / 5370 / 5770	5296 / 5696 / 6096 / 6496	116 / 516 / 916 / 1316	4

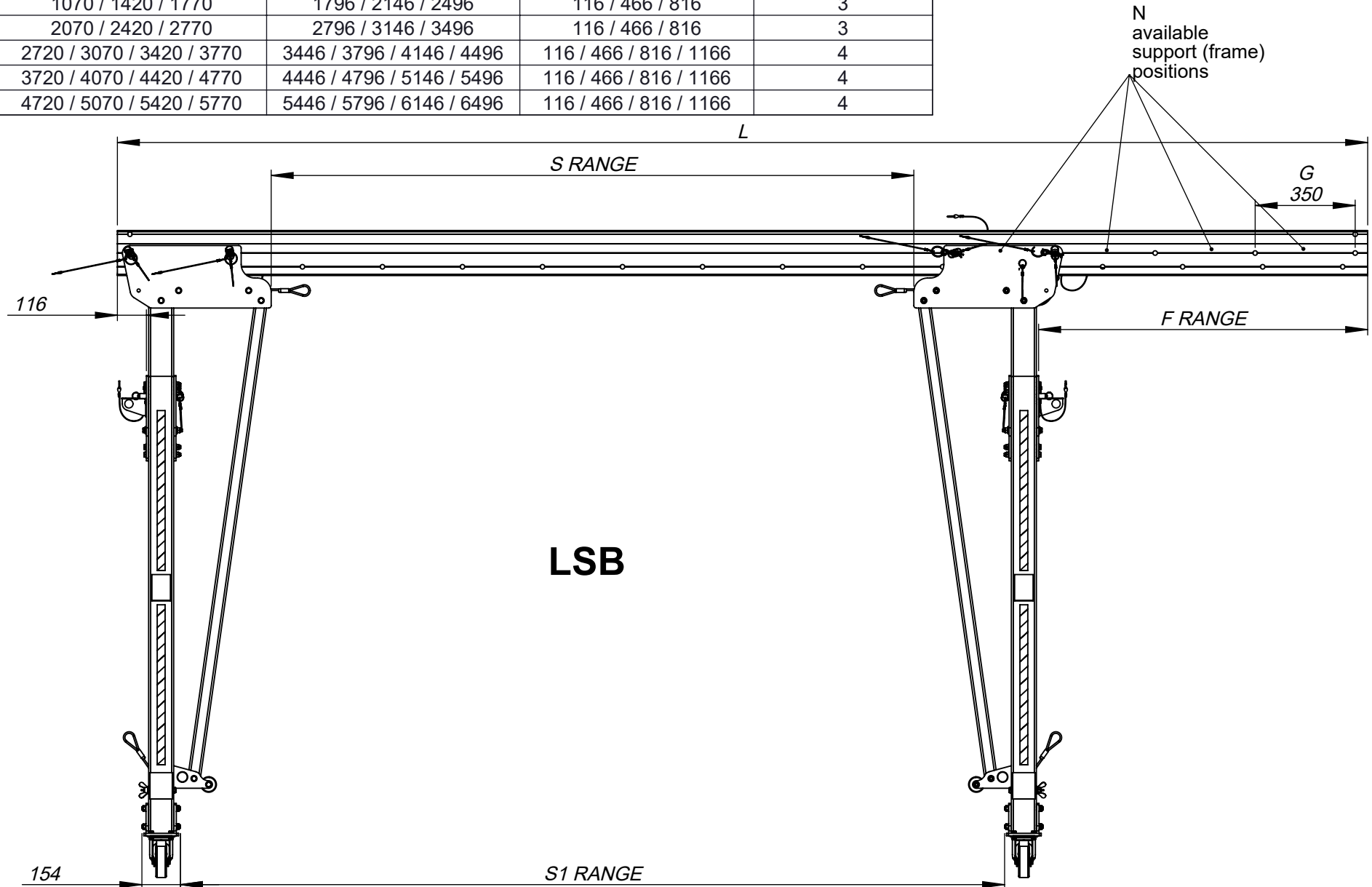


**!ATTENTION**  
This configuration is not  
for combined ASB beams  
(8 and 9-meters).

# LSB FRAME SPAN REGULATION

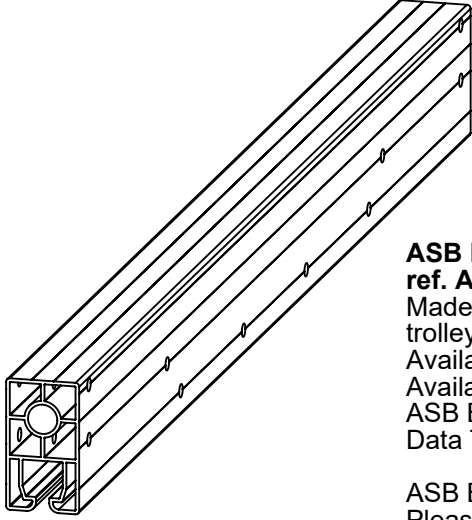
One support (frame) can be installed to the beam in alternative positions. Regulation step "G" for LSB is always 350mm. Number of steps depends on beam length.

'L' Total beam length [mm]	'S RANGE' Working span range [mm]	'S1 RANGE' Working span range [mm]	'F range' Outreach [mm]	'N' Number of available support positions [pcs]
2000	770	1496	116	1
3000	1070 / 1420 / 1770	1796 / 2146 / 2496	116 / 466 / 816	3
4000	2070 / 2420 / 2770	2796 / 3146 / 3496	116 / 466 / 816	3
5000	2720 / 3070 / 3420 / 3770	3446 / 3796 / 4146 / 4496	116 / 466 / 816 / 1166	4
6000	3720 / 4070 / 4420 / 4770	4446 / 4796 / 5146 / 5496	116 / 466 / 816 / 1166	4
7000	4720 / 5070 / 5420 / 5770	5446 / 5796 / 6146 / 6496	116 / 466 / 816 / 1166	4



**LSB**

## ASB BASIC EQUIPMENT



### ASB BEAM

ref. **ASBxxx-001** (where 'xxx' - beam length in cm]

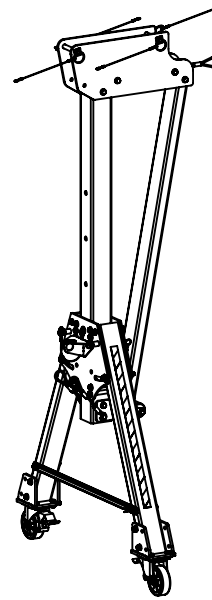
Made of aluminium alloy with inside rail (for internal trolley). Can be used with external and internal trolleys.

Available beam length (solid): 2 / 3 / 4 / 5 / 6 / 7m.

Available beam length (combined): 8 / 9m.

ASB Beam length, weight and WLL - ASB Technical Data Table.

ASB Beam length can be extended up to 9-meters.  
Please refer to ASB Combined beams Section.



### ASB SUPPORT (FRAME)

**A1** - ref. ASB500-450-1

**B1** - ref. ASB500-100-1

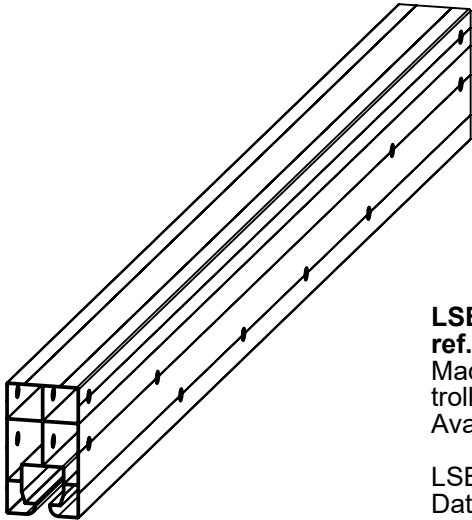
**C1** - ref. ASB500-500-1

**C2** - ref. ASB500-500-2

Made of aluminium alloy. Various height options. 200mm height adjustment. Foldable construction. Two the same supports are needed for one beam. Equipped with three bolts with cotter pin. Available support types: **A1 / B1 / C1 / C2.**

Support height and weight - ASB Technical Data Table and Basic support types section.

## LSB BASIC EQUIPMENT



### LSB BEAM

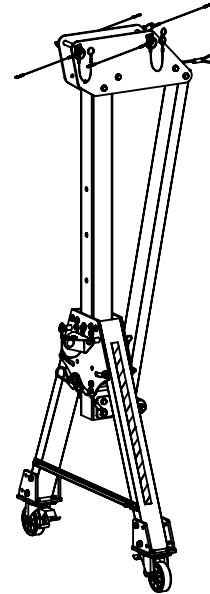
ref. **LSBxxx-001** (where 'xxx' - beam length in cm]

Made of aluminium alloy with inside rail (for internal trolley). Can be used with external and internal trolleys.

Available beam length: 2 / 3 / 4 / 5 / 6 / 7 m.

LSB Beam length, weight and WLL - LSB Technical Data Table.

LSB beam cannot be combined.



### LSB SUPPORT (FRAME)

**E1** - ref. LSB500-450-1

**F1** - ref. LSB500-100-1

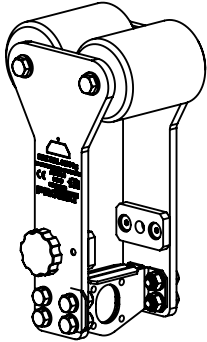
**G1** - ref. LSB500-500-1

**G2** - ref. LSB500-500-2

Made of aluminium alloy. Various height options. 200mm height adjustment. Foldable construction. Two the same supports are needed for one beam. Equipped with three bolts with cotter pin. Available support types: **E1 / F1 / G1 / G2.**

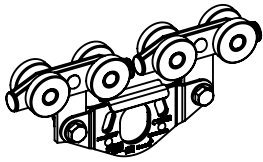
Support height and weight - LSB Technical Data Table and Basic support types section.

## ASB/LSB ACCESSORIES



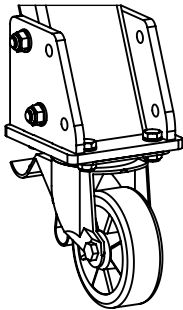
### EXTERNAL TROLLEY ref. ASB500-200

Made of aluminium alloy, stainless steel and polyamide parts. Position can be locked along the beam using knob.  
External trolley can be used **for lifting loads only**.



### INTERNAL TROLLEY ref. ASB500-250

Made of galvanized and stainless steel. Space saving. Attachment point only 55mm under the beam. Position locking using bolts with cotter pin.  
Internal trolley can be used **for personal protection purposes only**.  
One trolley can be use for one person.  
ASB - Max 5 trolleys on one ASB beam.  
LSB - Max 3 trolleys on one LSB beam.



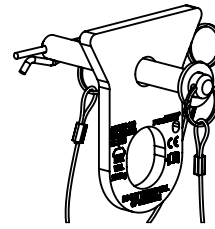
### WHEELS SET (4 pcs)

Support can be equipped with three types of swivel wheels with brake depending on the site of use:

- **W1, ref. ASB100-010** -  $\varnothing$  160mm galvanized steel with solid rubber tyre - for general use (standard).
- **W2, ref. ASB100-020** -  $\varnothing$  200mm galvanized steel with solid rubber tyre - for 'all-terrain'.
- **W3, ref. ASB100-030** -  $\varnothing$  160mm aluminium with non-marking solid rubber tyre (polyurethan) - for cleanroom / manufacturing hall.
- **W4, ref. ASB100-040** -  $\varnothing$  200mm cast iron with non-marking solid rubber tyre (polyurethan) - for cleanroom / manufacturing hall.
- **W5, ref. ASB100-050** -  $\varnothing$  200mm aluminium with non-marking solid rubber tyre (polyurethan) - for cleanroom / manufacturing hall.
- **W6, ref. ASB100-060** -  $\varnothing$  250mm cast iron with non-marking solid rubber tyre (polyurethan) - for cleanroom / manufacturing hall. Position lock 4 x 90°.
- **W7, ref. ASB100-060** -  $\varnothing$  250mm TANDEM (double) cast iron with non-marking solid rubber tyre (polyurethan) - for cleanroom / manufacturing hall. Position lock 4 x 90°.
- **W8, ref. ASB100-060** -  $\varnothing$  460mm TANDEM (double) pneumatic OFFROAD tyre. Position lock 4 x 90°.

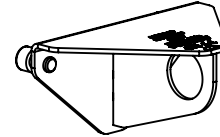
Complete ASB device must be equipped with four the same wheels. Available types of wheels: **W1 / W2 / W3 / W4 / W5 / W6 / W7 / W8**. It is recommended to use additionally Wheel Support set.

**FOR W6 / W7 / W8 HSB000-A10-100 CONNECTOR is needed!**



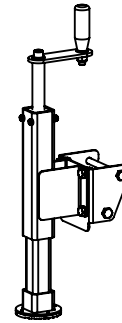
### HITCH FOR RAISING THE SUPPORT ref. ASB500-360

Made of aluminium alloy/galvanized steel. Used during raising and lowering the device support. Chain hoist is attached to the hitch ear.  
**MUST BE USED** with B1 / C1 / F1 / G1 support.



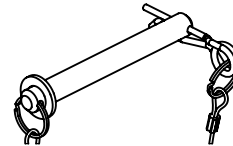
### CHAIN HOIST GRIP ref. ASB500-140

Made of stainless steel. Provides safety rising and lowering the vertical part of the support (adjustable upright) during device installation on the working site. Chain hoist grip is installed on support's side plate. One piece is needed for one support.



### WHEEL SUPPORT ref. ASB500-300

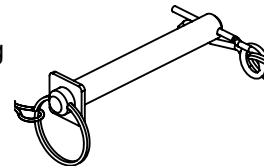
Made of galvanized and powder painted steel. Provides device leveling on uneven ground and stabilization during operation. Equipped with locking bolts with wings nuts. Complete ASB/LSB device should be equipped with four wheel supports.



### BOLT WITH COTTER PIN 16mm ref. ASB500-130

Made of galvanized steel. Used for:

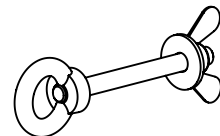
- locking vertical part of the support (one piece for one support),
- locking beam between support's front plates (two pieces for one support), **ASB (A1, B1) / LSB (E1, F1, G1)**
- locking internal trolley position along the beam (two pieces for one internal trolley),
- locking rope roller for beam on the beam's holes (two pieces for one rope roller for beam).



### BOLT WITH COTTER PIN 17,5mm ref. ASB500-560

Made of galvanized steel. Used for:

- locking beam between **ASB-C1** support's front plates (two pieces for one support).

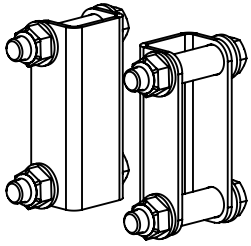


### HITCH FOR LIFTING THE VERTICAL PART OF SUPPORT ref. ASB500-370

Made of stainless steel. Used for easy beam height adjustment (vertical part of the support) with chain hoist. **SHOULD BE USED** with C1 / G1 support when chain hoist is used.

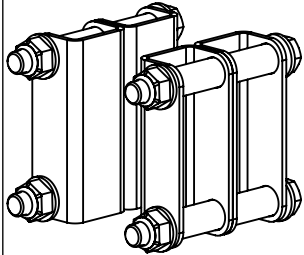


## ASB/LSB ACCESSORIES



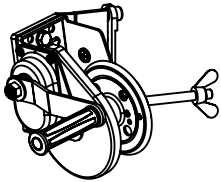
### WHEEL SUPPORT DISTANCE EXTENDER 40mm ref. ASB500-813

Made of galvanized and powder painted steel. Provides additional 40mm distance between wheel and wheel support.  
Recommended for W1 wheels (160mm diameter).



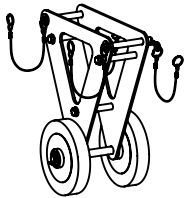
### WHEEL SUPPORT DISTANCE EXTENDER 80mm ref. ASB500-814

Made of galvanized and powder painted steel. Provides additional 80mm distance between wheel and wheel support.  
Recommended for W2 wheels (200mm diameter).



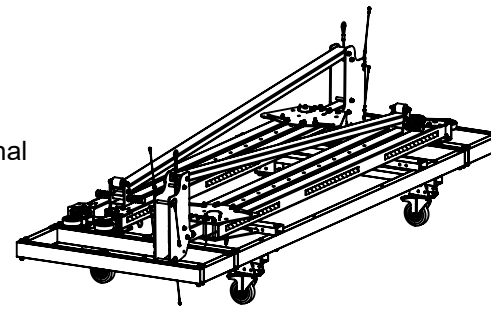
### FRAME WINCH ref. ASB500-640

Made of galvanized, powder-painted steel. Equipped with 6-meter strap fits for all support (frame) of ASB / LSB. Used instead of chain hoist grip (ASB500-140) and hitch (ASB500-370) and chain hoist. Provides safety and fast raising and lowering the vertical part of the support (beam height regulation). Solid rubber wheels  $\varnothing$  200mm.



### BEAM TRANSPORTER ref. ASB500-600

Made of aluminium alloy/galvanized steel parts. Used for easy beam transportation on long distances. Solid rubber wheels  $\varnothing$  200mm. Suits for ASB and LSB beams.



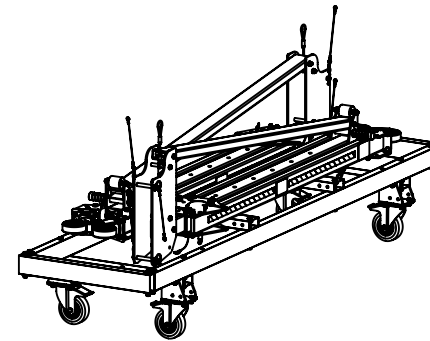
### SUPPORTS TRANSPORTATION TROLLEY WIDE VERSION: 1.4m ref. HSB000-A09-0xx

Made of aluminium alloy profiles. Equipped with wheels for easy movement. Appropriate for door-to-door frames transportation / storage, etc.

HSB000-A09-010  
[3.1m x 1.4m (max 4 pcs. B / F supports)]

HSB000-A09-060  
[3.5m x 1.4m (max 2 pcs. C1 / G1 supports)]

HSB000-A09-070  
[4.0m x 1.4m (max 2 pcs. C2 / G2 supports)]



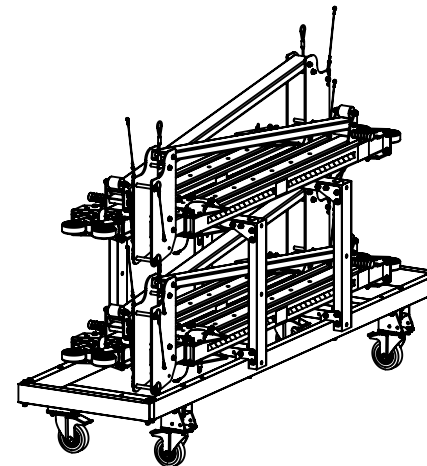
### SUPPORTS TRANSPORTATION TROLLEY NARROW VERSION: 0.8m ref. HSB000-A09-1xx

Made of aluminium alloy profiles. Equipped with wheels for easy movement. Appropriate for door-to-door frames transportation / storage, etc.

HSB000-A09-110  
[3.1m x 0.8m (max 2 pcs. B / F supports)]

HSB000-A09-160  
[3.5m x 0.8m (max 1 pcs. C1 / G1 supports)]

HSB000-A09-170  
[4.0m x 0.8m (max 1 pcs. C2 / G2 supports)]



### SUPPORTS TRANSPORTATION TROLLEY NARROW VERSION: 0.9m ref. HSB000-A09-1xx +SECOND LEVEL (ref. HSB000-A09-180)

Made of aluminium alloy profiles. Equipped with wheels for easy movement and with second level for increase storage space. Appropriate for door-to-door frames transportation / storage, etc.

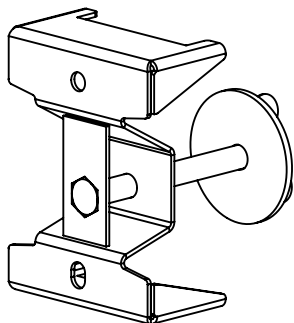
HSB000-A09-110 + 2 x HSB000-A09-180  
[3.1m x 0.9m (max 4 pcs. B / F supports)]

HSB000-A09-160 + 2 x HSB000-A09-180  
[3.5m x 0.9m (max 2 pcs. C1 / G1 supports)]

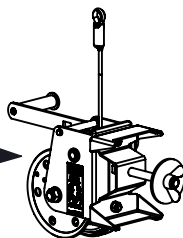
HSB000-A09-170 + 2 x HSB000-A09-180  
[4.0m x 0.9m (max 2 pcs. C2 / G2 supports)]



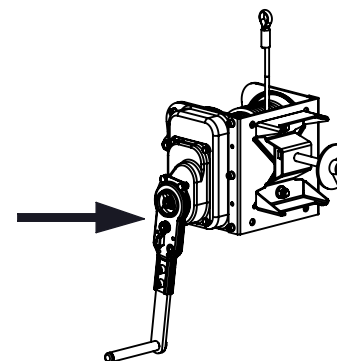
## ASB/LSB WINCH ACCESSORIES



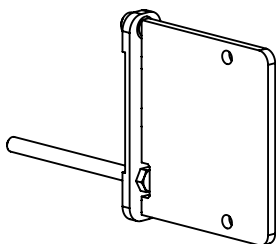
**WINCH BRACKET (RUP50x-CT)**  
**ref. ASB500-190**  
 Made of galvanized steel. Equipped with wing-nut for fast installation. Provides RUP50x-CT lifting devices installation to the vertical part of the support.  
 Fits for all Supports types (A / B / C / E / F / G).



