



## MOBILE ANCHOR RAIL

### RJ 500

EN 795:2012 typ D

CEN/TS 16415:2013

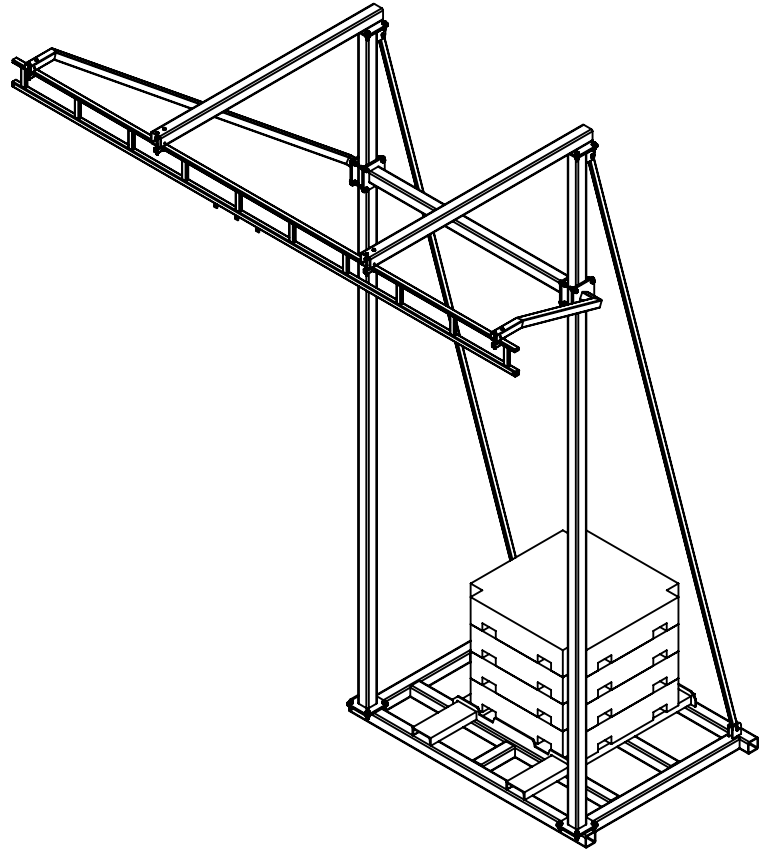
#### GENERAL INFORMATION

Mobile anchor rail RJ 500 is a complete fall protection system. An excellent structural stability is ensured by inertial mass comprising concrete blocks so it is not necessary to provide stable foundation or a support structure. RJ 500 is a modular device which can be interconnected to create any number of configurations and lengths as needed. Standard length of the rail is 6 running metres providing a track for horizontal travel of trolleys being anchor points for protected users. The rail is placed at a height of 6.88m.

RJ 500 is a device that will suit perfectly i.e. when servicing tanks, on railway siding and repair stations and whenever it is necessary to move safely on horizontal surfaces at a height.

Device RJ 500 complies with EN 795:2012 and CEN/TS 16415:2013 for Class D devices. Device RJ 500 is designed for fall protection of maximum 3 co-users.

The device should be placed in one location. If needed it can be moved to another location of adequate characteristics.



#### SAFETY INSTRUCTIONS

##### General information

The device RJ500 is designed to be used only for purposes described in this instruction manual. It is designed to provide protection when working at a height, i.e. when servicing tanks, on railway siding and repair stations and whenever it is necessary to move safely on horizontal surfaces at a height.

- The product must not be used to lift or handle any loads.
- Do not modify or replace any components of the devices on your own, as this may affect characteristics of the device and the user's safety.
- Be particularly careful when handling the device from one location of its use to another. If any damages to the product are found, the affected part must be replaced.
- It is necessary to draw a rescue plan for the location where the device is to be used in case if the device RJ 500 arrests a fall.
- When using retractable type fall arresters, it is recommended to use an additional line for lowering of snap hook of retractable type fall arrester to avoid continuous tension of winding spring of the device.

##### Inspection of products and devices before use

Before installation of the device always check whether all components are complete and in operating condition. Please check if the elements are not damaged or corroded. Never use damaged or corroded elements, as this may affect the user's safety.

##### Prohibition against modification of the device

Do not replace original elements of the devices for other that are not designed for this device. Never modify or repair the original elements of the device on your own.