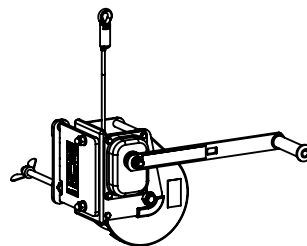
**BRAKE WINCH 500kg**  
**25-meter rope**  
**ref. RUP502-CT**  
 Made of galvanized and powder-painted steel. Mounted on vertical part of all supports (frames) types.



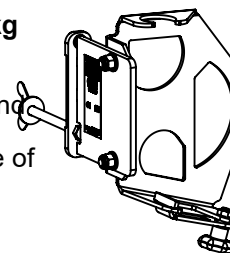
**BRAKE WINCH 1000kg**  
**50-meter rope**  
**ref. RUP503-CT**  
 Made of galvanized and powder-painted steel. Mounted on vertical part of all supports (frames) types.



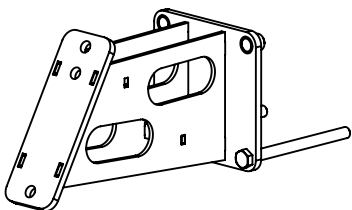
**WINCH BRACKET (RUP502-DT)**  
**ref. ASB500-610**  
 Made of galvanized steel. Equipped with wing-nut for fast installation. Provides RUP502-DT lifting device installation to the support side plate. Fits to A / B / E / F Supports.



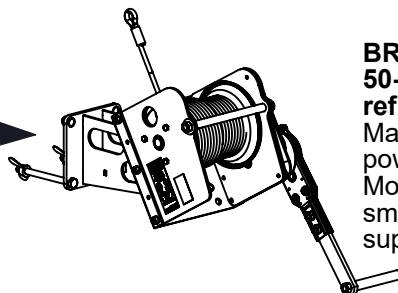
**BRAKE WINCH 500kg**  
**25-meter rope**  
**ref. RUP502-DT**  
 Made of galvanized and powder-painted steel. Mounted on side plate of small and medium support (frame).



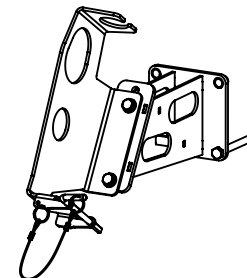
**CRW200 BRACKET**  
**ref. ASB500-570**  
 Made of galvanized and powder-painted steel. Mounted on side plate of support (frame).



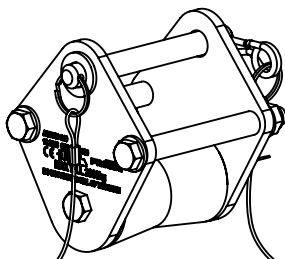
**WINCH BRACKET (RUP503-DT)**  
**ref. ASB500-190**  
 Made of galvanized steel. Equipped with wing-nuts for fast installation. Provides RUP503-DT lifting device installation to the support side plate. Fits to A / B / E / F Supports.



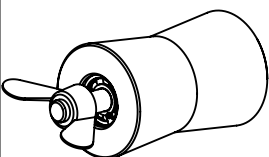
**BRAKE WINCH 1000kg**  
**50-meter rope**  
**ref. RUP503-DT**  
 Made of galvanized and powder-painted steel. Mounted on side plate of small and medium support (frame).



**CRW300 BRACKET**  
**ref. ASB500-580**  
 Made of galvanized and powder-painted steel. Mounted on side plate of support (frame).



**ROPE ROLLER FOR BEAM**  
**ref. ASB500-240**  
 Made of reinforced aluminium alloy, stainless steel and polyamide parts. Provides working rope guidance when RUP 50x-CT/DT lifting device is used. Installed to the beam using bolts with cotter pin. Used also with CRW devices.



**ROPE ROLLER FOR SUPPORT**  
**ref. ASB500-180**  
 Made of polyamide and galvanized steel. Provides working rope guidance when RUP 50x-CT/DT lifting device is used. Installed to the support using bolt with wing-nut. Installed between support front plates. Used also with CRW devices.

# ASB MARKING

## BEAM IDENTITY LABEL

**PROTEKT**  
STAROPOLSKA 6, 50-400 ŁÓDŹ  
TEL: +48 42 680 20 01, FAX: +48 42 680 20 02

**BEAM ASB300**

MAX WLL OF THE BEAM:  
**3000 kg**

ref.: ASB300-001

CE

SERIAL NUMBER:  
**00000000**

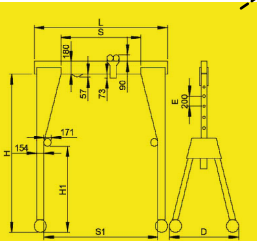
DATE OF MANUFACTURE:  
**01.2013**

## CONTENT OF IDENTITY LABEL

- Device type.
- Reference number.
- Serial number.
- Month and year of manufacture.
- CE marking.
- Caution: Read the manual.
- Marking of the manufacturer or distributor.

## WLL TABLE PLATE

ASB - TECHNICAL DATA TABLE												
"H" BEAM LENGTH (mm)	BEAM WEIGHT (kg)	"S1" WORKING SPAN (mm)	"S2" BOTTOM SPAN (mm)	A1 SUPPORT		B1 SUPPORT		C1 SUPPORT		C2 SUPPORT		
				WLL (T)	GANTRY WEIGHT (kg)	WLL (T)	GANTRY WEIGHT (kg)	WLL (T)	GANTRY WEIGHT (kg)	WLL (T)	GANTRY WEIGHT (kg)	
2000	26,7	770	1496	3	122	3	148	3	204	1	242	
3000	40,1	1770	2496	3	135	3	161	3	216	1	255	
4000	53,4	2770	3496	3	148	3	174	3	231	1	269	
5000	66,5	3770	4496	2,5	162	2,5	186	2,5	244	1	282	
6000	80,1	4770	5496	2	175	2	201	2	258	1	295	
7000	93,5	5770	6496	1,5	188	1,5	214	1,5	271	1	309	
SUPPORT WEIGHT (kg)				38,2	50,2				72,8	98,4		
"H" - SUPPORT HEIGHT (MM)				1594...2194	2207...3607				3230...5430	4230...6430		
"H1" - UNDER ROLLER HEIGHT (MM)				34...634	141...1541				164...2364	164...2864		
"D" - LEG SPACING (MM)				1115	1928				2834	2834		
"E" - HEIGHT INCREMENT (MM)				200	200				200	200		



**CAUTION !  
DO NOT MOVE  
GANTRY UNDER LOAD !**

## GANTRY CE ID LABEL (BOTH SIDES)

FRAME SERIAL NUMBER:  
**00000000**

**ASB700-C1-W1**

CE **€1437**

Max. 5x

BEAM SERIAL NUMBER:  
**00000000**

**PROTEKT**  
STAROPOLSKA 6, 50-400 ŁÓDŹ  
TEL: +48 42 680 20 01, FAX: +48 42 680 20 02

DATE OF MANUFACTURE:  
**10.2018**

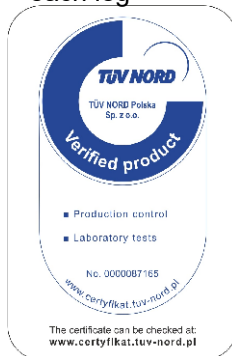
The same serial numbers as in "Beam" and "Frame" ID LABEL

## NEXT INSPECTION LABEL

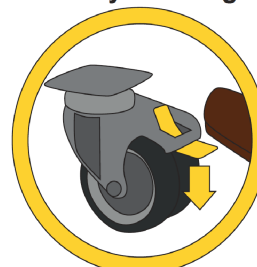
Month and year of the manufacturer's next inspection. Don't use the device after this date.  
Attention: Before the first use mark the date of inspection (date of first use + 12 months, e.g. first use 01.2013 - mark inspection 01.2014).  
"Next inspection label" placed on Frame Identity Label.



TUV CERTIFICATE  
NO.: 0000087165  
each leg



WHEEL LOCK  
STICKER  
each leg  
Safety Warning



Brakes must be Locked  
before lifting Load

## FRAME IDENTITY LABEL

**PROTEKT**  
STAROPOLSKA 6, 50-400 ŁÓDŹ  
TEL: +48 42 680 20 01, FAX: +48 42 680 20 02

**FRAME B1-W1**

CE

SERIAL NUMBER:  
**00000000/A**

FRAME LOAD MUST NOT EXCEED BEAM WLL  
ref.: ASB500-100-1-W1

DATE OF MANUFACTURE:  
**01.2013**

**PROTEKT**  
STAROPOLSKA 6, 50-400 ŁÓDŹ  
TEL: +48 42 680 20 01, FAX: +48 42 680 20 02

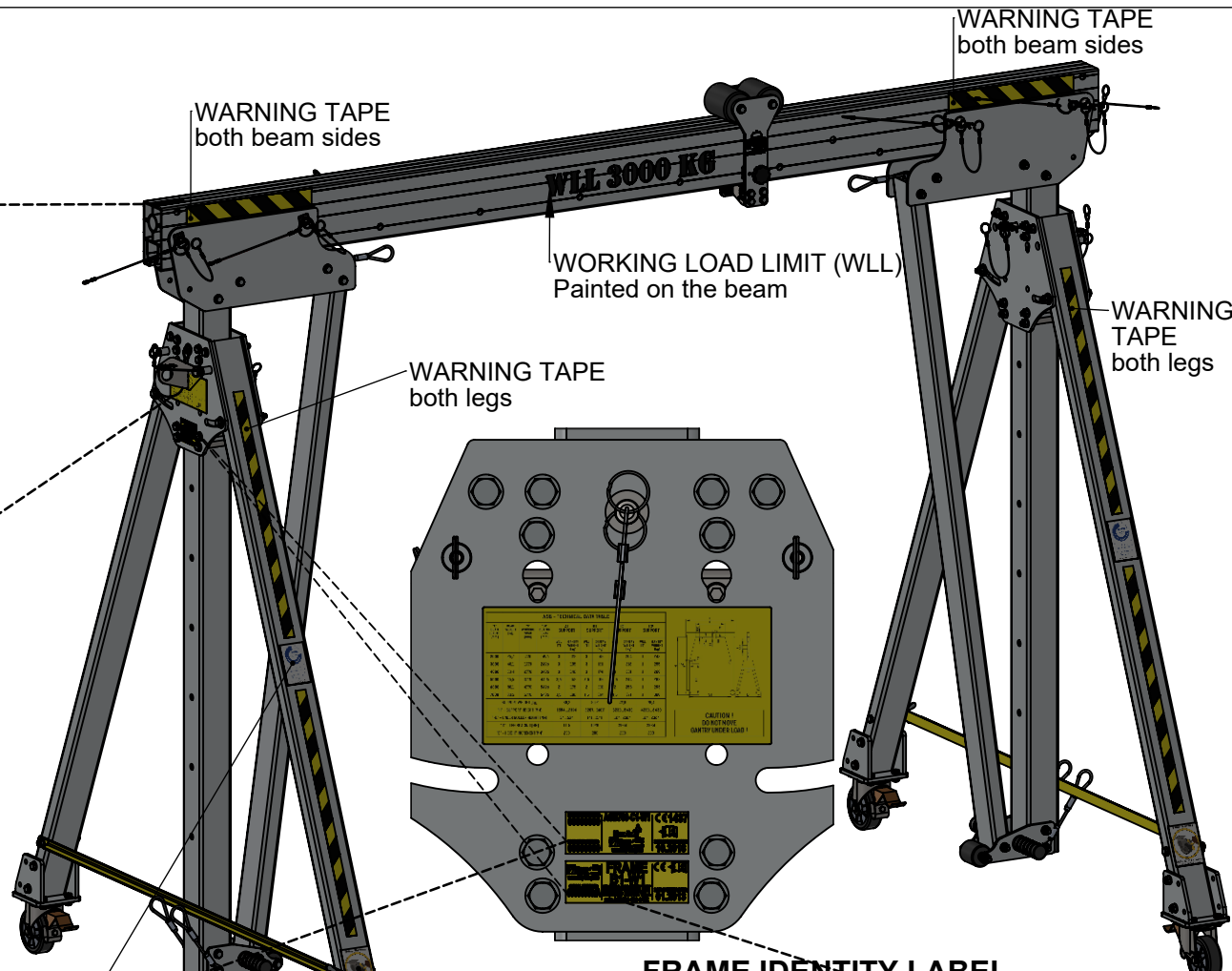
**FRAME B1-W1**

CE

SERIAL NUMBER:  
**00000000/B**

FRAME LOAD MUST NOT EXCEED BEAM WLL  
ref.: ASB500-100-1-W1

DATE OF MANUFACTURE:  
**01.2013**



# LSB MARKING

## BEAM IDENTITY LABEL

**PROTEKT**  
STAWKOWICZA 5, 00-400 LÓDŹ  
TEL. +48 42 690 20 00, FAX +48 42 690 20 00

**BEAM  
LSB300**

SERIAL NUMBER:  
**00000000**

MAX WLL OF THE BEAM:  
**1500 kg**

ref.: **LSB300-001**

CE

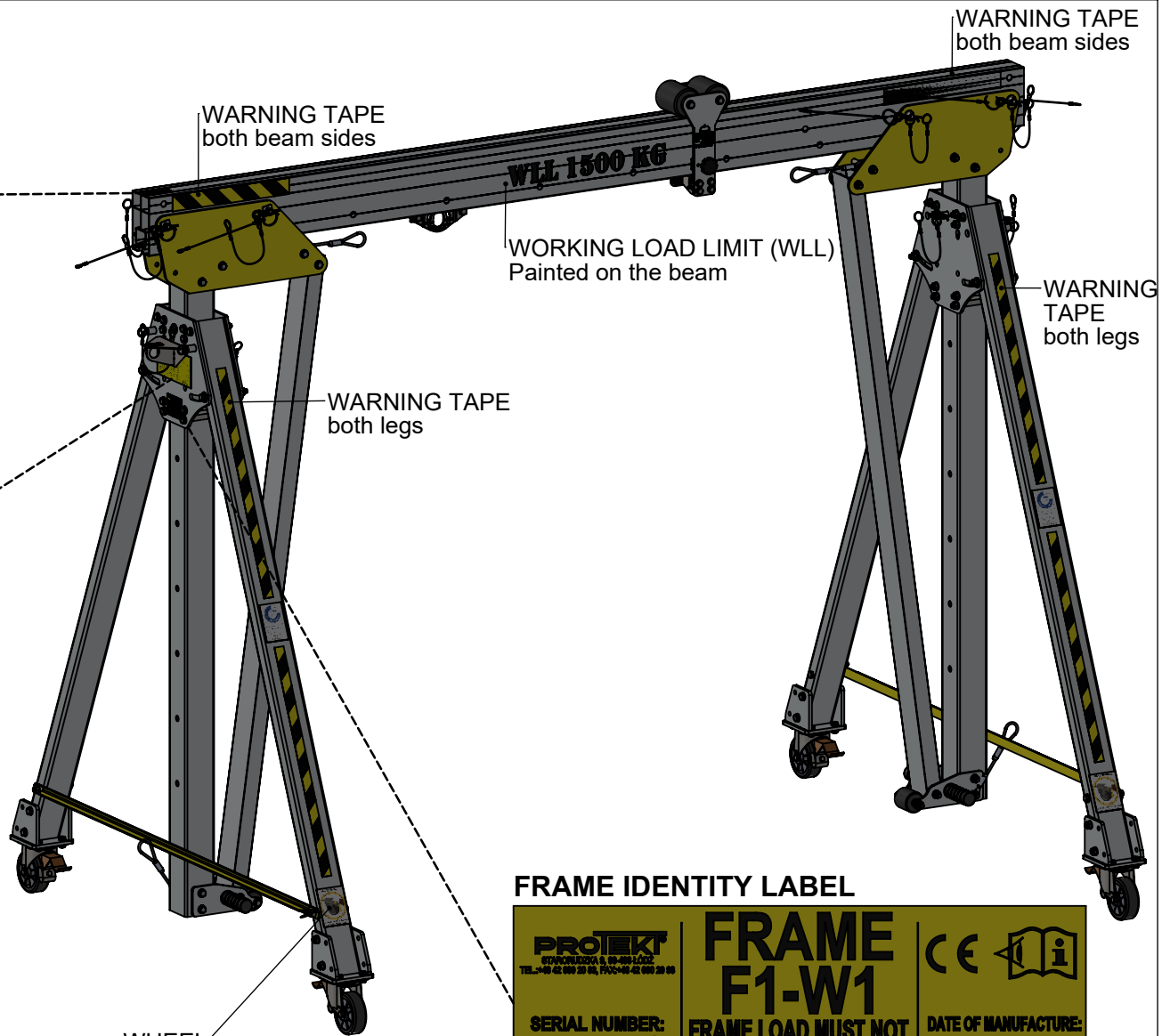
DATE OF MANUFACTURE:  
**01.2013**

## CONTENT OF IDENTITY LABEL

- Device type.
- Reference number.
- Serial number.
- Month and year of manufacture.
- CE marking.
- Caution: Read the manual.
- Marking of the manufacturer or distributor.

## WLL TABLE PLATE

LSB - TECHNICAL DATA TABLE													
"L" BEAM LENGTH (mm)	BEAM WEIGHT (kg)	"S" WORKING SPAN (mm)	"S1" BOTTOM SPAN (mm)	E1 SUPPORT		F1 SUPPORT		G1 SUPPORT		G2 SUPPORT		E	D
				WLL (T)	GANTRY WEIGHT (kg)	WLL (T)	GANTRY WEIGHT (kg)	WLL (T)	GANTRY WEIGHT (kg)	WLL (T)	GANTRY WEIGHT (kg)		
2000	13,2	1496	770	2	122	1,75	148	1,75	204	0,5	242		<p><b>CAUTION!</b> DO NOT MOVE GANTRY UNDER LOAD!</p>
3000	19,7	2496	1770	1,5	135	1,5	161	1,5	218	0,5	255		
4000	26,3	3496	2770	1,25	148	1,25	174	1,25	231	0,5	269		
5000	32,8	4496	3770	1	162	1	188	1	244	0,5	282		
6000	39,4	5496	4770	0,75	175	0,75	201	0,75	258	0,5	295		
7000	46	6496	5770	0,5	188	0,5	214	0,5	271	0,5	309		
SUPPORT WEIGHT (kg)				34	45		62		68,8				
"H" - SUPPORT HEIGHT (MM)				1594...2194		2207...3607		3230...5430		4230...6430			
"H1" - UNDER ROLLER HEIGHT (MM)				34...634		141...1541		164...2364		164...2364			
"D" - LEG SPACING (MM)				1115		1928		2834		2834			
"E" - HEIGHT INCREMENT (MM)				200		200		200		200			



## GANTRY CE ID LABEL (BOTH SIDES)

FRAME SERIAL NUMBER:  
**00000000**

**LSB700-G1-W1**

CE **1437**

Max. 3x

BEAM SERIAL NUMBER:  
**00000000**

**PROTEKT**  
STAWKOWICZA 5, 00-400 LÓDŹ  
TEL. +48 42 690 20 00, FAX +48 42 690 20 00

DATE OF MANUFACTURE:  
**10.2018**

The same serial numbers as in "Beam" and "Frame" ID LABEL

## NEXT INSPECTION LABEL

Month and year of the manufacturer's next inspection.  
Don't use the device after this date.  
Attention: Before the first use mark the date of inspection (date of first use + 12 months, e.g. first use 01.2013 - mark inspection 01.2014).  
"Next inspection label" placed on Frame Identity Label.



## FRAME IDENTITY LABEL

**PROTEKT**  
STAWKOWICZA 5, 00-400 LÓDŹ  
TEL. +48 42 690 20 00, FAX +48 42 690 20 00

**FRAME  
F1-W1**

SERIAL NUMBER:  
**00000000/A**

FRAME LOAD MUST NOT EXCEED BEAM WLL

ref.: **LSB500-100-1-W1**

CE

DATE OF MANUFACTURE:  
**01.2013**

**PROTEKT**  
STAWKOWICZA 5, 00-400 LÓDŹ  
TEL. +48 42 690 20 00, FAX +48 42 690 20 00

**FRAME  
F1-W1**

SERIAL NUMBER:  
**00000000/B**

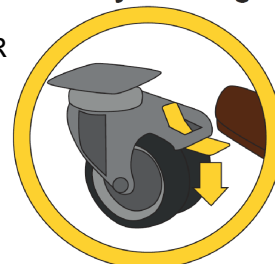
FRAME LOAD MUST NOT EXCEED BEAM WLL

ref.: **LSB500-100-1-W1**

CE

DATE OF MANUFACTURE:  
**01.2013**

## FRAME IDENTITY LABEL



# ASB COMBINED BEAM

Can be used only with ASB Supports and ASB Beams.

ref. ASB800-001 - 8-meter

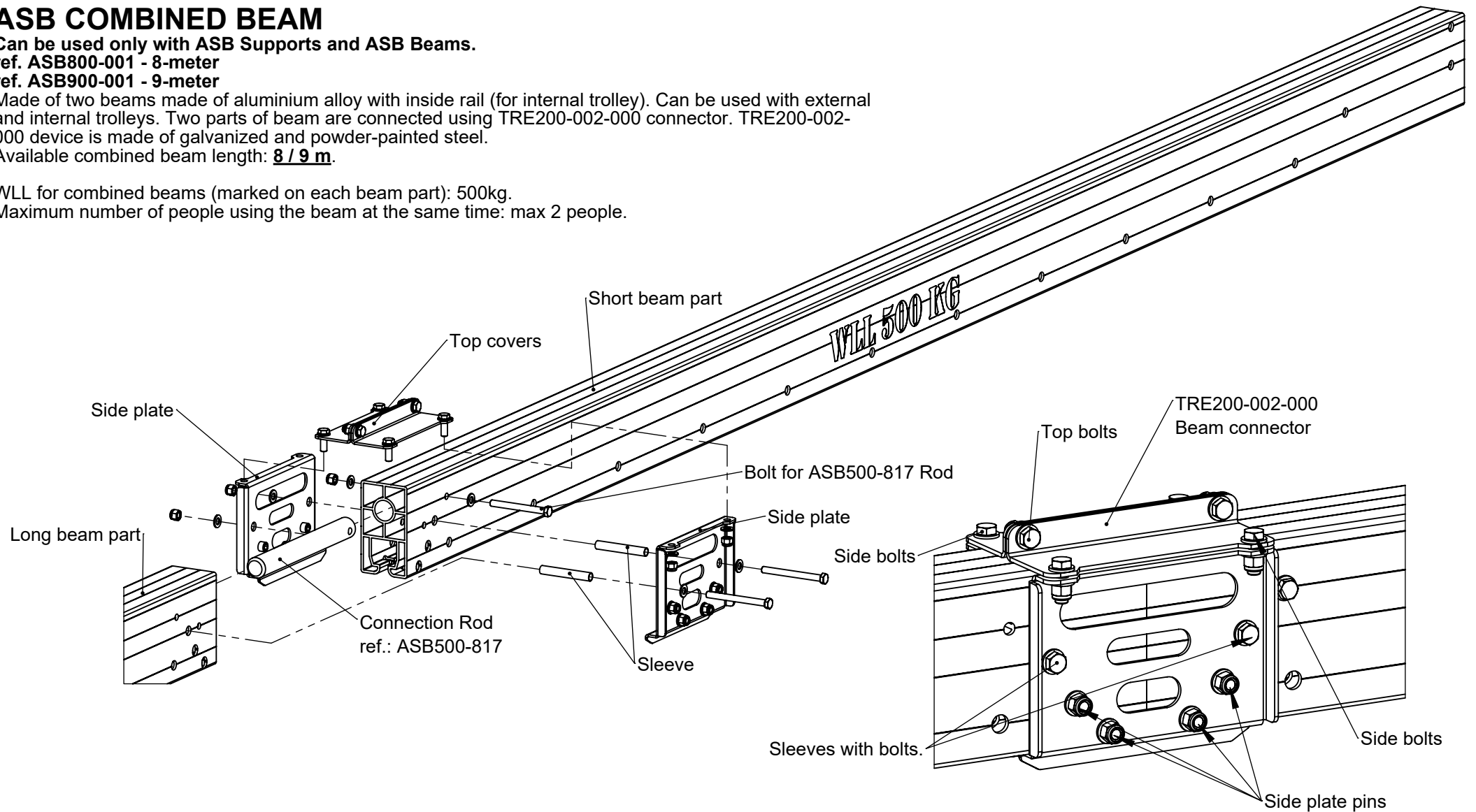
ref. ASB900-001 - 9-meter

Made of two beams made of aluminium alloy with inside rail (for internal trolley). Can be used with external and internal trolleys. Two parts of beam are connected using TRE200-002-000 connector. TRE200-002-000 device is made of galvanized and powder-painted steel.

Available combined beam length: **8 / 9 m**.

WLL for combined beams (marked on each beam part): 500kg.

Maximum number of people using the beam at the same time: max 2 people.



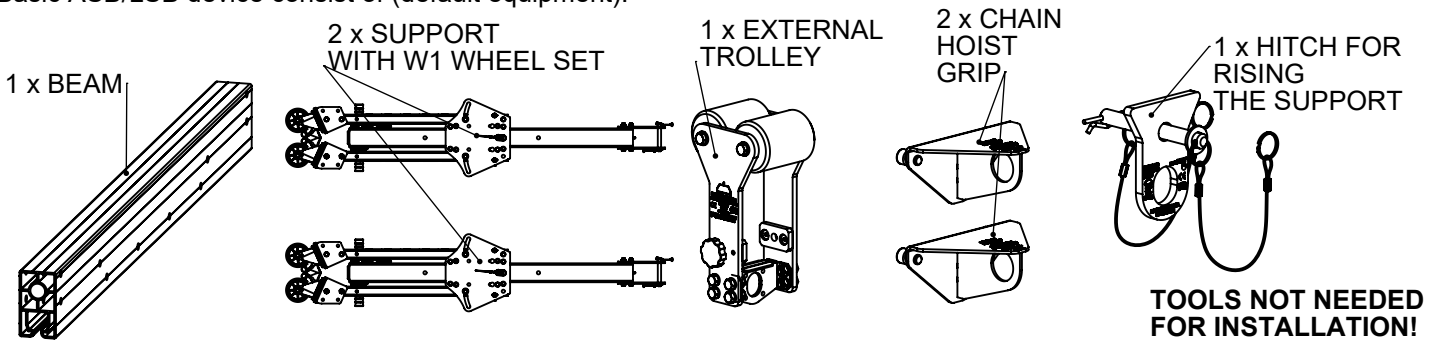
## INSTALLATION PROCEDURE:

1. Install ASB500-817 Connection Rod in the shorter beam part using M12x120-8.8 bolt with self-locking nut.
2. Install two parts of beam to the supports.
3. Raise the both beams end and connect them using ASB500-817 Connection Rod.
4. Put on the connection point TRE200-002-000 unit (pins on the side plates should be inserted into sockets in the shape of longitudinal holes on the beams).
5. Fit two Sleeves into holes and tighten them firmly using two M12x130-8.8 bolts with self-locking nuts.
6. Tighten firmly 4 pcs of Side bolts and after that tighten firmly 2 pcs of Top bolts.



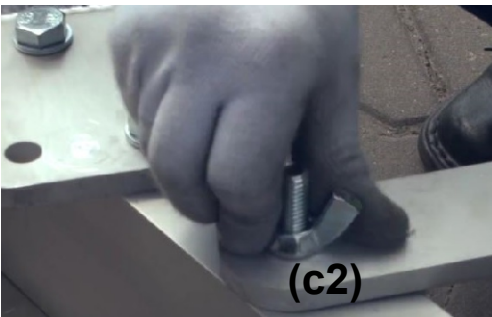
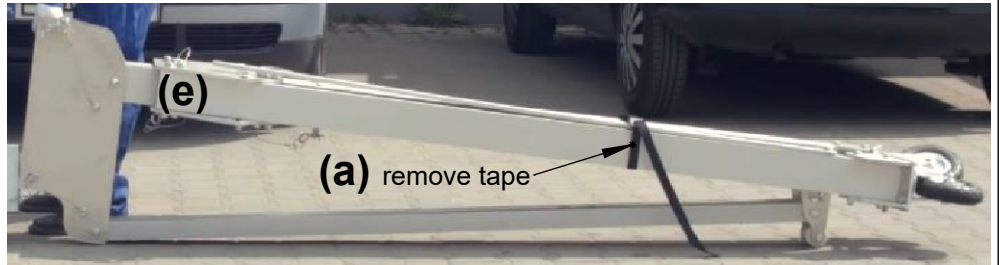
# SECTION 2 - DEVICE INSTALLATION

ASB/LSB device should be installed by minimum two people equipped with hard hat, protective footwear and gloves. Basic ASB/LSB device consist of (default equipment):

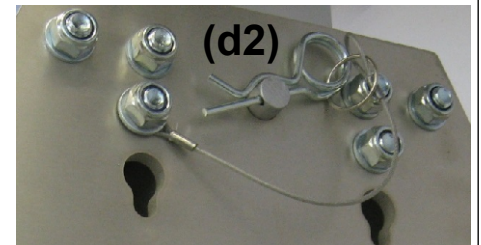
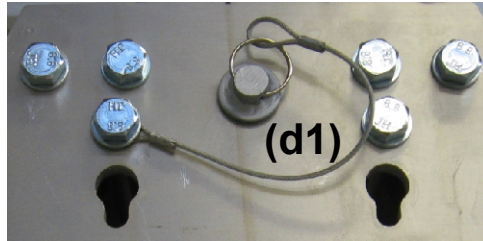


## 1. SUPPORT PREPARATION:

- Remove the tape (a) holding legs together.
- Spread the legs (b1, b2) and install between them legs bracket (c1) using bolt with wing nut (c2).



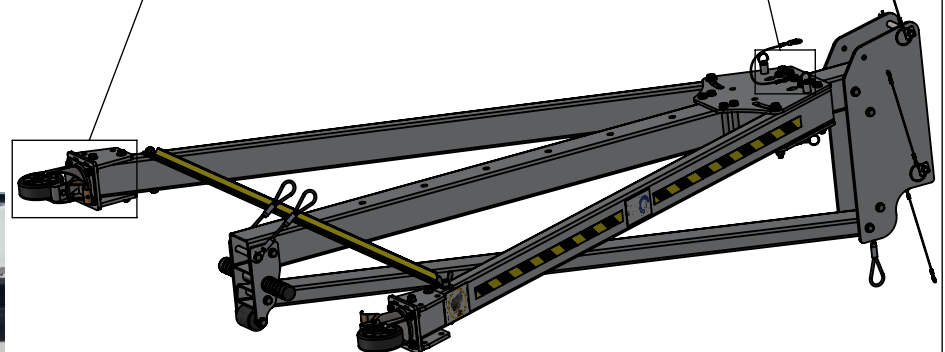
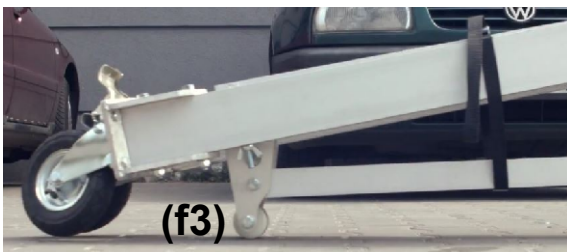
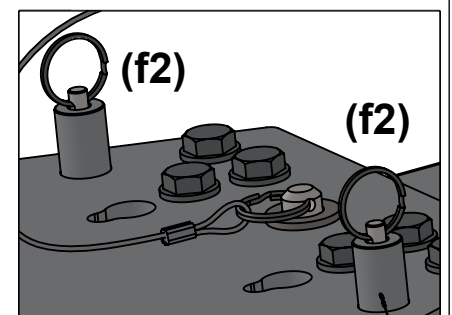
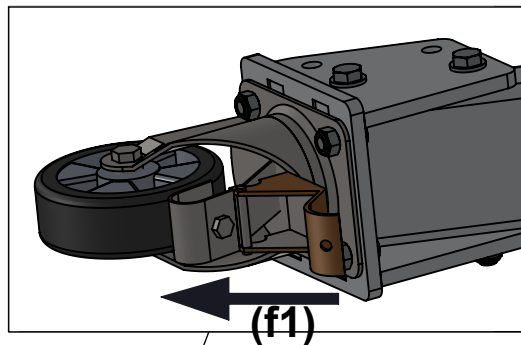
- Check proper installation of bolt (d1) with cotter pin (d2) in support. For easy device installation the vertical part of the support should be locked at the lowest position (e).



- Lock the wheel brakes (f1) using only protective footwear. DO NOT USE HANDS!

- When legs are fully opened they are automatically locked by pin (f2).

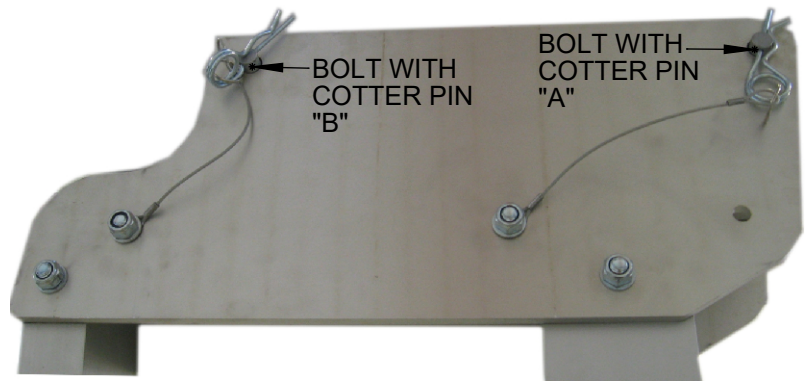
- Supports can be easily moved with special roller (f3).



Properly assembled support.

## 2. BEAM INSTALLATION

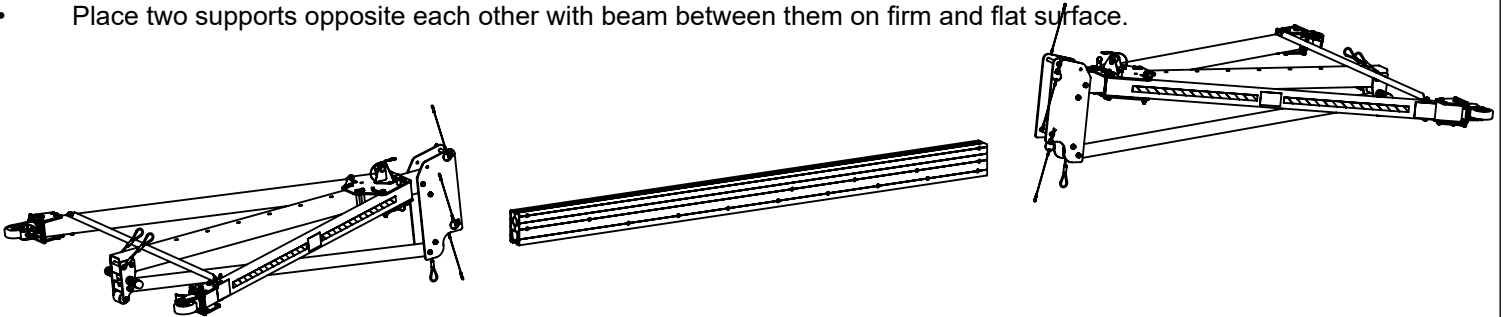
- Support is equipped with two bolts with cotter pin ("A" and "B") for beam installation.



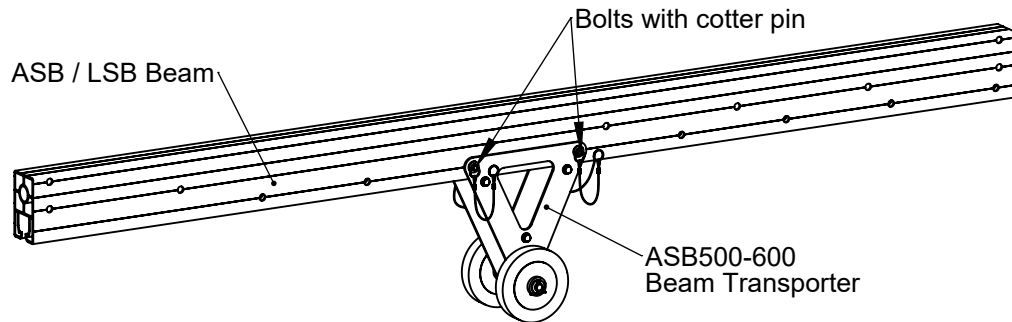
- Remove both "A" and "B" bolts with cotter pin.



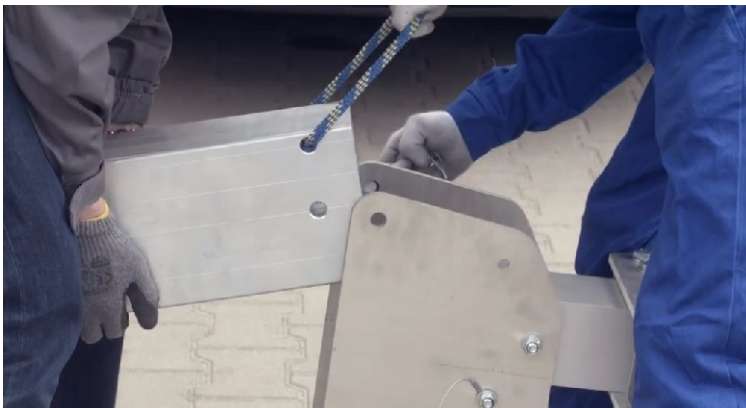
- Place two supports opposite each other with beam between them on firm and flat surface.



- ASB beam can be easily transported using ASB500-600 Beam Transporter which can be installed to the beam using two bolts with cotter pin.



- Connect one end of the beam with support using "A" bolt. Secure the bolt with cotter pin!



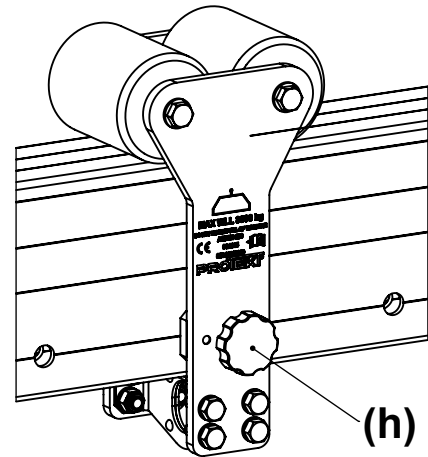
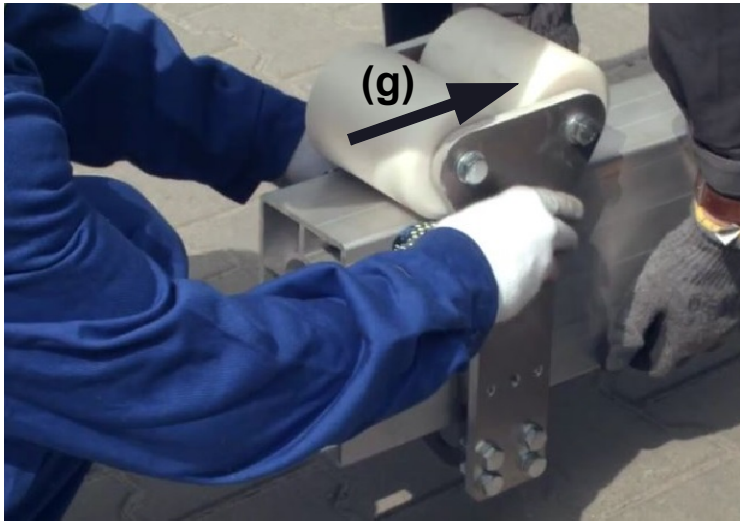
- BEFORE INSTALLATION OF SECOND SUPPORT PUT ON THE BEAM ALL NEEDED TROLLEYS!**



### 3. TROLLEYS INSTALLATION

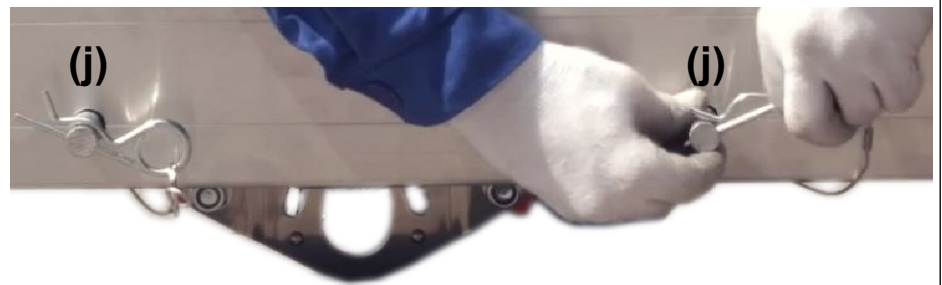
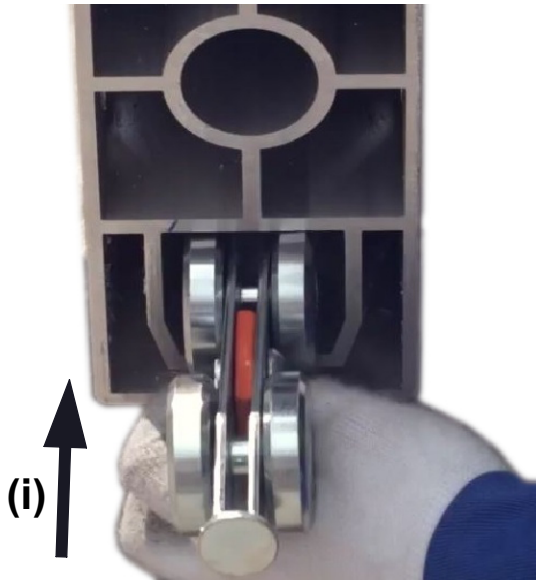
#### 3.1. EXTERNAL TROLLEY INSTALLATION

- Put the external trolley on the free end of the beam (g) and secure trolley's position (h) near beam center with knob (friction brake).