##### Obligation to use individual fall protection equipment when installing the device

Always use individual fall protection equipment during installation of the product, when risk of a fall from a height is present. This also applies to working on aerial work platforms ("manlifts").





## Inspection of the device after arresting a fall

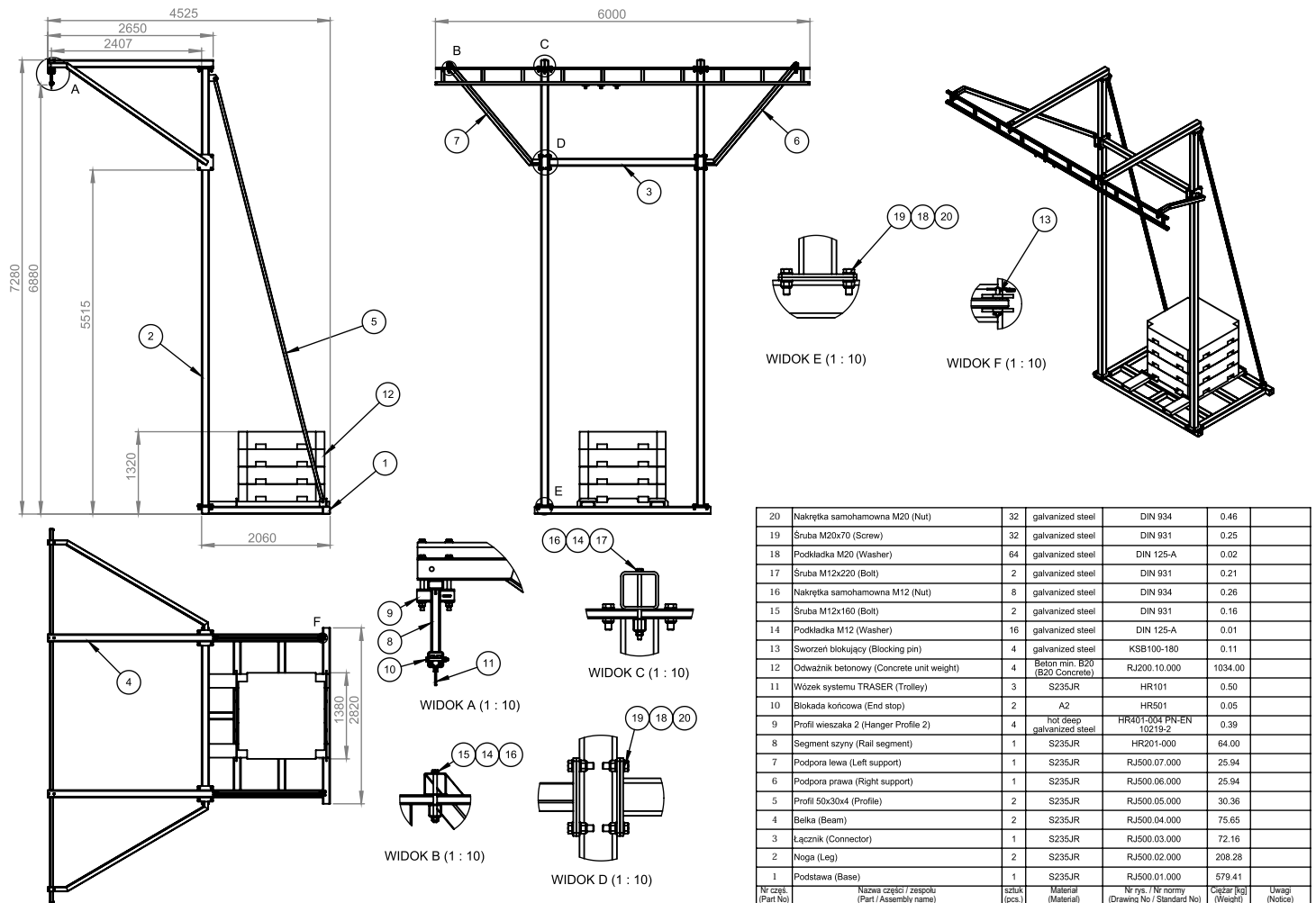
When the device RJ 500 has been used to arrest a fall, it must be withdrawn from use immediately and inspected by a competent person or an authorised service point (manufacturer). In case of any doubts please contact the manufacturer.