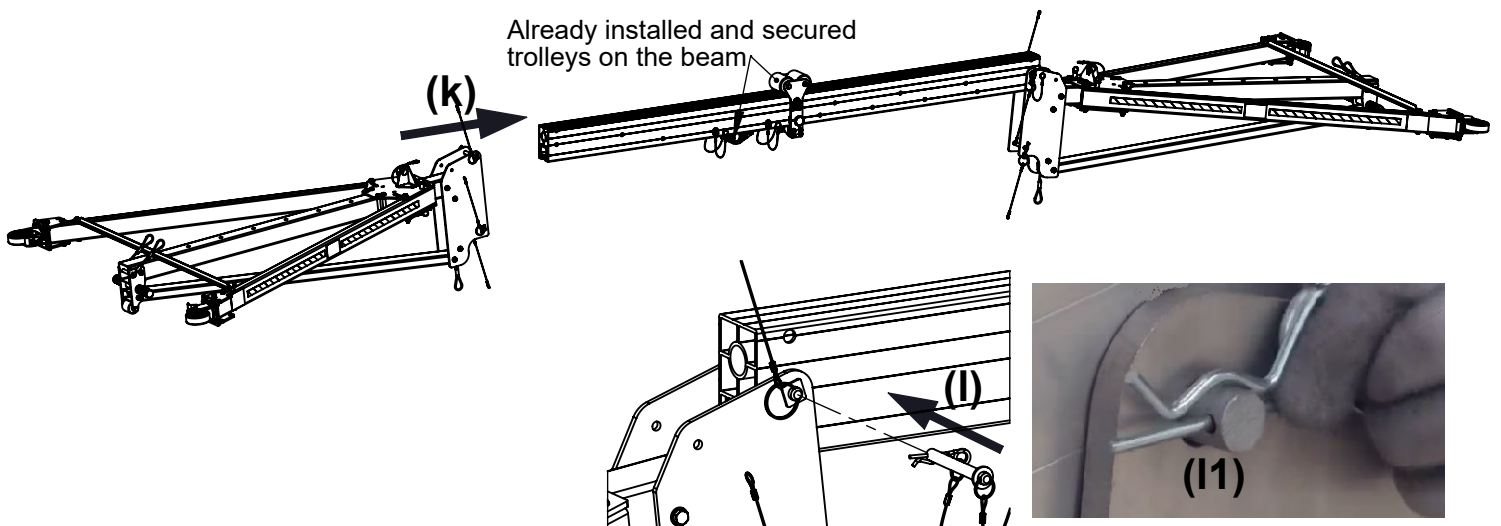


#### 3.2. INTERNAL TROLLEY INSTALLATION

- Insert internal trolley into beam's rail (i) and secure trolley's position with two bolts with cotter pin (j).



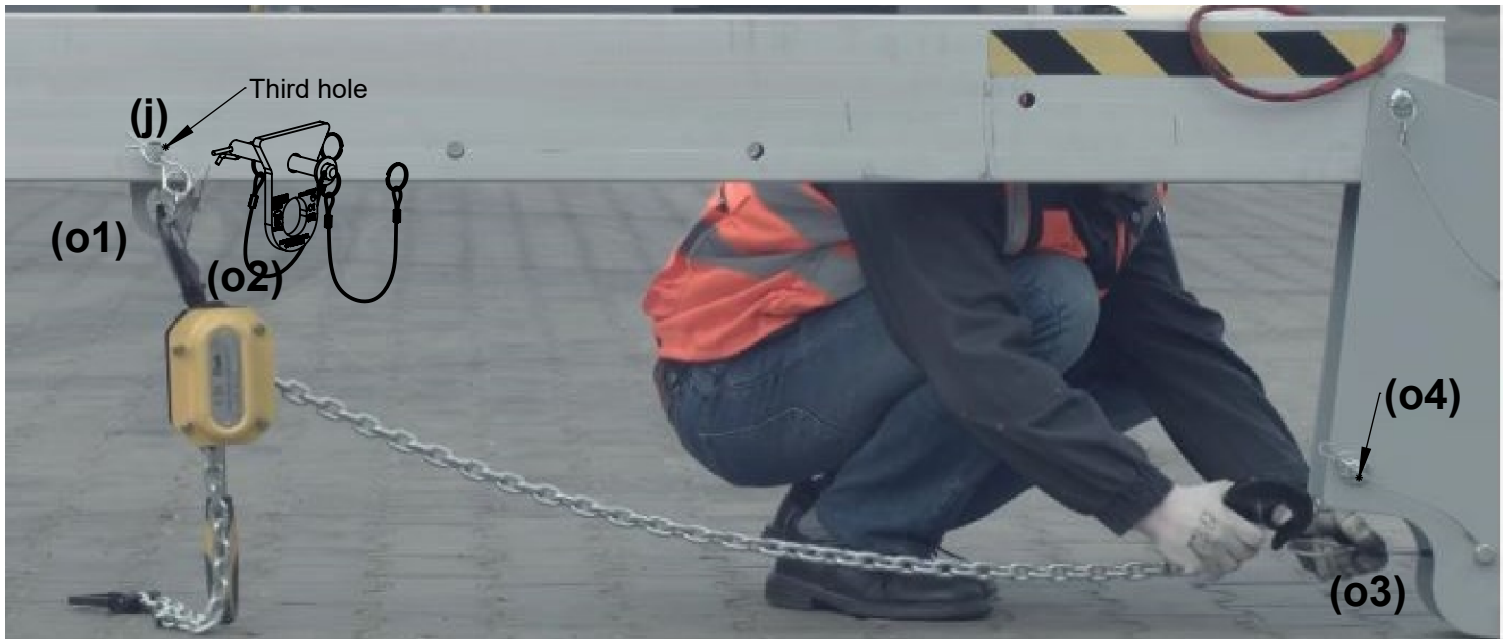
- After installation of all needed trolleys install second support to the beam end (k) using "A" bolt (l).
- Secure the bolt with cotter pin (l1).
- In this stage there is easy way to remove ASB500-600 Beam Transporter.



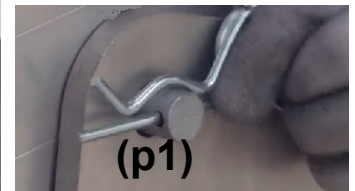
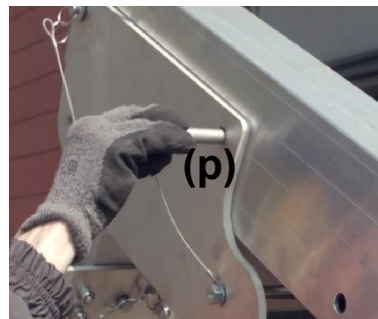
#### 4. RAISING THE DEVICE SUPPORTS

It is recommended that supports should be raised using chain hoist (at least 1,5 tonne WLL) and hitch for raising the support (ASB500-360).

- Attach ASB500-360 hitch into third bottom line hole on the beam (o1).
- Attach chain hoist to the ASB500-360 hitch installed on the beam (o2).
- ASB500-360 hitch must be immobilized using bolt with cotter pin (j).
- Attach chain hoist hook to the end of the small steel rope (o3) located between support front plates.
- Be sure that bolt with cotter pin "B" is removed from support front plate (o4).
- Start raising the support using chain hoist lever (05).
- While raising ensure the sustainability of whole device.



- Insert the second bolt "B" into support front plate (p).
- Secure bolt with cotter pin! (p1).
- Release chain hoist and remove steel rope.
- Repeat above instructions for second support.

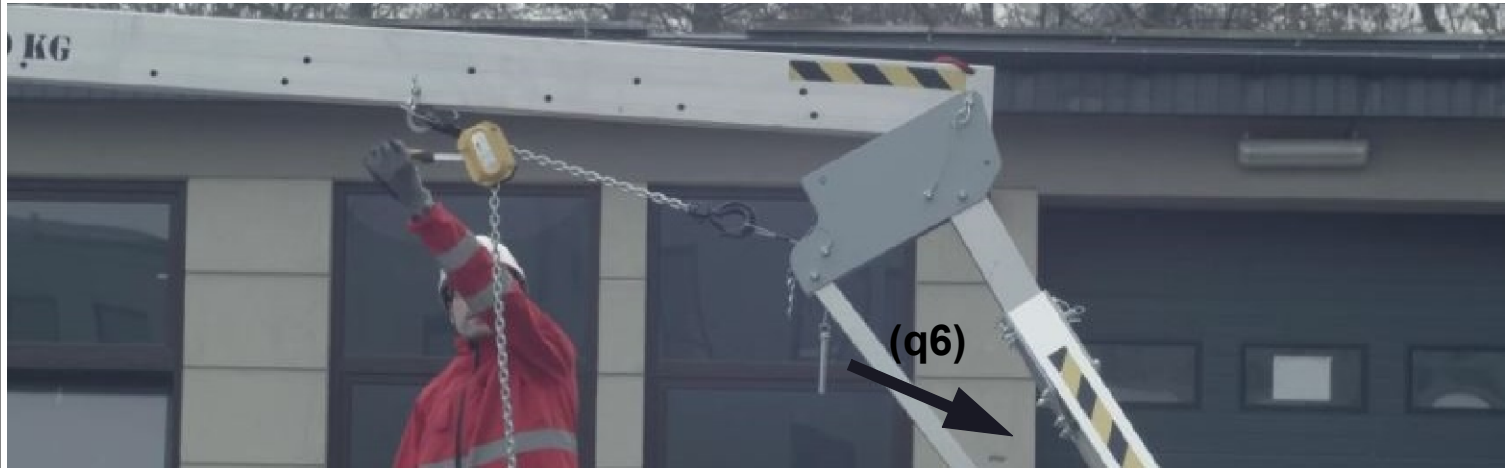
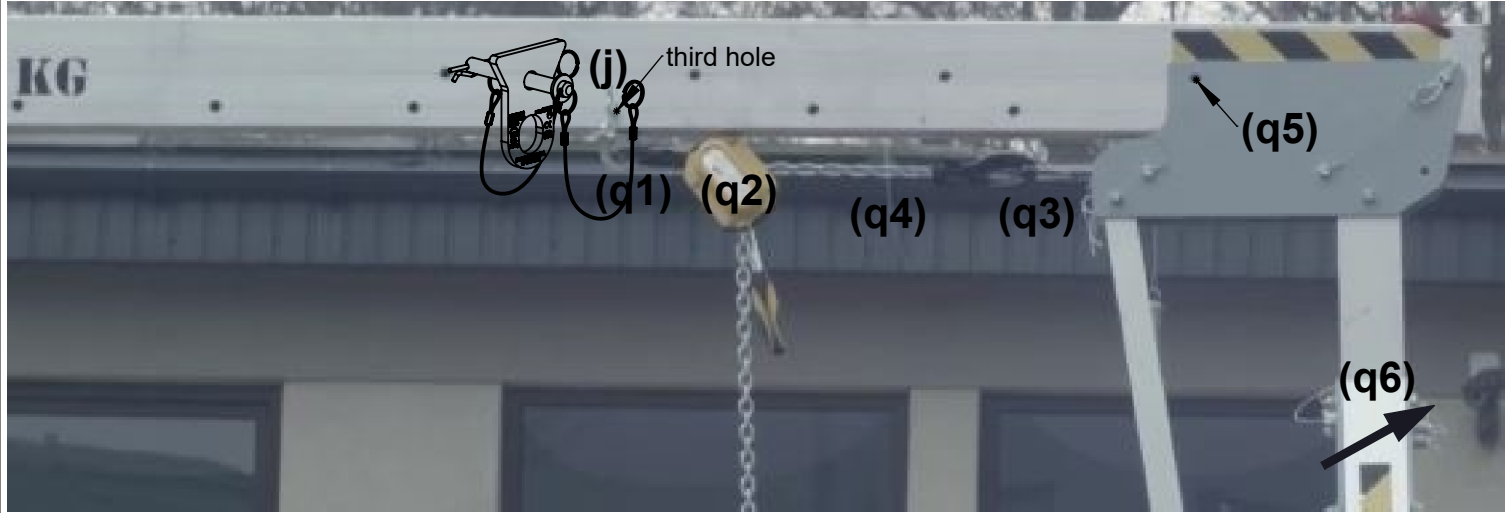




## 5. LOWERING THE DEVICE SUPPORTS

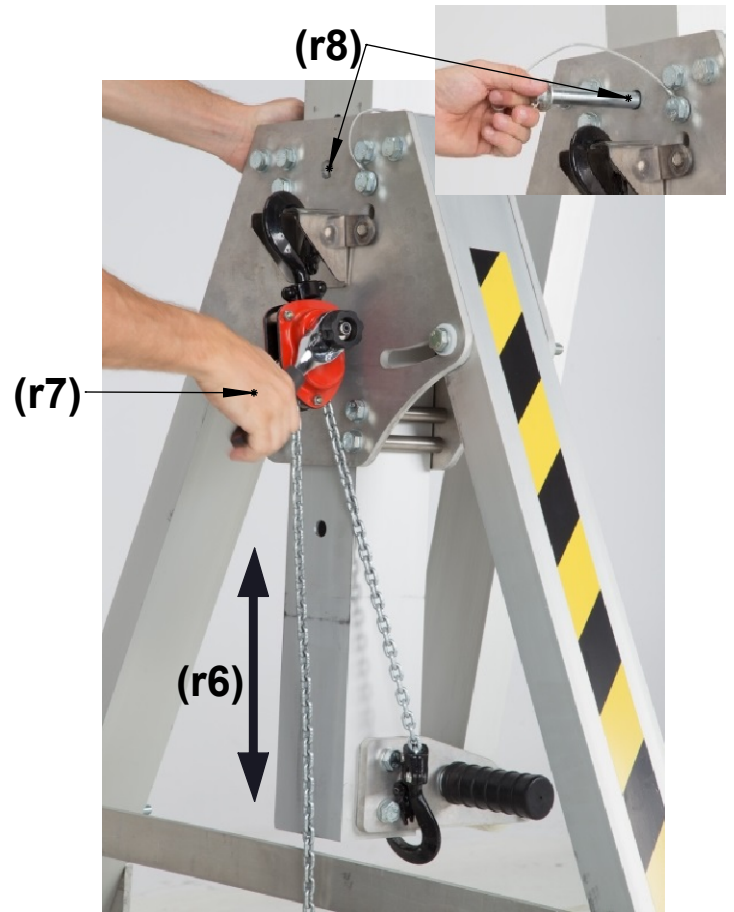
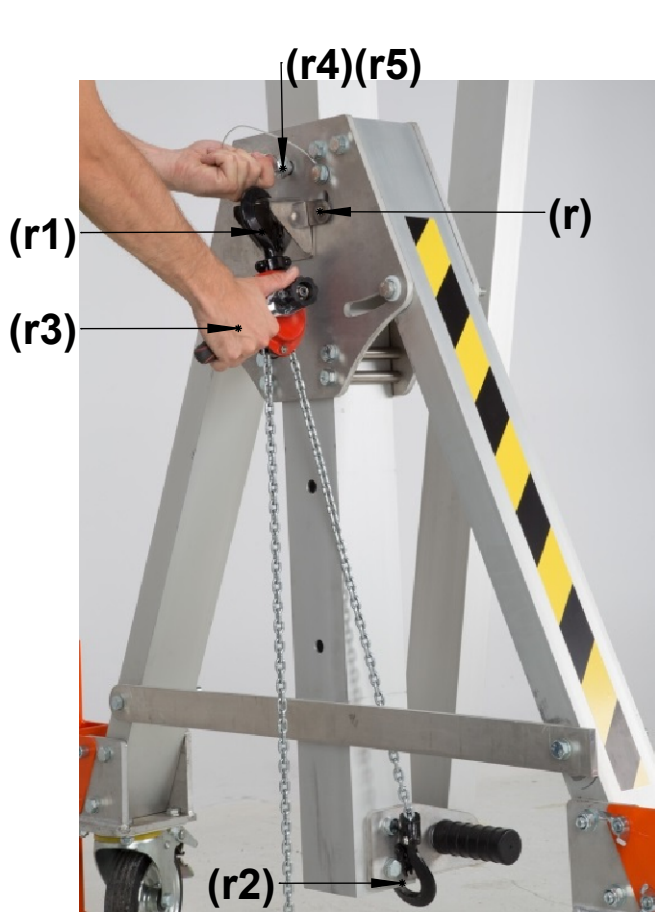
It is recommended that supports should be lowered using chain hoist (at least 1,5 tonne WLL) and hitch for raising the support (ASB500-360).

- Before lowering support be sure that all wheel brakes are locked (f1).
- Attach ASB500-360 hitch into third bottom line hole on the beam (q1).
- Attach chain hoist to the ASB500-360 hitch installed on the beam (q2).
- ASB500-360 hitch must be immobilized using bolt with cotter pin (j).
- Attach chain hoist hook to the end of the small steel rope (q3) located between support front plates..
- Be sure that the chain hoist mechanism is locked, chain strung (q4) and hook properly attached to the end of the steel rope. Small slack of the chain is allowed.
- Remove bolt with cotter pin "B" from support front plate (q5).
- Unlock the wheels and push support outside (q6).
- While lowering the device ensure the sustainability of whole device.
- Repeat above instructions for second support.

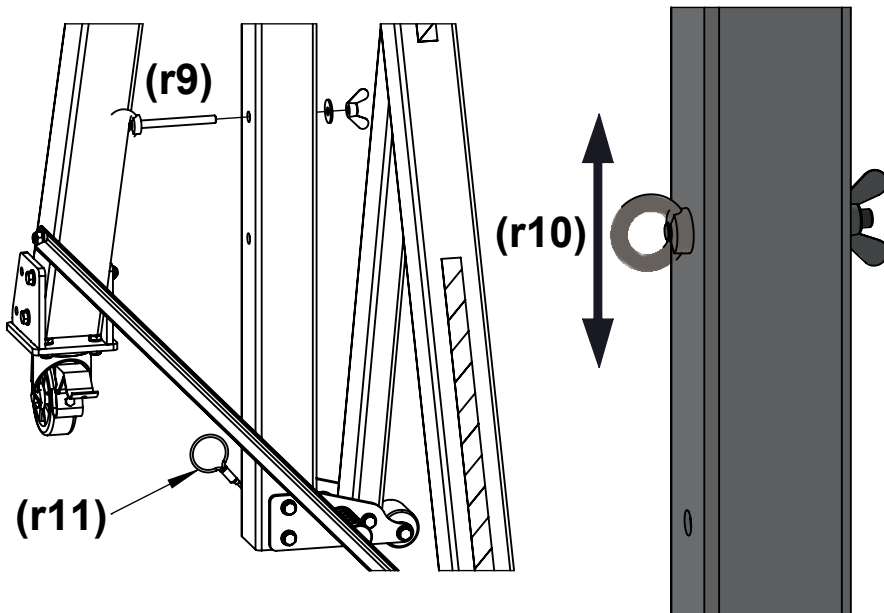


## 6-A. BEAM HEIGHT ADJUSTMENT (USING CHAIN HOIST)

- Hang chain hoist grip on support side plate using two holes (r).
- Install chain hoist on the chain hoist grip (r1).
- Attach the chain hoist hook to the bottom edge of the vertical part of the support (r2).
- Pull up the chain and lock the mechanism (r3) so that the bolt with cotter pin was moveable (r4).
- Be sure that the chain hoist mechanism is locked and hook properly attached to the bottom edge of the vertical part of the support.
- Remove the bolt with cotter pin (r5).
- Adjust (up or down) height of the vertical part of the support (r6) using chain hoist lever (r7).
- Insert bolt through the support side plates and secure it with cotter pin (r8).



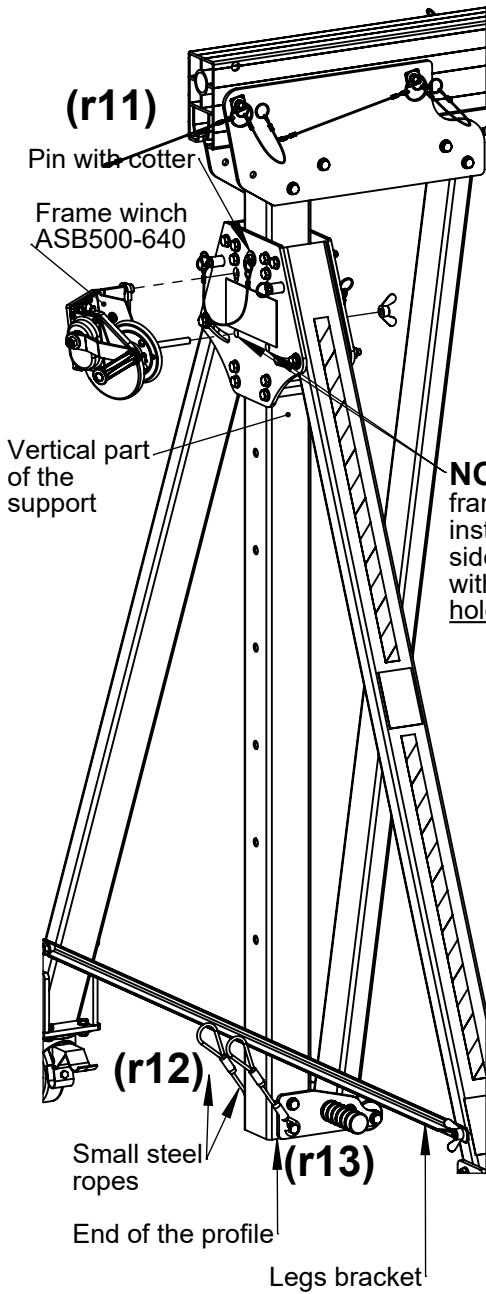
- If the chain is too short to attach it to the bottom edge of the vertical part of the support ASB500-370 hitch can be used (r9). Hitch should be installed on hole of the vertical part of the support. Chain hoist hook should be attached to the hitch ear (r10).
- Hook of the chain hoist can be attached to the small steel rope installed on vertical part of the support bottom (r11).
- Repeat above instruction for second support. Both supports must be set at the same height!