## Additional important information

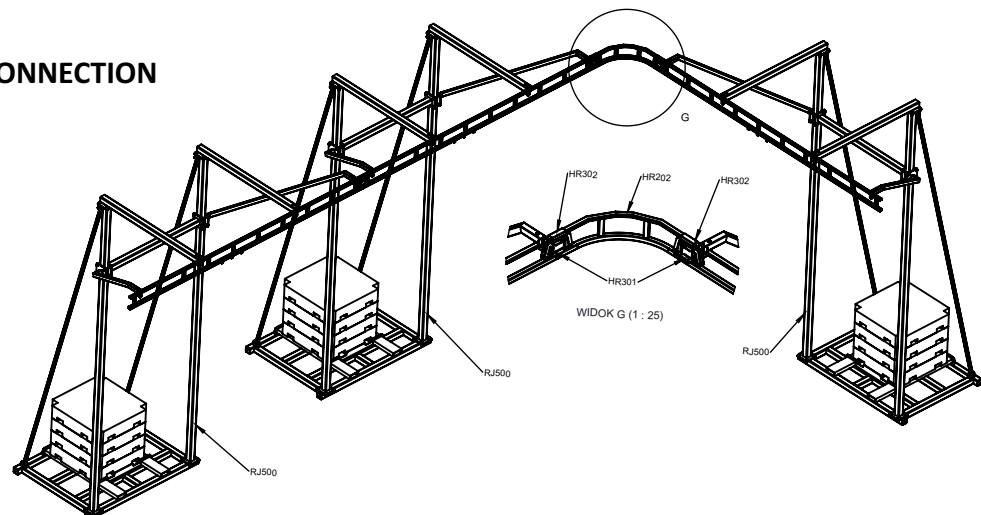
- Before working with use of the device RJ 500 always draw a plan of a potential rescue action after arresting a fall.
- Use the device after inspection only.
- Limit the access of unauthorised personnel to working area of the device.
- Before working with use of the device RJ 500 please check if all pins and cotters are present and installed correctly.
- Keep location where the device is used clean and tidy.

## TECHNICAL DATA

### Components of the device / configurations



## EXAMPLE MODULAR CONNECTION





## INSTALLATION OF THE DEVICE

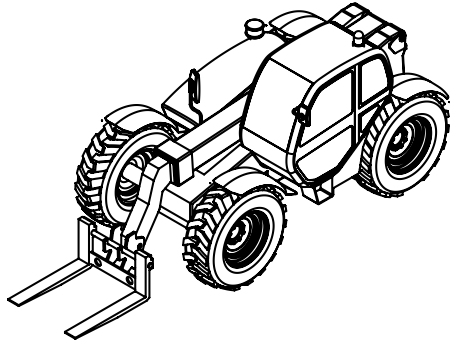
Order of installation

Before installing the device RJ 500 prepare necessary tools as follows:

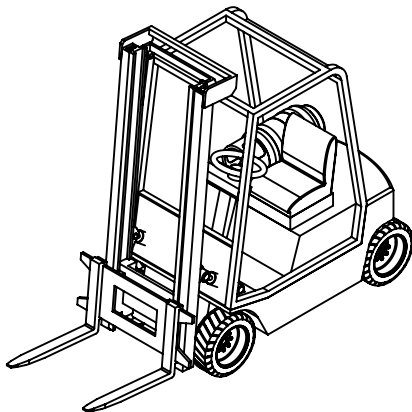
- Hammer
- Spirit level
- Set of combination open-end wrenches (2 sets)

Devices (equipment):

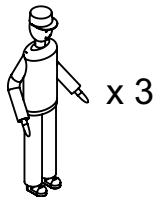
- Telescopic handler (e.g. MERLO P72.10)



- Forklift truck, capacity min. 2.5T and lifting height min. 3.0m (e.g. TOYOTA 8FGCU25)

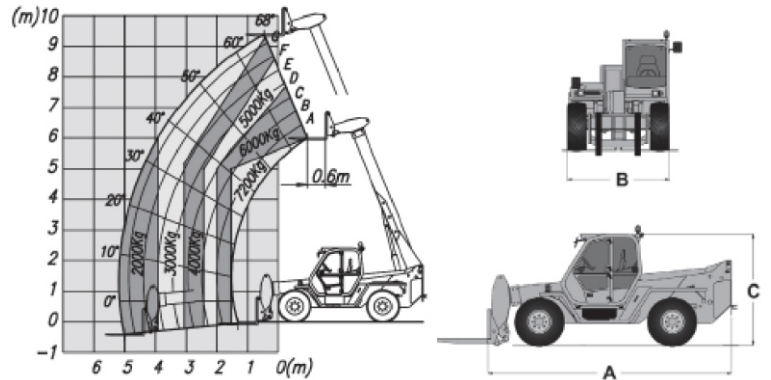
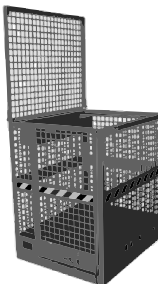


- qualified personnel (holding adequate licences for operation of the above devices and medical examinations for working at a height)



and:

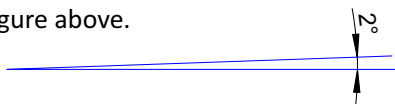
- slings min. 7.0T (2 pcs)
- personal equipment for works at a height for workers (including harness for works at a height, energy absorbers with lanyards, helmets for works at a height)
- side cage (working platform) for forklift truck for min. two workers (conforming to current regulations for this type of devices)



MANUFACTURER	MERLO
MAXIMUM LIFTING HEIGHT	9.40
DRIVE	4 WHEELS
WHEELS	BLACK STEERING
DEADWEIGHT (kg)	10500
CAPACITY (kg)	7000
DEVICE DIMENSIONS A x B x C (m)	5.35 x 2.33 x 2.44
OPTIONAL EQUIPMENT	fork, bucket, cage



1. Position base "1" on a flat and hard ground and load it with four concrete unit weights "12" using a forklift truck (or an equivalent ballast of 4100kg in weight). Maximum inclination angle of a surface on which the device can be placed is shown in figure above.



2. In a lying position assemble legs "2", coupler "3" and beam "4", by screwing them using adequate screws as shown in the figure.

3. Mount rail segment "8" to beams "4", and then screw them with adequate screws as shown in the figure, and mount right support "6" and left support "7" also by screwing them with adequate screws as shown in the figure. Mount profile "5" using locking pins "13".

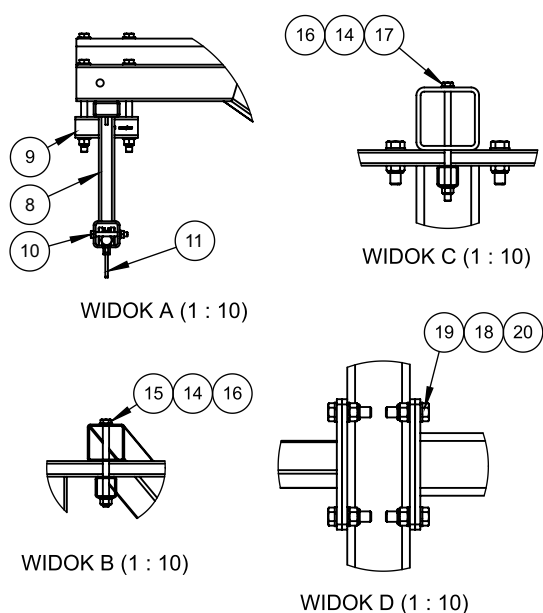
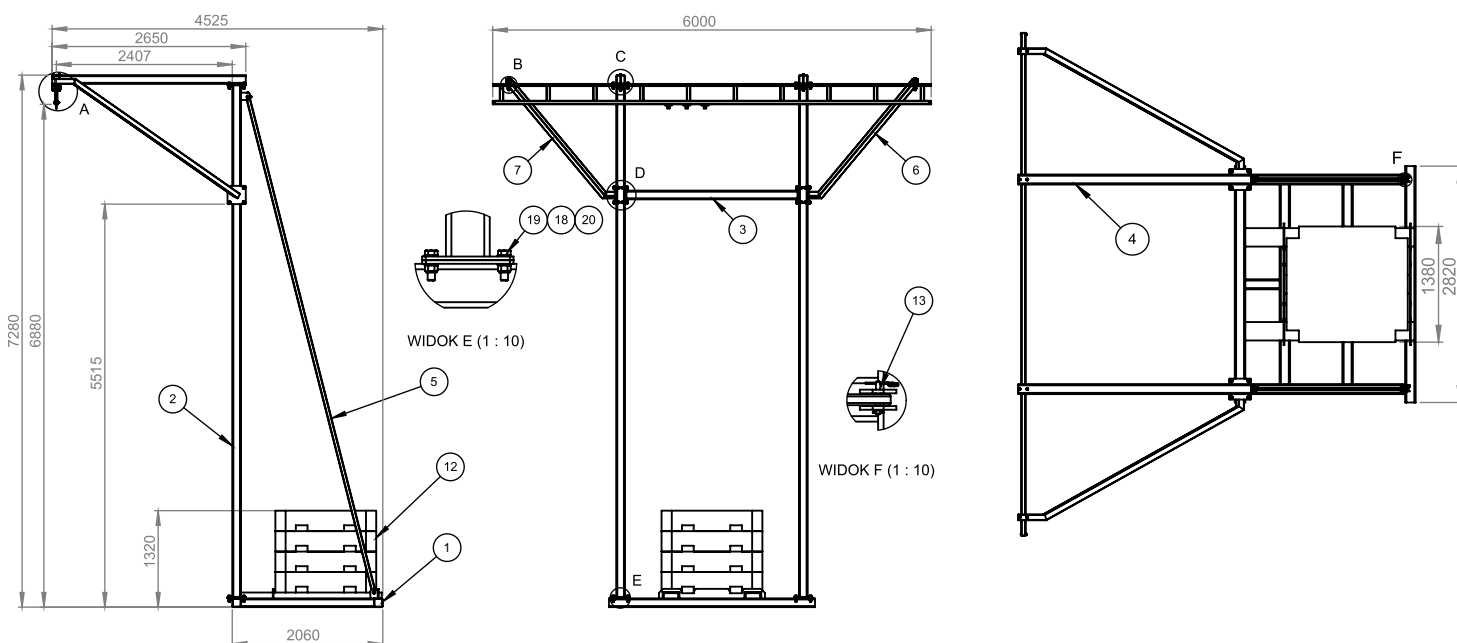
4. Insert required number of trolleys (max. 3 pcs) "11" in lower guide of rail segment "8".