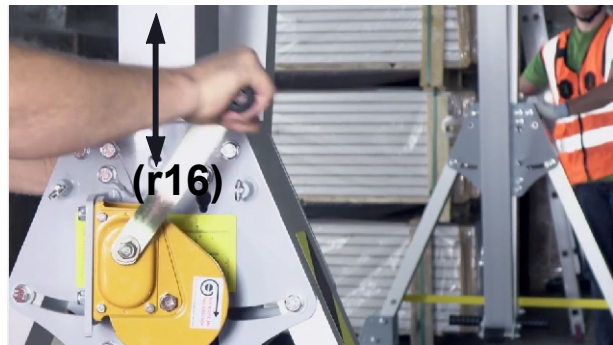
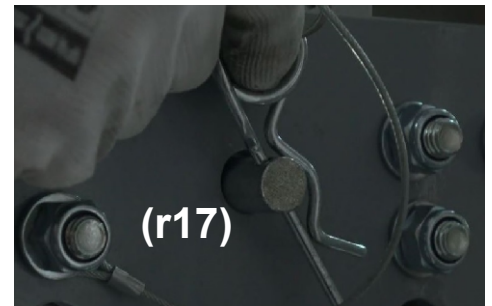
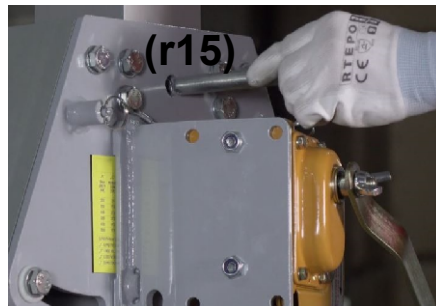
- **BOTH VERTICAL PARTS OF THE SUPPORT SHOULD BE RAISED POSSIBLY EVENLY!**

## 6-B. BEAM HEIGHT ADJUSTMENT (USING FRAME WINCH ASB500-640)

- Install frame winch ASB500-640 on the side plate holes using wing nut (r11).
- Start extending strap from the winch and attach connector to the:
  - end of the small steel rope (r12) located on the lower end of the vertical part of the support,
  - or to the end of the profile (r13).
- **BE SURE that strap is located behind (inside the ASB/LSB device) the legs bracket (r14).**
- Tension the strap using winch handle and remove pin with cotter (r15).
- Start adjusting support (frame) height using winch handle (r16).
- **After adjusting pin must be installed and secured with cotter!(r15, r17).**
- **NEVER USE ASB/LSB DEVICE IF THE VERTICAL PART OF THE SUPPORT (FRAME) HANGS ON THE FRAME WINCH ONLY!!!**



**NOTICE!**  
frame winch can be installed on support side plate equipped with two additional holes!



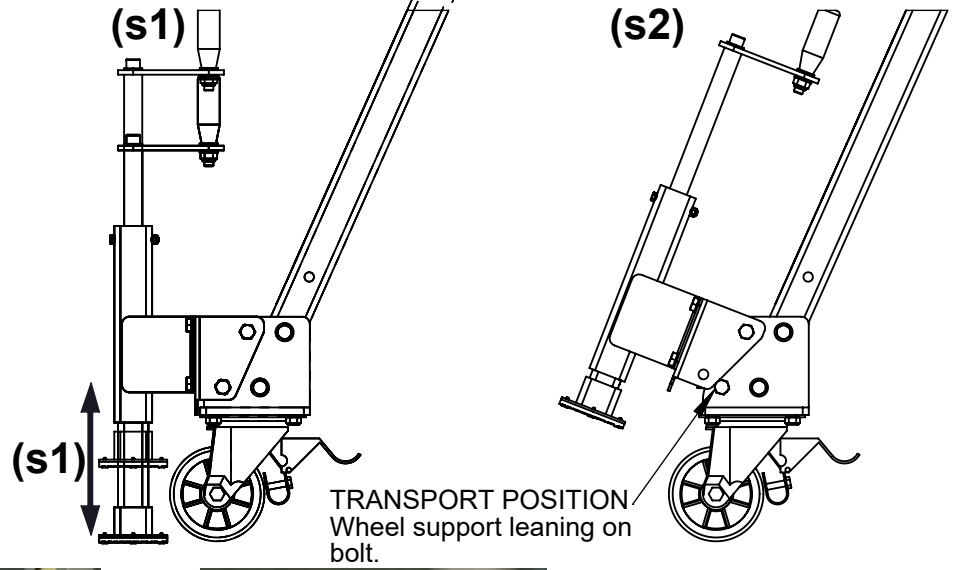
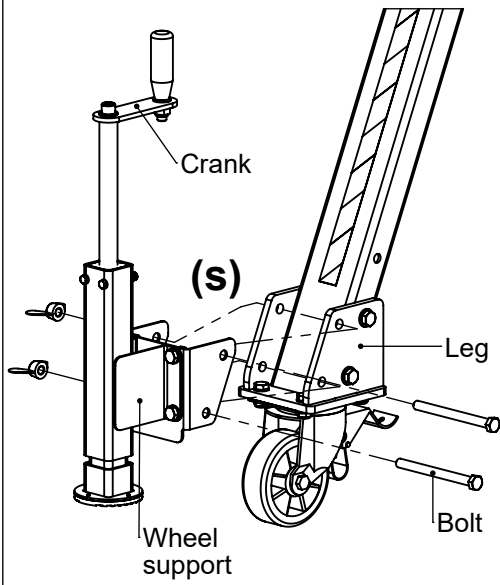
- **BOTH VERTICAL PARTS OF THE SUPPORT SHOULD BE RAISED POSSIBLY EVENLY!**





## 7-A. WHEEL SUPPORT INSTALLATION

- It is recommended to use additionally Wheel Support set.
- Attach the wheel support to the leg using two bolts with wing-nuts (s).
- Rotate the crank handle for height adjustment (s1).
- Additional wheel support position used during transport the ASB device. (s2)

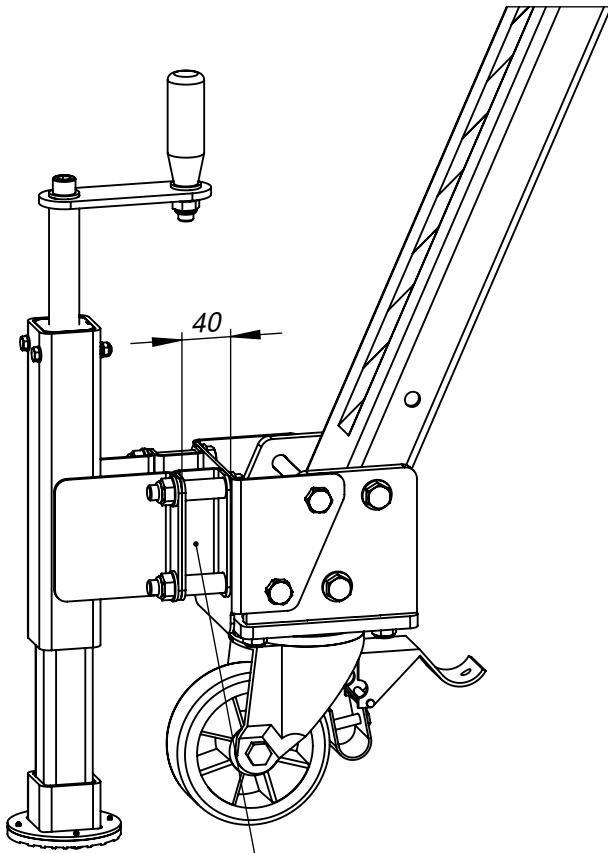


## 7-B. WHEEL SUPPORT EXTENDER

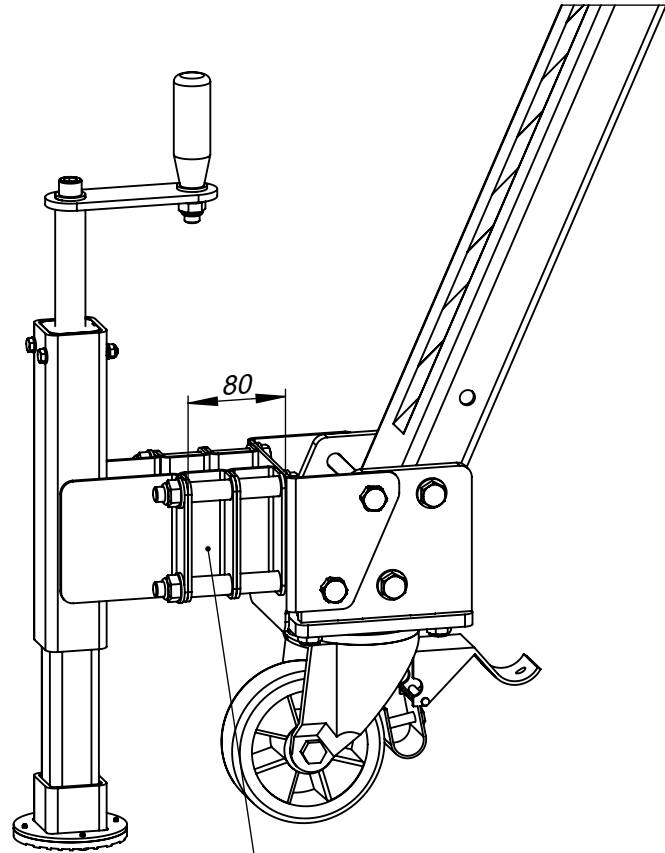
Distance between wheel and wheel support can be extended using:

- ASB500-813 - 40mm extender (recommended for W1 160mm diameter wheels)
- ASB500-814 - 80mm extender (recommended for W2 200mm diameter wheels)

Extenders can be used when the device is frequently moved and used continuously with wheel supports. Transport position (described in 7-A section) is not necessary.



**ASB500-813**  
**40mm Extender**



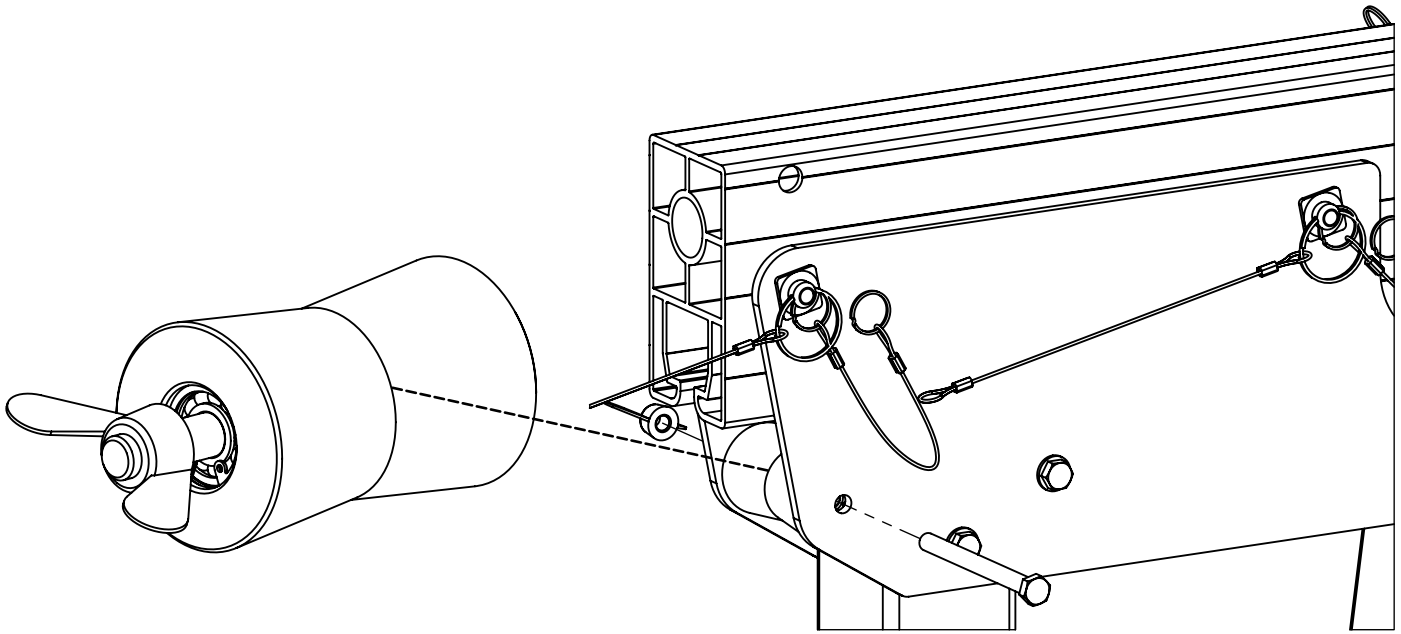
**ASB500-814**  
**80mm Extender**

## 8. ROPE ROLLERS INSTALLATION

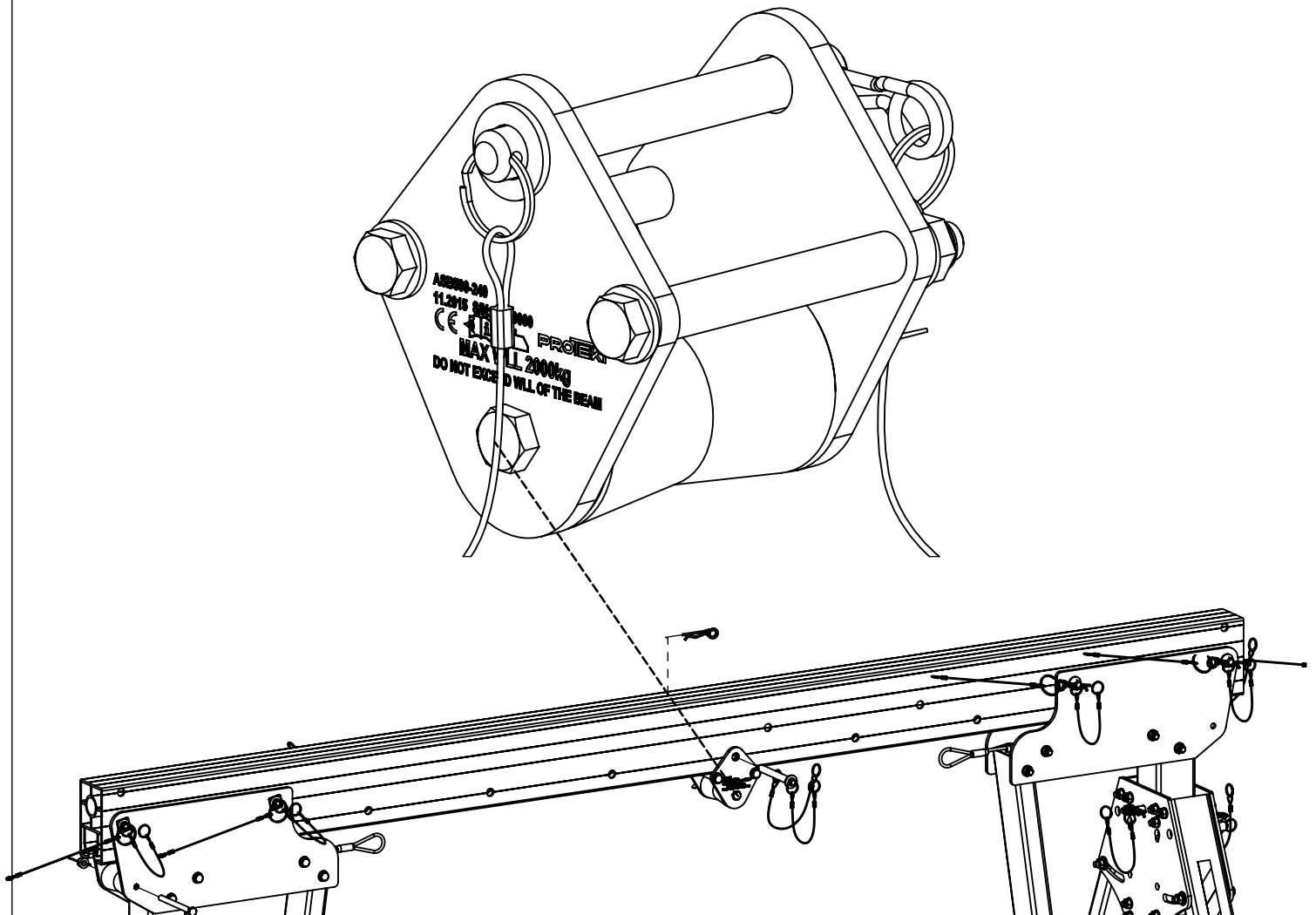
ASB device can be used with brake winch. For winch rope guidance two types of rope rollers should be used:

- ASB500-180 - rope roller for support
- ASB500-240 - rope roller for beam

8.1. Rope roller for support ASB500-180 should be installed between two support front plates using bolt and wing nut.



8.2. Rope roller for beam ASB500-240 should be installed in one hole on the beam using ASB500-130 bolt and cotter pin.

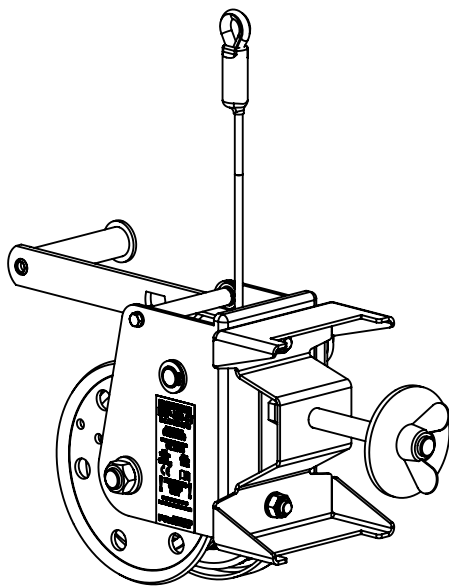
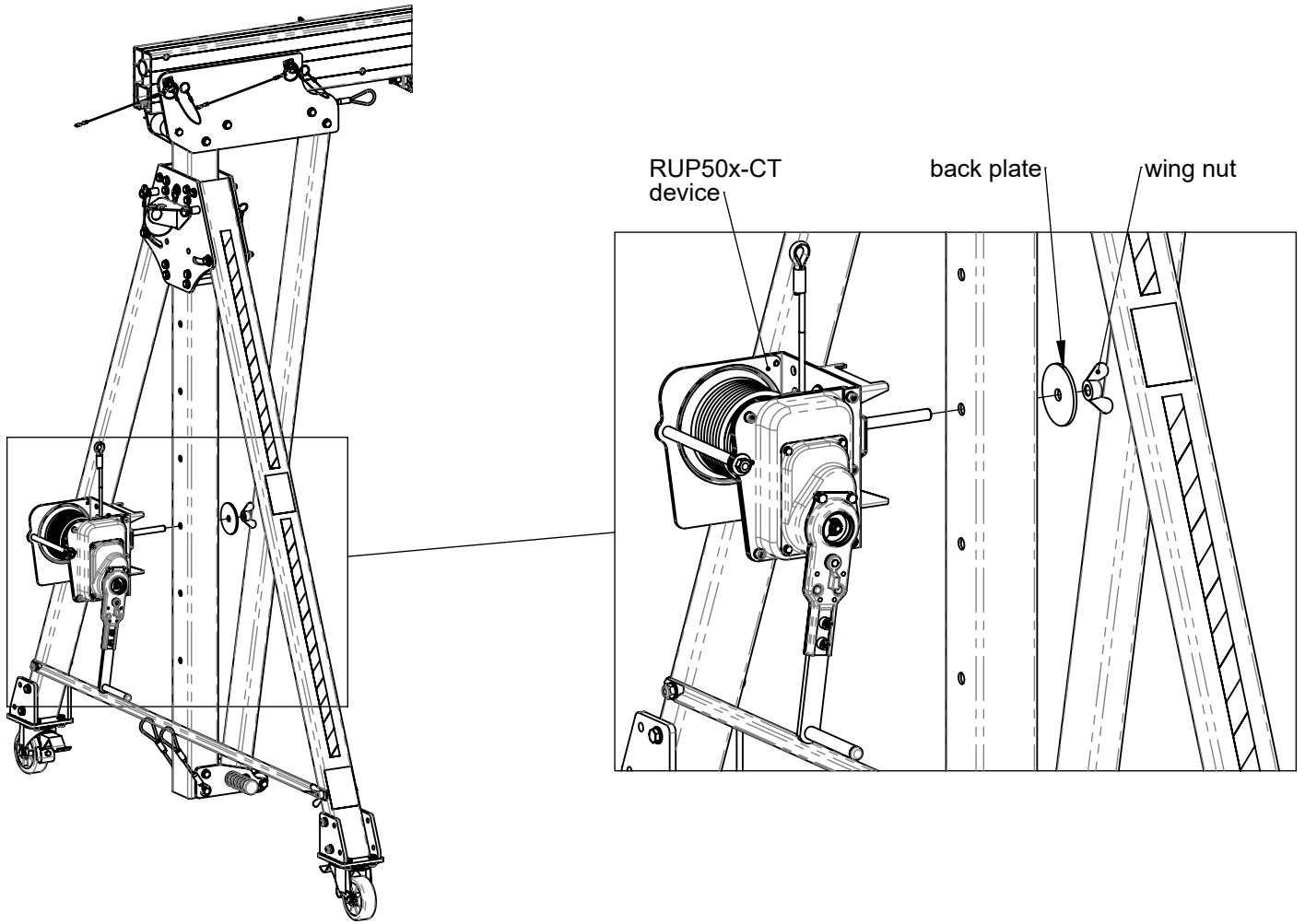


## 9. BRAKE WINCH INSTALLATION

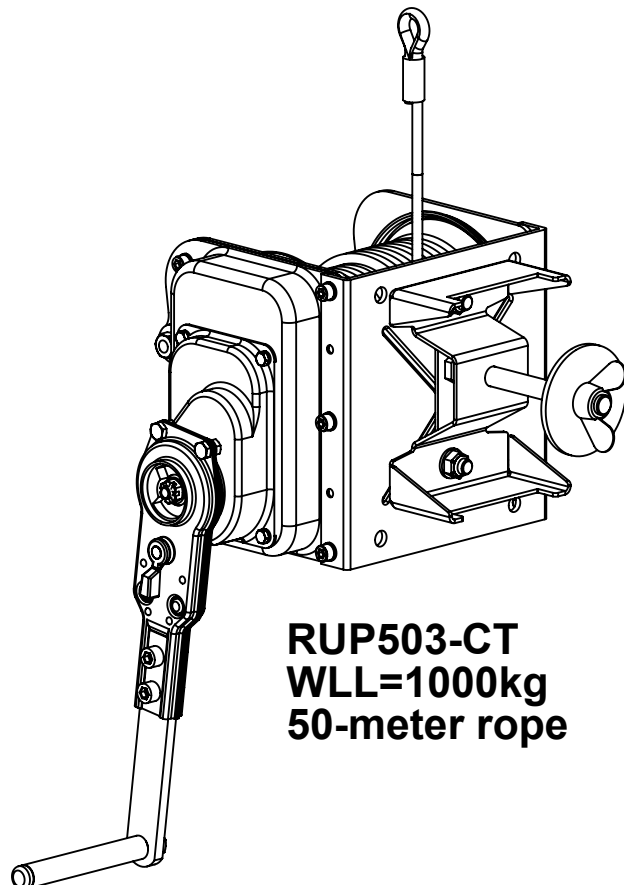
### 9.1. RUP50x-CT INSTALLATION

ASB/LSB device can be used with brake winch RUP50x-CT series.