5. Lock ends of rail segment "8" with end locks "10" to prevent accidental derailing of trolleys from the rail segment!

6. Using telescopic handler and two slings lift the device part assembled in the lying position. Mount slings on both beams "4".

7. Screw both legs "2" to base "1" by screwing them with adequate screws as shown in the figure.

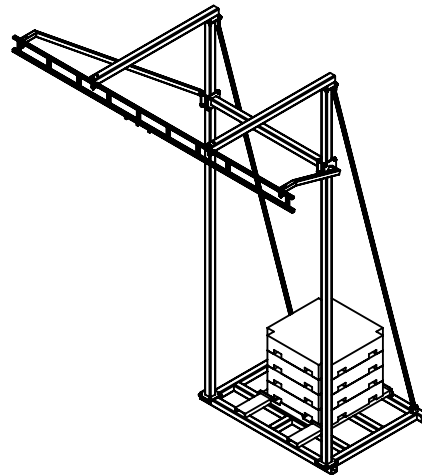
8. Lock both profiles "5" in base "1" using pins "13".



20	Nakrętka samohamowna M20 (Nut)	32	galvanized steel	DIN 934	0.46	
19	Śruba M20x70 (Screw)	32	galvanized steel	DIN 931	0.25	
18	Podkładka M20 (Washer)	64	galvanized steel	DIN 125-A	0.02	
17	Śruba M12x220 (Bolt)	2	galvanized steel	DIN 931	0.21	
16	Nakrętka samohamowna M12 (Nut)	8	galvanized steel	DIN 934	0.26	
15	Śruba M12x160 (Bolt)	2	galvanized steel	DIN 931	0.16	
14	Podkładka M12 (Washer)	16	galvanized steel	DIN 125-A	0.01	
13	Sworzeń blokujący (Blocking pin)	4	galvanized steel	KSB100-180	0.11	
12	Odważnik betonowy (Concrete unit weight)	4	Beton min. B20 (B20 Concrete)	RJ200.10.000	1034.00	
11	Wózek systemu TRASER (Trolley)	3	S235JR	HR101	0.50	
10	Blokada końcowa (End stop)	2	A2	HR501	0.05	
9	Profil wieszaka 2 (Hanger Profile 2)	4	hot deep galvanized steel	HR401-004 PN-EN 10219-2	0.39	
8	Segment szyny (Rail segment)	1	S235JR	HR201-000	64.00	
7	Podpora lewa (Left support)	1	S235JR	RJ500.07.000	25.94	
6	Podpora prawa (Right support)	1	S235JR	RJ500.06.000	25.94	
5	Profil 50x30x4 (Profile)	2	S235JR	RJ500.05.000	30.36	
4	Belka (Beam)	2	S235JR	RJ500.04.000	75.65	
3	Łącznik (Connector)	1	S235JR	RJ500.03.000	72.16	
2	Noga (Leg)	2	S235JR	RJ500.02.000	208.28	
1	Podstawa (Base)	1	S235JR	RJ500.01.000	579.41	
Nr częś. (Part No)	Nazwa części / zespołu (Part / Assembly name)	sztuk (pcs)	Materiał (Material)	Nr rys. / Nr normy (Drawing No / Standard No)	Ciężar [kg] (Weight)	Uwagi (Notice)



## Complete folding



After the installation is complete remove mounting slings. For this use telescopic handler and work cage. Please remember to meet any safety requirements for worker who removes the sling when operating in work cage. The worker must be equipped with adequate personal fall protection equipment as specified in the manual.

The device can be handled in “completely folded” position to another place of installation using telescopic handler.

## Inspection of the device before use

Before each use of the device carry out its visual inspection

- Make sure that the device is complete
- Make sure that there are no cracks or deformations on the device
- Make sure that the device is upright
- Check function of the lock gear of retractable type fall arrester (if applicable)

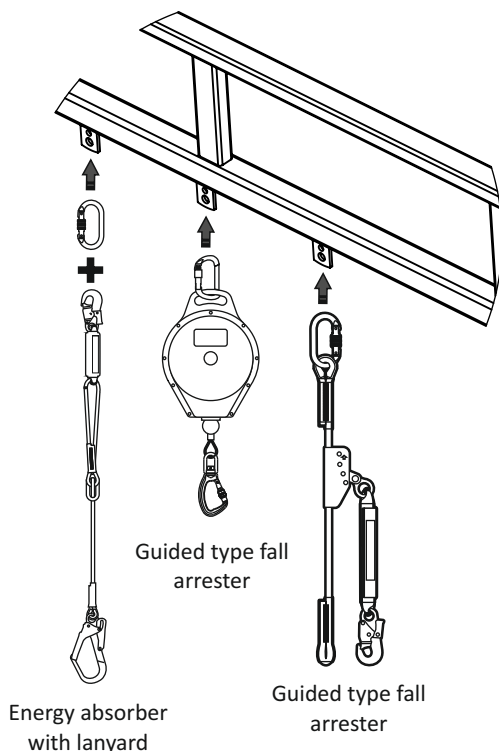
## Periodic inspection of the device

Periodic inspection (min. once a year) should be carried out by a competent person or a service point authorised by the manufacturer. In case of any doubts please contact the manufacturer. Inspection activities:

- Inspection of weld seams, deformations, cracks
- Check function of the retractable type fall arrester (if applicable)
- Inspection of bolts, pins, cotters
- Quality assessment of surfaces, corrosion centres

## Using the system

Cooperation of energy absorbing and connecting components with the system



Complete fall protection system comprises anchor system (RJ 500) and the connected personal fall protection equipment. The system can be used to anchor personal protection equipment compliant with EN 363. Connection should be carried out using snap hook AZ011. The device is designed for use by max. 3 co-users. For cooperation with anchor system RJ 500, use the following personal protection equipment:

- full body harness compliant with EN 361,
- energy absorbing and connecting components as:
- lanyards with energy absorbers compliant with EN 354/355,
- guided type fall arresters compliant with EN 353-2,
- retractable type fall arresters compliant with EN 360 (most commonly).
- connectors (snap hooks) compliant with EN 362.

Before operation put on full body harness in accordance with relevant instruction manual. Connect attachment point on full body harness to anchor system by means of one of the above energy absorbing and connecting components in accordance with its instruction manual. Attach connector of energy absorbing and connecting component to the RJ 500 system trolley directly (if it is snap hook AZ011) or by means of snap hook AZ011 (if energy absorbing and connecting component is equipped with other connector).

## Additional inspection of individual fall protection equipment

- Inspect if snap hooks are closed and locked
- Use correctly adjusted full body harness



## IDENTITY CARD

Reference number of device		Serial number	.....	
Date of first use	.....	Date of manufacture:	.....	Date of purchase: .....
Location of installation	.....			
User name:	.....			

### Technical Inspections

No.	Date of inspection	Type of inspection / repair	Remarks	Date of next inspection	Name and signature of technician
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					