RUP50x-CT device can be installed in one hole in vertical part of the support (all sizes A / B / C / E / F / G).



**RUP502-CT**  
**WLL=500kg**  
**25-meter rope**

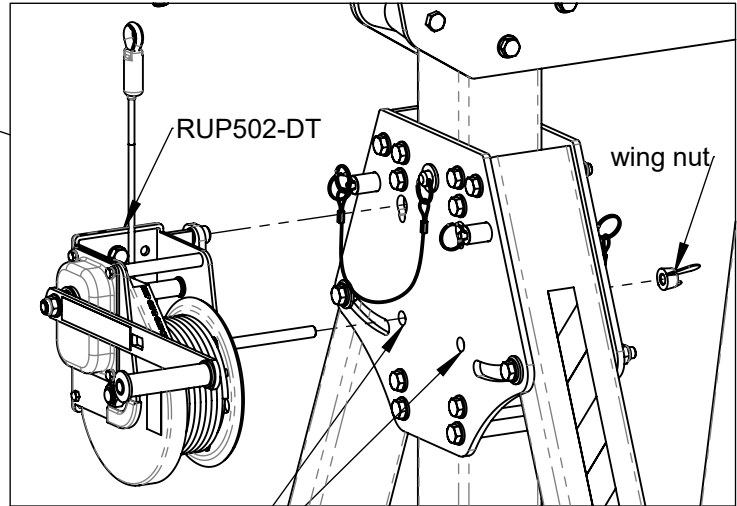
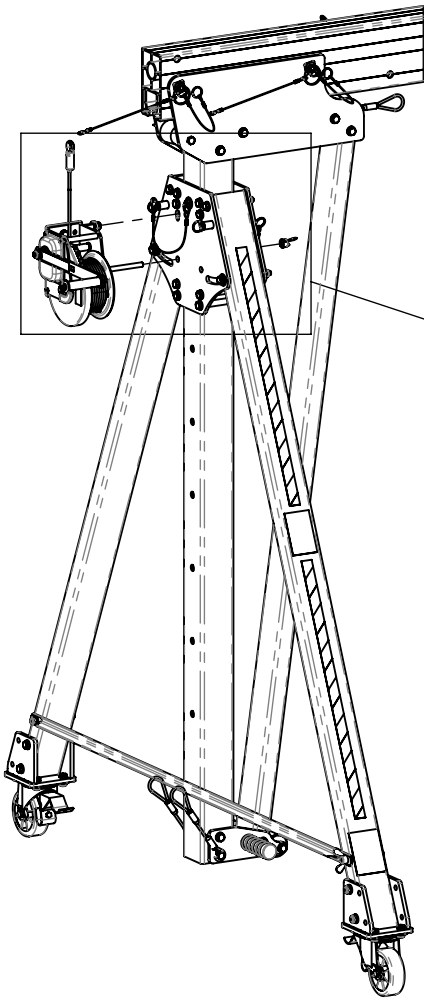


**RUP503-CT**  
**WLL=1000kg**  
**50-meter rope**

## 9.2. RUP502-DT INSTALLATION

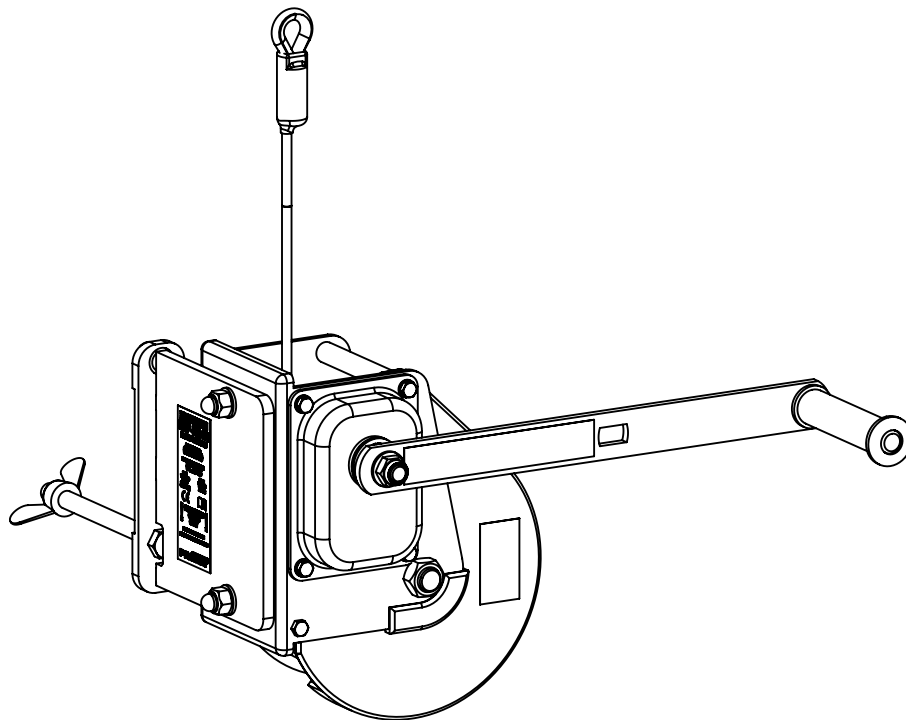
ASB/LSB device can be used with brake winch RUP502-DT.

RUP502-DT device can be installed on small and medium support side plate (A / B / E / F).



### NOTICE!

RUP50x-DT device can be installed on support side plate equipped with two additional holes!



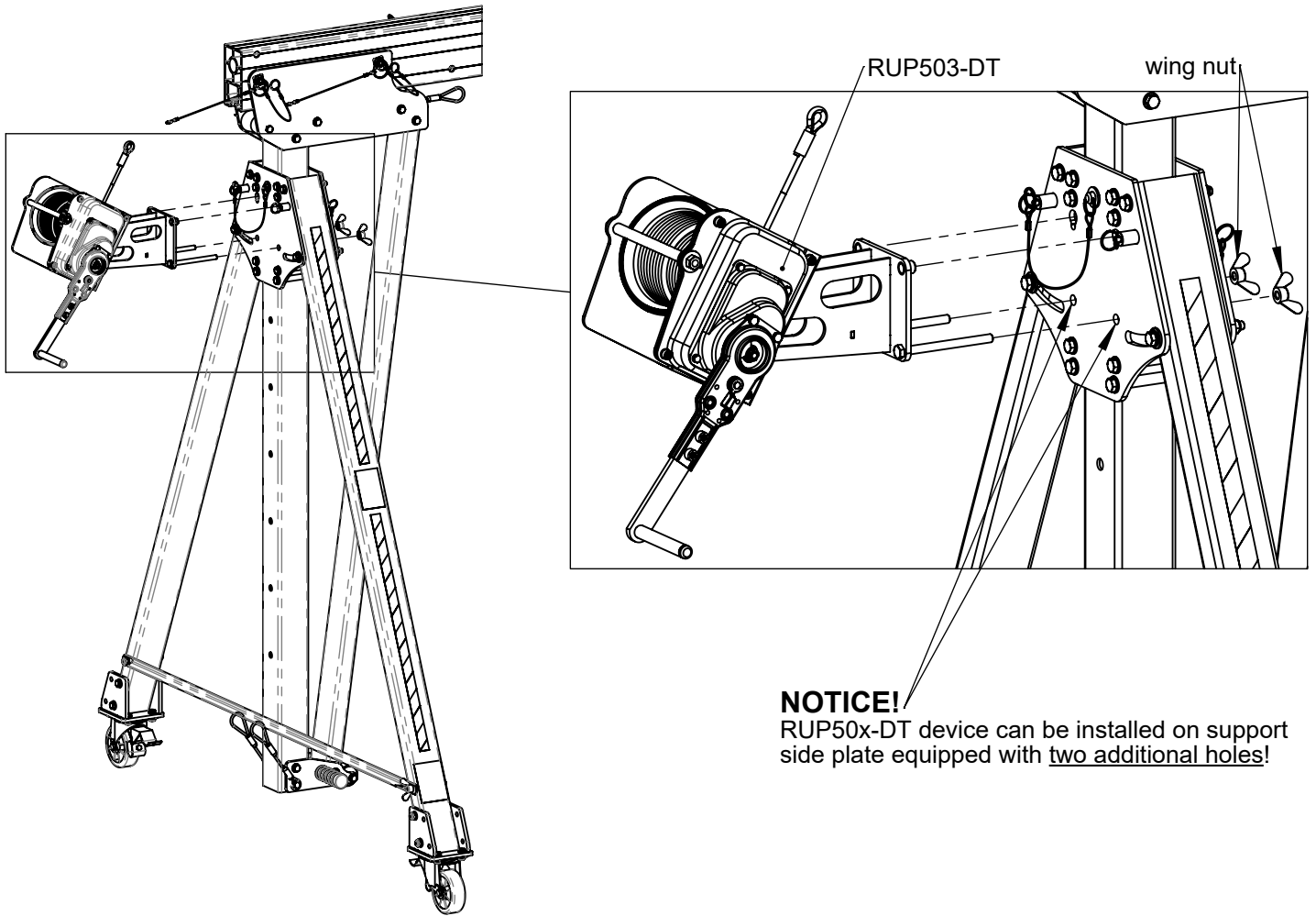
**RUP502-DT**  
**WLL=500kg**  
**25-meter**



### 9.3. RUP503-DT INSTALLATION

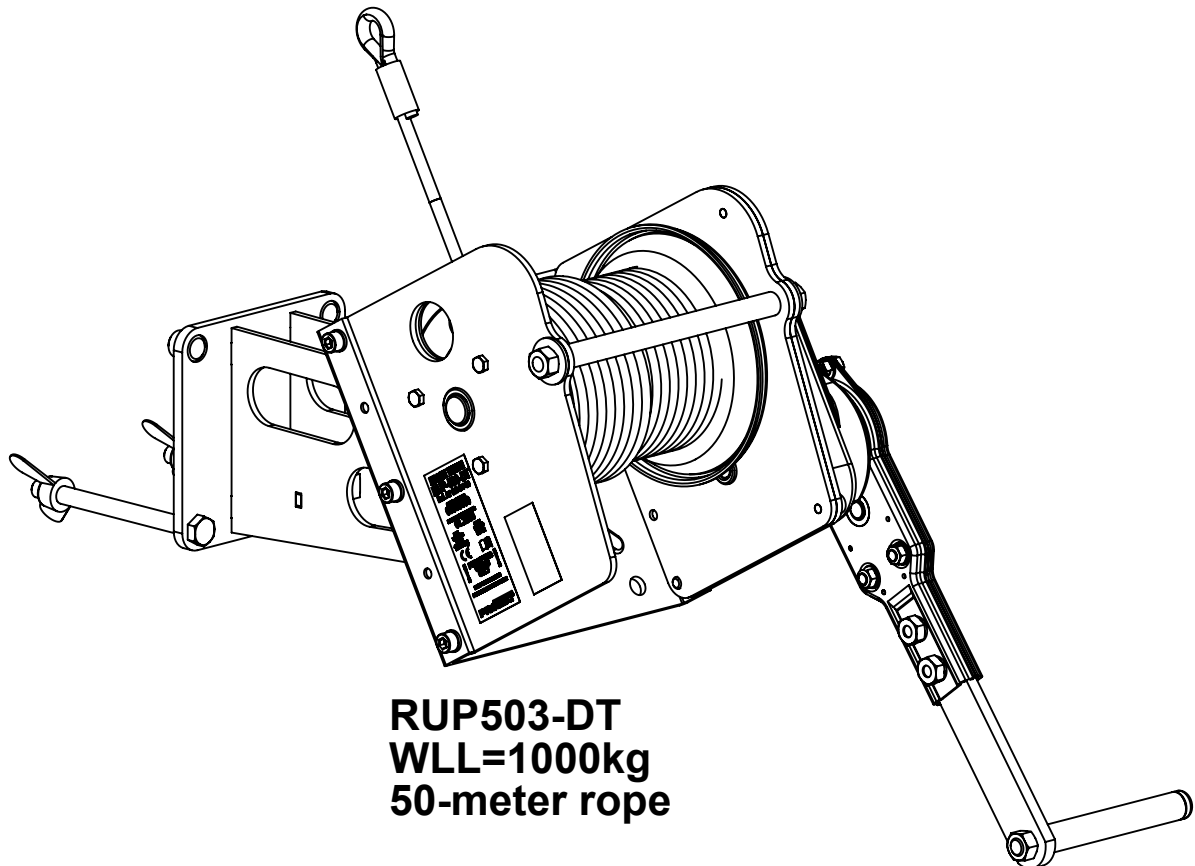
ASB/LSB device can be used with brake winch RUP503-DT.

RUP503-DT device can be installed on small and medium support side plate (A / B / E / F).



#### **NOTICE!**

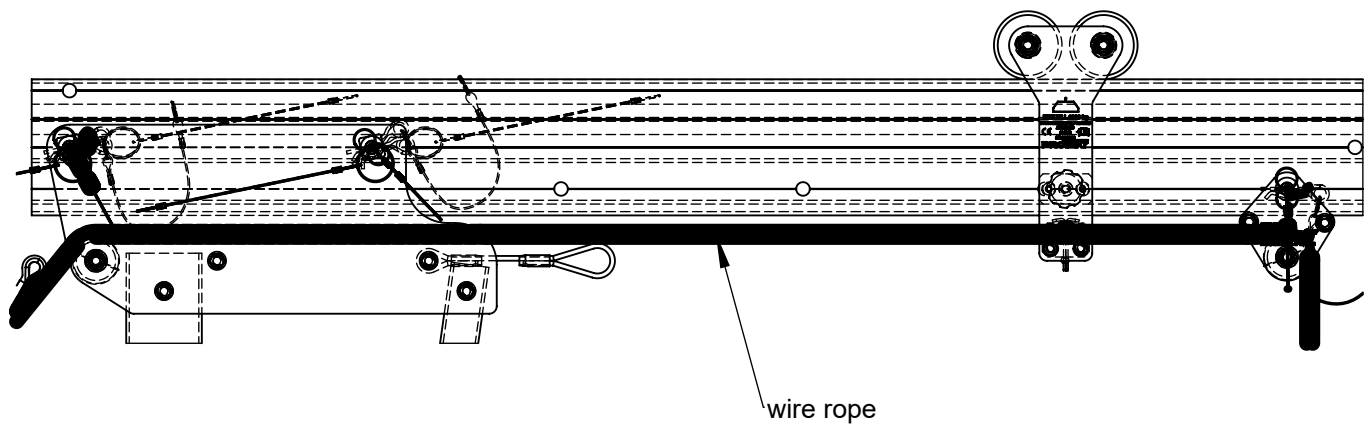
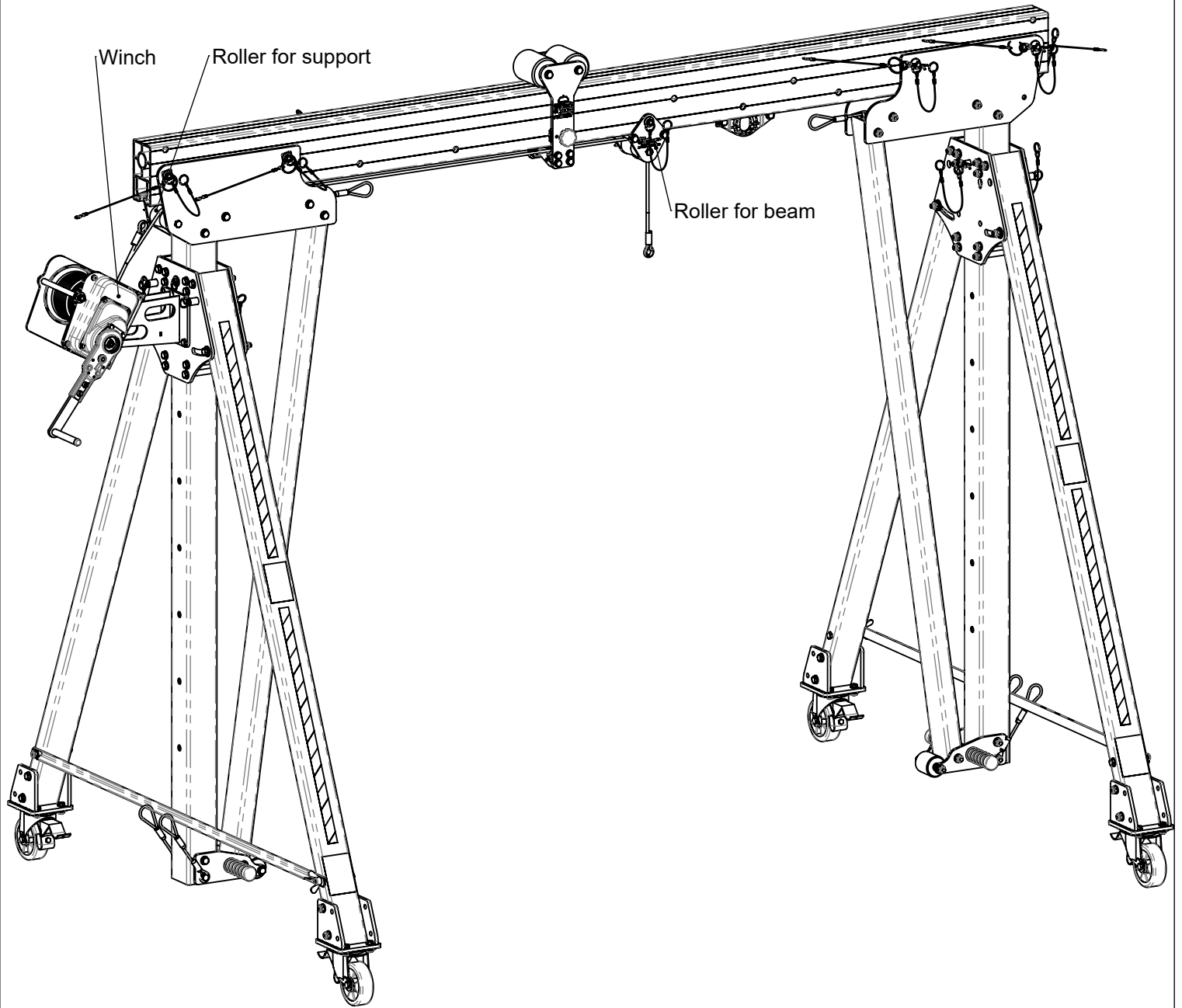
RUP50x-DT device can be installed on support side plate equipped with two additional holes!



**RUP503-DT**  
**WLL=1000kg**  
**50-meter rope**

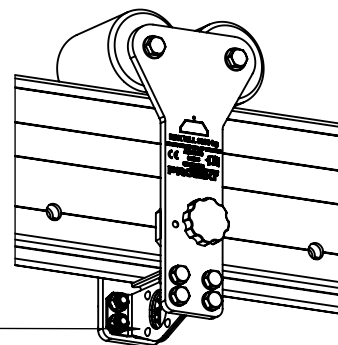
## 10. WINCH WIRE ROPE INSTALLATION

Wire rope from RUP50x-CT / RUP50x-DT devices should be guided through rope rollers (described in Section 2 Point 8). External trolley attachment point does not interfere with wire rope.



## SECTION 3 - LIFTING LOADS

External trolley ASB500-200 can be used with ASB/LSB for lifting loads up to Working Load Limit (WLL) indicated on the beam. One beam can be used with more than one external trolley. Loads suspended on several external trolleys **MUST NOT** exceed WLL indicated on the beam. For personal protection during lifting loads please refer to Section 5.



### ASB500-200 EXTERNAL TROLLEY ATTACHMENT POINT FOR LIFTING LOADS lifting loads up to Beam WLL.

#### DEVICE LOAD CARRYING CAPACITY

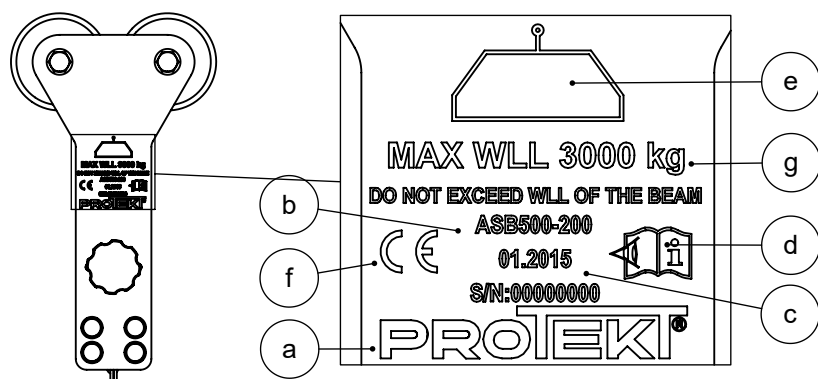
The load hoisted by the ASB/LSB device may be connected to the external trolley attachment point using chain hoists or other lifting devices with appropriate load carrying capacity. External trolley is installed on the beam. Maximum operating carrying capacity of the device is indicated on the beam.

DO NOT exceed Working Load Limit (WLL) indicated on the beam.

#### GENERAL PRECAUTIONS FOR LIFTING LOADS

- ASB/LSB device is used for lifting and lowering loads weighing up to WLL indicated on the beam.
- External trolley is not an emergency device for lifting people and it should not be used for this purpose.
- Do not use a ASB/LSB device contrary to its intended use.
- Do not lift loads over an area occupied by people.
- Do not change the device design, repair or replaceable elements included in the kit.
- Before each use of the device, carry out thorough inspection to check the device condition and proper operation. Carefully check all parts, paying particular attention to any damage, excessive wear, corrosion, abrasion, cuts and malfunction.
- The device must be immediately withdrawn from use if there is any doubt about the condition of the device or its operation. The device may be readmitted for use only after a manufacturer's detailed inspection, and manufacturer's written consent for its use.
- Position ASB device on a flat, hard and stable surface, free of loose materials, such as rocks, debris etc.
- Check the stability of the load attached to the internal trolley attachment point or cable, on which it is hoisted, to prevent accidental detachment of any of the elements.
- The use of the device with other devices (such as devices for lifting and lowering loads) must be in accordance with the instruction for use of these devices.
- It is forbidden to use the kits in which the ASB/LSB device is included, in which the operation of any component disrupts the operation of other components.
- In case of any doubts as to the condition and usage of this device, please contact the manufacturer of the device.
- Avoid working where user may swing and hit an object or where lines may cross or tangle with that of another worker in the area.

#### EXTERNAL TROLLEY MARKING



#### CONTENT OF EXTERNAL TROLLEY MARKING:

- a) Marking of the manufacturer or distributor.
- b) Model symbol / reference number.
- c) Month and year of manufacture / Serial number.
- d) Caution: read the manual.
- e) Device for lifting loads.
- f) CE marking.
- g) Maximum Working Load Limit notice.

## SECTION 4

# PERSONAL PROTECTION ACCORDING TO EN 795 AND TS 16415

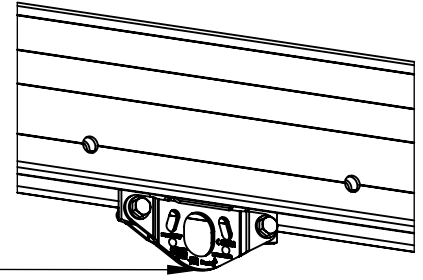
ASB/LSB with internal trolley (ASB500-250) can be used as a temporary anchorage according to EN 795 and TS 16415.

ASB device provides protection for maximum five people at the same time.

ASB with combined beam provides protection for maximum two people at the same time.

LSB device provides protection for maximum three people at the same time.

For personal protection during lifting loads please refer to Section 5.



### ASB500-250 INTERNAL TROLLEY ATTACHMENT POINT FOR PERSONAL PROTECTION one person (EN 795)

**ASB MAX 5 pcs.  
LSB MAX 3 pcs.**

#### **RULES FOR PERSONAL PROTECTION:**

1. ONE internal trolley can be used by ONE person at the same time.
2. For ASB maximum FIVE people can be attached to the available attachment points at the same time.
3. For ASB combined beam TWO people can be attached to the available attachment points at the same time.
4. For LSB maximum THREE people can be attached to the available attachment points at the same time.
5. Anchor points designed for personal protection should ONLY be used for personal fall protection equipment and NOT for lifting equipment.

#### **GENERAL PRECAUTIONS**

- AVOID working where the user may swing and hit an object or where lines may cross or tangle with that of another worker in the area.
- Fall arrest and rescue systems used with this device MUST MEET applicable EN standards requirements (EN 795 for anchor devices; EN 362 for connectors; EN 361 for full body harnesses; EN 360 for retractable type fall arresters; EN 1496 for rescue lifting devices; EN 1497 for rescue harnesses; EN 341 for descender devices).
- The Maximum Arrest Force (MAF) to which a user of a Fall Arrest System (FAS), who wears a full body harness, is exposed during an arrest of his/her fall is limited by law 6 kN in EU. The system used to protect user against fall from height must include fall protection equipment reducing the Maximum Arrest Force, acting on the user while arresting the fall, to maximum value of 6kN (e.g. fall safety energy absorber with lanyard or retractable fall arrester).
- Make sure that device is installed in a upright position on a flat, stable and hard surface. The surface must support the load.
- DO NOT use ASB device for more than five people at the same time.
- It is recommended that the device should be transported and installed by minimum two people.
- The anchor device or anchor point for the fall arrest system should always be positioned, and the work carried out in such a way, as to minimize both the potential for falls and potential fall distance. The anchor device/point should be placed above the position of the user. The shape and construction of the anchor device/point shall not allowed to self-acting disconnection of the equipment. Minimal static strength of the anchor device/point is 12 kN. It is recommended to use certified and marked structural anchor point complied with EN 795.

#### **THE ESSENTIAL PRINCIPLES OF USE OF PERSONAL PROTECTIVE EQUIPMENT**

- Personal Protective Equipment (PPE) shall only be used by a person trained and competent in its safe use.
- PPE must not be used by a person with medical condition that could affect the safety of the equipment user in normal and emergency use.
- A rescue plan shall be in place to deal with any emergencies that could arise during the work.
- It is forbidden to make any alterations or additions to the equipment without the manufacturer's prior written consent.
- Any repair shall only be carried out by equipment manufacturer or his certified representative.
- PPE shall not be used outside its limitations, or for any purpose other than that for which it is intended.
- PPE should be a personal issue item.
- Before use ensure about the compatibility of items equipment assembled into fall arrest system. Periodically check connecting and adjusting of the equipment components to avoid accidental loosening or disconnecting of the components.
- It is forbidden to use combinations of items of equipment in which the safe function of any one item is affected by or interferes with the safe function of another.
- It is essential for the safety of the user that if the product is re-sold outside the original country of destination the reseller shall provide instruction for use, for maintenance, for periodic examination and for repair in language of the country in which the product is to be sold.
- A full body harness (conforming EN 361) is the only acceptable body holding device that can be used in a fall arrest system.
- On full body harness use only attaching points marked with big letter "A" to attach a fall arrest system.
- It is obligatory to verify the free space required beneath the user at the workplace before each occasion of use the fall arrest system, so that, in the case of a fall, there will be no collision with the ground or other obstacle in the fall path. The required value of the free space should be taken from instruction manual of used equipment.
- There are many hazards that may affect the performance of the equipment and corresponding safety precautions that have to be observed during equipment utilization, especially:
  - trailing or looping of lanyards or lifelines over sharp edges,
  - any defects like cutting, abrasion, corrosion,
  - climatic exposure,
  - pendulum falls,
  - extremes of temperature,
  - chemical reagents,
  - electrical conductivity.

## **INSPECTION**

Before each use of personal protective equipment it is obligatory to carry out a pre-use check of the equipment, to ensure that it is in a serviceable condition and operates correctly before it is used.

During pre-use check it is necessary to inspect all elements of the equipment in respect of any damages, excessive wear, corrosion, abrasion, cutting or incorrect acting, especially take into consideration:

- in full body harnesses and belts - buckles, adjusting elements, attaching points, webbings, seams, loops;
- in energy absorbers - attaching loops, webbing, seams, casing, connectors;
- in textile lanyards or lifelines or guidelines - rope, loops, thimbles, connectors, adjusting elements, splices;
- in steel lanyards or lifelines or guidelines - cable, wires, clips, ferrules, loops, thimbles, connectors, adjusting elements;
- in retractable fall arresters - cable or webbing, retractor and brake proper acting, casing, energy absorber, connector;
- in guided type fall arresters - body of the fall arrester, sliding function, locking gear acting, rivets and screws, connector, energy absorber;
- in connectors - main body, rivets, gate, locking gear acting;
- in tripods - legs, safety pins, eye bolts, feet, chain, connecting elements.

## **PERIODIC INSPECTION**

After every 12 months of utilization, personal protective equipment must be withdrawn from use to carry out periodical detailed inspection. The periodic inspection must be carried out by a competent person who has the knowledge and training required for personal protective equipment periodic inspections. The periodic inspection can be carried out also by the manufacturer or his authorized representative. In case of some types of the complex equipment e.g. some types of retractable fall arresters the annual inspection can be carried out only by the manufacturer or his authorized representative.

During this inspection will be established admissible time of the device use till next manufacturer's inspection.

The result of the inspection must be recorded in Identity Card.

Regular periodic inspections are the essential for equipment maintenance and the safety of the users which depends upon the continued efficiency and durability of the equipment.

During periodic inspection it is necessary to check the legibility of the equipment marking.

## **MAXIMUM LIFESPAN**

Maximum lifespan of the ASB500-250 internal trolley is unlimited but its depends on the intensity of usage and the environment of use. Using the device in rough environment, marine, contact with sharp edges, exposure to extreme temperatures or aggressive substances, etc. can lead to the withdrawal from use even after one use.

## **WITHDRAWAL FROM USE**

Personal protective equipment must be withdrawn from use immediately when any doubt arise about its condition for safe use and not used again until confirmed in writing by equipment manufacturer or his representative after carried out the detailed inspection.

## **WITHDRAWN FROM USE AFTER ARRESTING A FALL**

Device must be withdrawn from use immediately when it have been used to arrest a fall. After that must be carried out detailed manufacturer's inspection of the tripod.

The manufacturer's inspection can be carried out by:

- manufacturer
- person recommended by manufacturer
- company recommended by manufacturer.

During this inspection will be established if the tripod can be longer used and will be define the admissible time of tripod use till next manufacturer's inspection and recorded in Identity Card.

## **TRANSPORTATION**

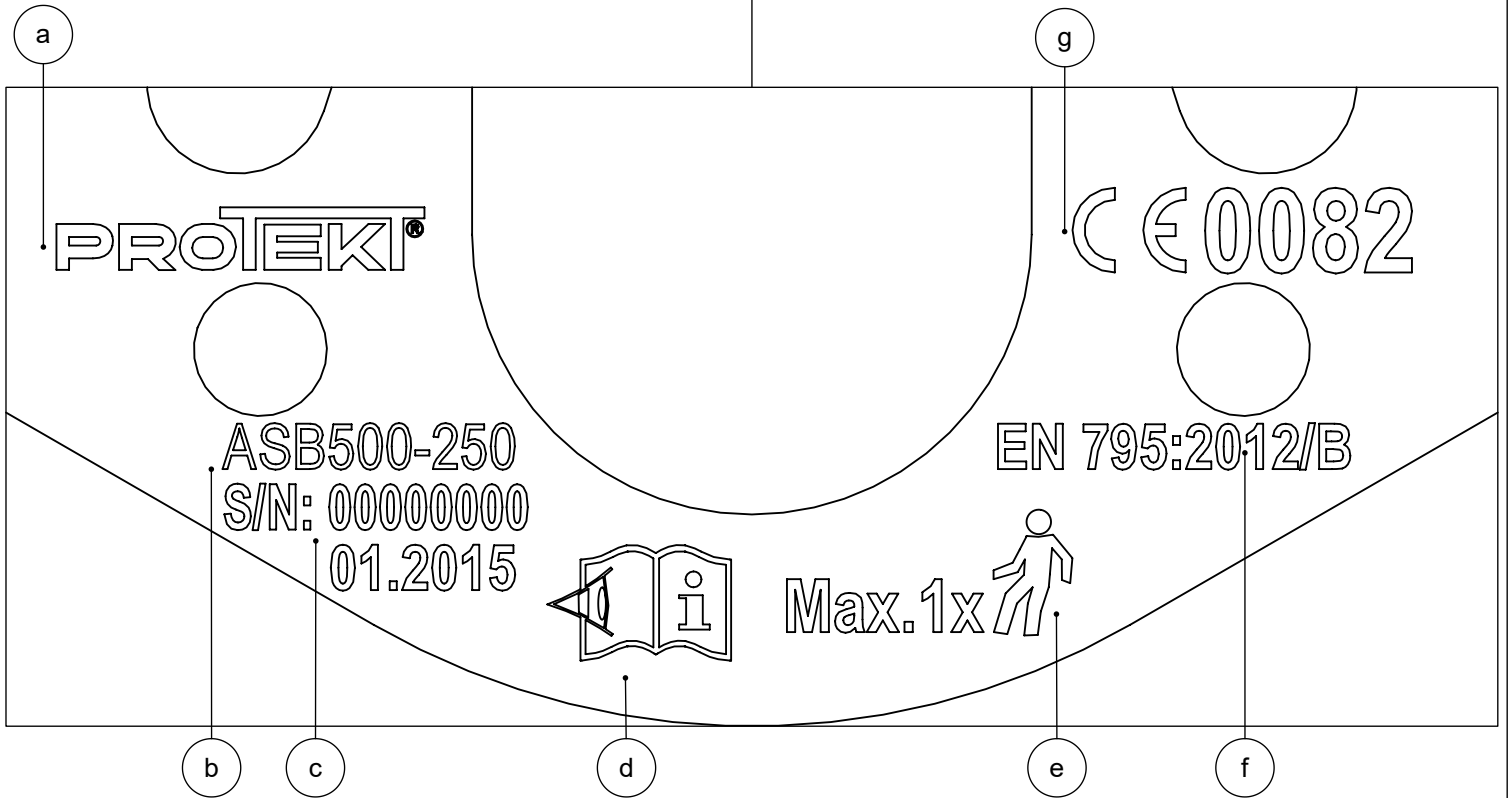
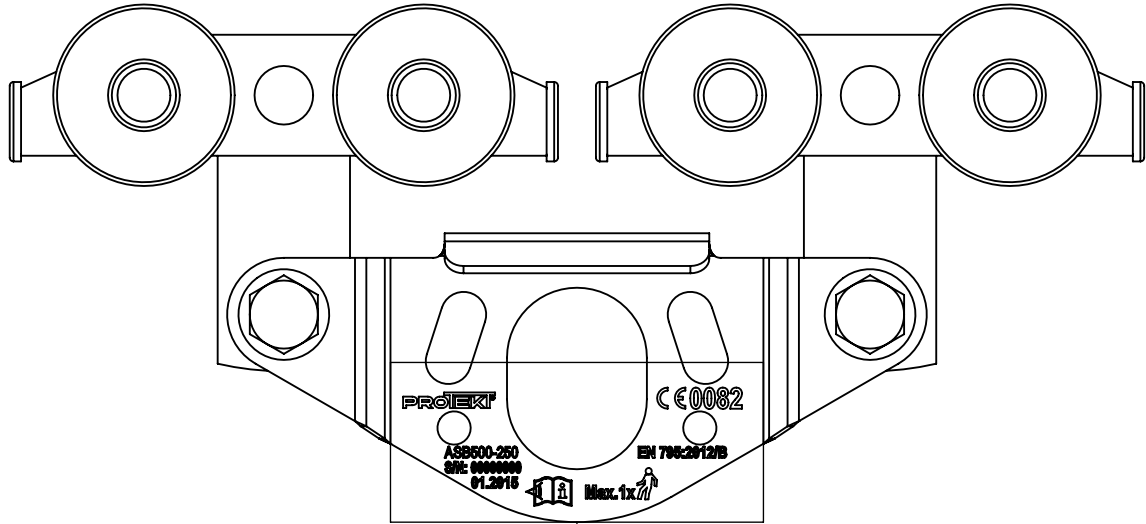
Personal protective equipment must be transported in the package (e.g.: bag made of moisture-proof textile or foil bag or cases made of steel or plastic) to protect in against damage or moisture.

## **MAINTENANCE AND STORAGE**

The equipment can be cleaned without causing adverse effect on the materials in the manufacture of the equipment. For textile products use mild detergents for delicate fabrics, wash by hand or in a machine and rinse in water. Plastic parts can be cleaned only with water. When the equipment becomes wet, either from being in use or when due cleaning, it shall be allowed to dry naturally, and shall be kept away from direct heat. In metallic products some mechanic parts (spring, pin, hinge, tec.) can be regularly slightly lubricated to ensure better operation. Other maintenance and cleaning procedures should be adhered to detailed instructions stated in the manual of the equipment.

Personal protective equipment should be stored loosely packed, in a well-ventilated place, protected from direct light, ultraviolet degradation, damp environment, sharp edges, extreme temperatures and corrosive or aggressive substances.

## INTERNAL TROLLEY MARKING



### CONTENT OF INTERNAL TROLLEY MARKING:

- a) Marking of the manufacturer or distributor.
- b) Model symbol / reference number.
- c) Month and year of manufacture / Serial number.
- d) Caution: read the manual.
- e) Maximum number of users permitted simultaneously.
- f) Number / year / type of the European standard.
- g) CE marking and number of the notified body controlling manufacturing of the equipment.

## SECTION 5

# LIFTING LOADS AND PERSONAL PROTECTION AT THE SAME TIME

**Before read this section please refer to Section 3 and Section 4 (All recommendations contained in these Sections apply in Section 5).**

- ASB/LSB device can be used for lifting/lowering loads and personnel protection at the same time.
- For lifting loads external trolley and other lifting equipment can be used.
- For personal protection internal trolley can be used.
- When personnel is protected using internal trolley(s) during lifting/lowering load(s) Working Load Limit (WLL) indicated on the beam must be reduced to the Reduced Working Load Limit (RWLL). RWLL depends on the amount of protected employees.



PERMITTED CONFIGURATION	REDUCED WORKING LOAD LIMIT RWLL =
Lifting loads only	RWLL =
Lifting loads + 1 person protected	= WLL - 600kg
Lifting loads + 2 people protected	= WLL - 650kg
Lifting loads + 3 people protected	= WLL - 700kg
Lifting loads + 4 people protected	= WLL - 750kg
Lifting loads + 5 people protected	= WLL - 800kg

**IF RWLL VALUE IS NEGATIVE  
THE DEVICE CANNOT BE USED FOR  
LIFTING/LOWERING LOADS AND PERSONNEL PROTECTION AT THE SAME TIME.**

**example 1:**

WLL indicated on the ASB 6-meter beam = 2000kg

3 people protected on three internal trolleys

$RWLL = WLL - 700kg = 2000kg - 700 kg = 1300 kg$

results: device can be used at the same time for personnel protection (3 people) and for lifting/lowering loads (up to 1300kg).

**example 2:**

WLL indicated on the LSB 7-meter beam = 500kg

3 people protected on three internal trolleys

$RWLL = WLL - 700kg = 500kg - 700 kg = -200 kg$

results: device CANNOT BE used at the same time for personnel protection and for lifting/lowering loads.

**GENERAL PECAUTIONS:**

- DO NOT exceed Reduced Working Load Limit (RWLL) during lifting/lowering loads when the people are protected using internal trolleys.
- **LSB device CANNOT be used for lifting/lowering loads and personnel protection at the same time if RWLL value is negative.**
- For personal protection please refer to Section 4!
- For lifting loads please refer to Section 3!

**RWLL VALUE [kg]  
DEPENDING ON BEAM LENGTH AND NUMBER PROTECTED USERS**

	WLL material only		RWLL 1 person		RWLL 2 people		RWLL 3 people		RWLL 4 people		RWLL 5 people	
	ASB	LSB	ASB	LSB	ASB	LSB	ASB	LSB	ASB	LSB	ASB	LSB
<b>2m beam</b>	3000	1750	2400	1150	2350	1100	2300	1050	2250	1000	2200	950
<b>3m beam</b>	3000	1500	2400	900	2350	850	2300	800	2250	750	2200	700
<b>4m beam</b>	3000	1250	2400	650	2350	600	2300	550	2250	500	2200	450
<b>5m beam</b>	2500	1000	1900	400	1850	350	1800	300	1750	250	1700	200
<b>6m beam</b>	2000	750	1400	150	1350	100	1300	50	1250	n/a	1200	n/a
<b>7m beam</b>	1500	500	900	n/a	850	n/a	800	n/a	750	n/a	700	n/a

n/a - not applicable

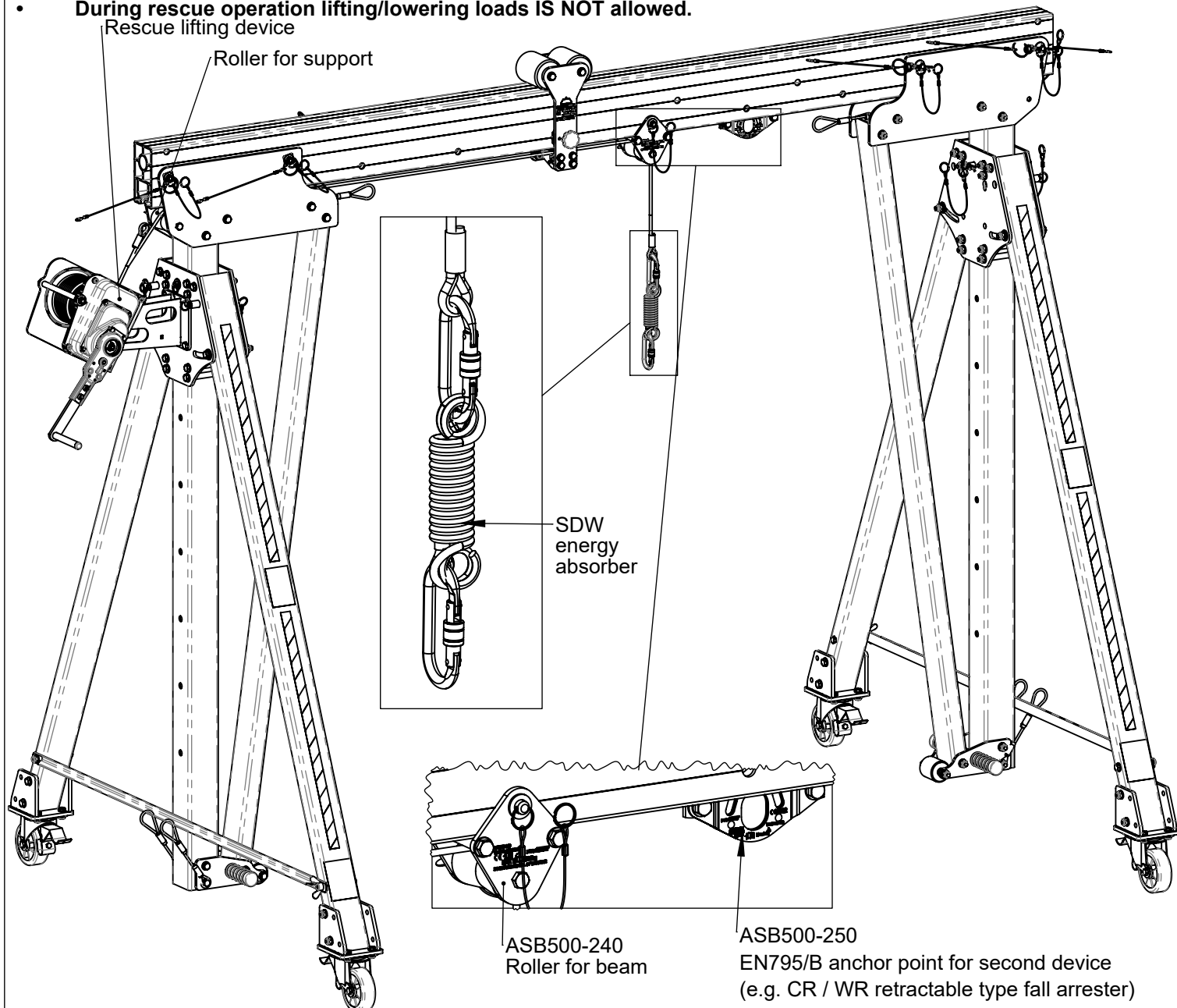
## SECTION 6 - RESCUE ACCORDING TO EN 1496/B

### GENERAL PECAUTIONS FOR RESCUE:

- Secondary fall arrest system (conforming EN 363) must be used when working with ASB/LSB and RUP 50x-C / RUP50x-D / CRW200 / CRW300.
- Fall arrest and rescue system used with this device MUST MEET applicable EN standards requirements (EN 795 and TS 16415 for anchor devices; EN 362 for connectors; EN 361 for full body harnesses; EN 360 for retractable type fall arresters; EN 1496 for rescue lifting devices; EN 1497 for rescue harnesses; EN 341 for descender devices).

### USAGE ASB DEVICE FOR RESCUE PURPOSES

- ASB/LSB device can be used for rescue purposes in conjunction with RUP 50x-C / RUP 50x-D rescue lifting devices and CRW200 / CRW300 rescue lifting device.
- RUP50x-D devices can be installed only on supports side plates equipped with two additional holes - please refer to Section 2 Points 9.2 and 9.3.
- Rescue lifting device rope installation - please refer to Section 2 Point 10.
- CRW200 / CRW300 device installation - please refer to Section 6.
- **RUP50x-C / RUP 50x-D Rescue lifting device MUST BE used with SDW energy absorber installed on the end of the wire rope!**
- **During rescue operation lifting/lowering loads IS NOT allowed.**



### USE LIFTING EQUIPMENT AS PERSONAL PROTECTIVE EQUIPMENT

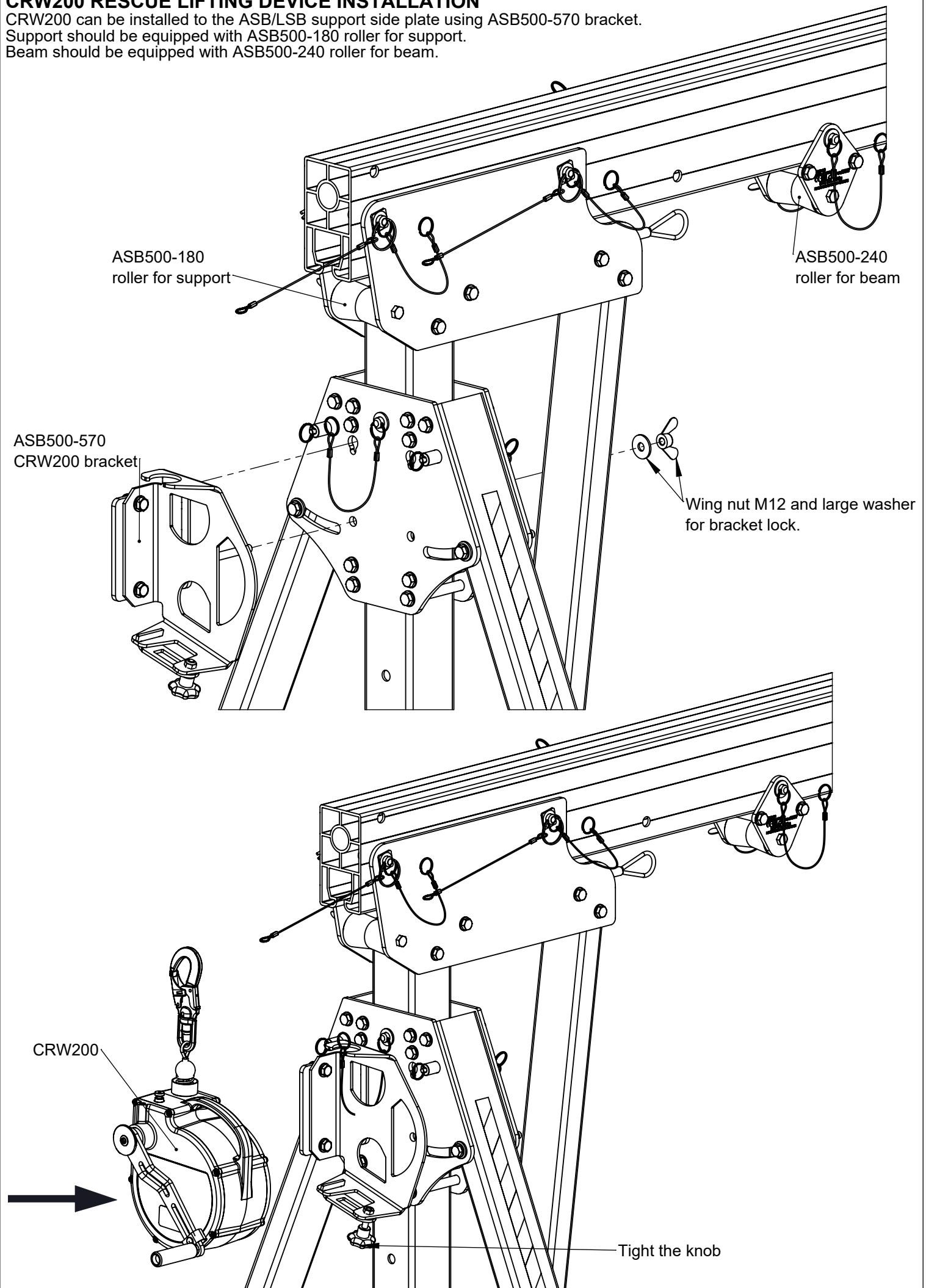
This device can be used as a personal protective equipment exceptionally according to Directive 2009/104/EC Annex II section 3.1.2.

- While workers are on work equipment designed for lifting loads the control position must be manned at all times.
- Persons being lifted must have reliable means of communication. In the event of danger, there must be reliable means of evacuating them.
- During rescue action always use SDW energy absorber at the end of the rescue lifting device rope.
- Absolutely not exceed the Working Load Limit.
- Be particularly careful. Do not overload these device parts. During the use of equipment for lifting loads for the purpose of personal rescue user must be particularly careful and frequently check the condition of components of the set (rope, pulleys, anchor points).
- For personal rescue purposes safety factor must be, at least 10:1.
- For safety reasons, is better to use two winches (one for lifting loads and one for personal protective use).



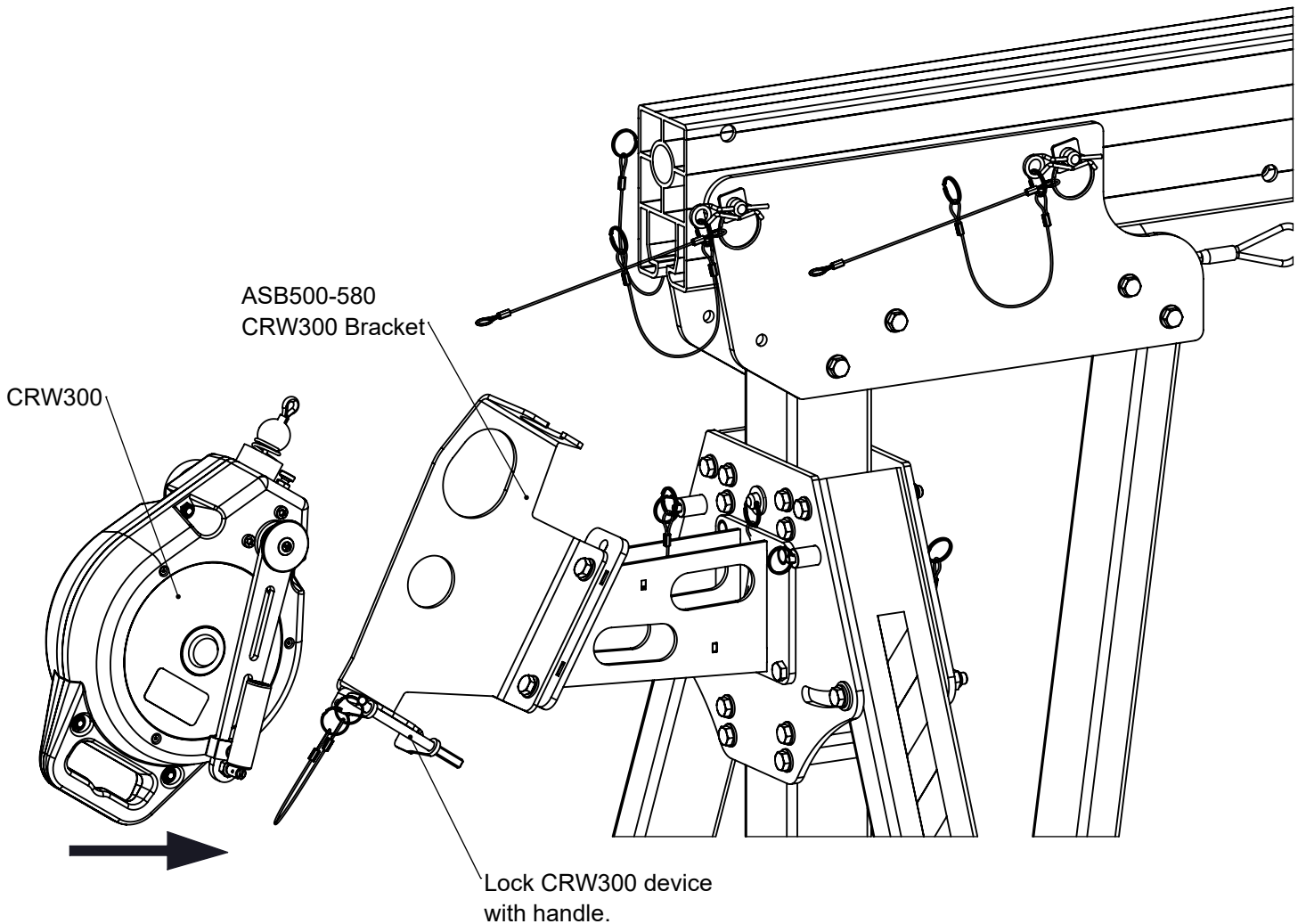
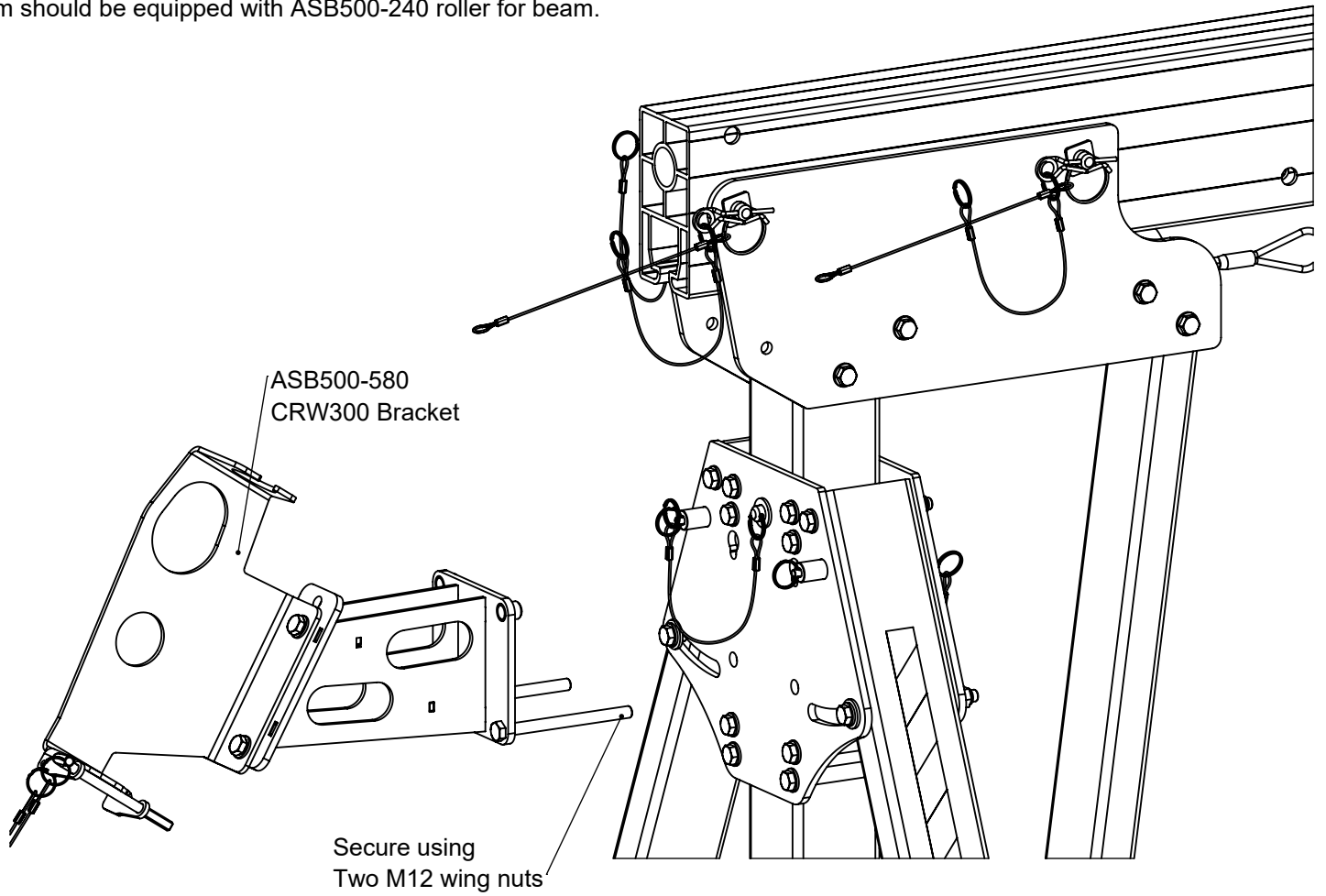
# CRW200 RESCUE LIFTING DEVICE INSTALLATION

CRW200 can be installed to the ASB/LSB support side plate using ASB500-570 bracket.  
Support should be equipped with ASB500-180 roller for support.  
Beam should be equipped with ASB500-240 roller for beam.



## CRW300 RESCUE LIFTING DEVICE INSTALLATION

CRW300 can be installed to the ASB/LSB support side plate using ASB500-580 bracket.  
Support should be equipped with ASB500-180 roller for support.  
Beam should be equipped with ASB500-240 roller for beam.



# IDENTITY CARD

IT IS RESPONSIBILITY OF THE USER ORGANISATION TO PROVIDE THE IDENTITY CARD AND TO FILL IN THE DETAILS REQUIRED. THE IDENTITY CARD SHOULD BE FILLED IN ONLY BY COMPETENT PERSON RESPONSIBLE FOR PROTECTIVE EQUIPMENT. THE IDENTITY CARD SHOULD BE FILLED IN BEFORE THE FIRST USE OF THE EQUIPMENT. ANY INFORMATION ABOUT THE EQUIPMENT LIKE: PERIODIC INSPECTIONS, REPAIRS, REASONS OF EQUIPMENT'S WITHDRAWN FROM USE SHALL BE NOTED. THE IDENTITY CARD SHOULD BE STORED DURING A WHOLE PERIOD OF EQUIPMENT UTILIZATION. DO NOT USE THE EQUIPMENT WITHOUT THE IDENTITY CARD.

**DEVICE REF NUMBER**

**\_ SB - \_ \_ - W \_**

**BEAM S/N**

**SUPPORT S/N**

**MATERIAL TROLLEY S/N**

**DATE OF MANUFACTURE**

**DATE OF PURCHASE**

**DATE OF FIRST USE**

**USER NAME**

## PERIODIC EXAMINATION AND REPAIR HISTORY

	DATE	REASON FOR SERVICING / REPAIR	REPAIRS CARRIED OUT	NAME AND SIGNATURE OF COMPETENT PERSON	DATE OF NEXT EXAMINATION
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					

**PRODUCER:**

PROTEKT, 93-403 LODZ, ul. Starorudzka 9, POLAND, tel: +48 (42) 680 20 83, fax: +48 (42) 680 20 93, www.protekt.com.pl

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**MODEL AND TYPE OF EQUIPMENT**

**INTERNAL TROLLEY  
(for personal protection)**

**REF. NUMBER**

**ASB500-250**

**SERIAL NUMBER**

**DATE OF MANUFACTURE**

**DATE OF PURCHASE**

**DATE OF FIRST USE**

**USER NAME**

## PERIODIC EXAMINATION AND REPAIR HISTORY

	DATE	REASON FOR SERVICING / REPAIR	REPAIRS CARRIED OUT	NAME AND SIGNATURE OF COMPETENT PERSON	DATE OF NEXT EXAMINATION
1					
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