## GENERAL DESCRIPTION

TM 12-2 safety hexapod is a component of personal protective equipment against fall from height. Hexapod is used to protect employees (using Trolley B. Main Tripod Central Anchor Point or Beam Anchor Point) working in drainage wells, reservoirs, wells, silos etc. during lifting loads (using Trolley A and Reinforced Leg Attachment Point and Main Tripod Lateral Attachment Point). For personal protection hexapod must be used in conjuction with fall arrest equipment. Hexapod TM 12-2 is designed to use with RUP 502-AT, RUP 503-T brake winches (for lifting loads) and RUP502-A, RUP 503 and CRW 300 rescue lifting devices (for personal rescue purposes). TM 12-2 is composed from two independend main tripods and one 3-meter beam.

TM 12-2 "HEXAPOD" FULL SET


## CERTIFICATION AND COMPLIANCE WITH STANDARDS

a) EN 795:2012 type B

Equipment use as a transportable temporary anchor point for one person. EC certificate.
b) TS 16415:2013 type B

Equipment use as a transportable temporary anchor point for two people. Compliance with standard and document TS 16415/B:2013. Not covered by the EC certificate.
c) EN 1496:2006 type B

Equipment use with RUP 502-A / RUP 503 / CRW 300 as an rescue kit for one or two people. Compliance with standard and document EN1496/B:2006. Not covered by the EC certificate.

## CONTENT OF THE IDENTITY LABEL

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


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 near Identity Label.

## TABLE OF CONTENT

- SECTION 1 - GENERAL DATA ..... 01
- General description ..... 01
- Certification and compliance with standards ..... 01
- Content of identity label ..... 01
- Technical data ..... 03
- Basic equipment ..... 03
Maximum device loading ..... 03
- SECTION 2 - DEVICE INSTALLATION ..... 04
- Beam parts installation procedure ..... 04
- Installing main tripod ..... 05
- Installing TM 12-2 hexapod full set ..... 06
- Leveling hexapod beam ..... 06
Locking trolleys position with t-locks ..... 06
- SECTION 3 - PERSONAL PROTECTION ACCORDING TO EN 795/B AND TS 16415/B ..... 07
- Description ..... 07
- Anchor points description ..... 07
- Rules for personal protection. ..... 08
- General precautions ..... 08
- The essential princpiples of use of personal protective equipment ..... 08
- Inspection ..... 09
- Periodic inspection ..... 09
- Admissible time of use ..... 09
- Withdrawal from use ..... 09
- Withdrawn from use after arresting a fall ..... 09
- Transportation ..... 09
- Maintenance and storage ..... 09
- SECTION 4 - LIFTING LOADS. ..... 10
- Description ..... 10
- Attachment points description ..... 10
- Usage TM 12-2 hexapod full set for lifting loads. ..... 11
- Installing RUP 502-AT / RUP 503-T brake winches to the TM 12-2 hexapod full set. ..... 12
- Usage TM 12-2 main tripod for lifting loads ..... 13
- Installing RUP 502-AT / RUP 503-T brake winch to the TM 12-2 main tripod ..... 14
- SECTION 5 - RESCUE ACCORDING TO EN 1496/B ..... 15
- Rules for rescue ..... 15
- General precautions for rescue ..... 15
- Usage TM 12-2 hexapod full set for rescue purposes ..... 16
- Installing RUP 502-A / RUP 503 rescue lifting devices to the TM 12-2 hexapod full set ..... 17
- Installing CRW 300 rescue lifting device to the TM 12-2 hexapod full set. ..... 18
- Usage TM 12-2 main tripod for rescue purposes ..... 19
- Installing RUP 502-A / RUP 503 rescue lifting devices to the TM 12-2 main tripod. ..... 20
- Installing CRW 300 rescue lifting device to the TM 12-2 main tripod ..... 21
- SECTION 6 - USAGE SCENARIOS ..... 22
- IDENTITY CARD ..... 24


## TECHNICAL DATA

- working height
- legs fully extended: 221 cm
- legs fully retracted: 139 cm
- working width
- $\quad$ legs fully extended: 537 cm
- legs fully retracted: 464 cm
- legs spacing
- $\quad$ legs fully extended: 191 cm
- legs fully retracted: 139 cm
- tripods spacing
- legs fully extended: 174 cm
- legs fully retracted: 210 cm
- beam range: 280 cm
- two independent tripods
- protection for maximum two people at the same time
- available 6 attachment points
- weight of components:
- beam: 34 kg
- main tripod: 28 kg
- overall weight (without chain): $\sim 90 \mathrm{~kg}$
- shipping dimensions:
- wooden box with two tripods and equipment: $254 \times 33 \times$

33 cm

- beam: $305 \times 17 \times 15 \mathrm{~cm}$


BEAM RANGE: 280 cm


## BASIC EQUIPMENT

- main tripod head - made of zinc-platted painted steel. Head is equipped with stainless-steel eye-bolt for rope pulley attachment. Head is equipped with locking pin for beam attachment.
- beam - made of zinc-platted painted steel profile. Hexapod beam is equipped with two trolleys ("A" and "B") and beam anchor point. For locking trolleys' position T-locks are used.
- legs - made of duraluminium profiles with rounded edges. They consist two sections. The telescopic construction of the legs allows the user to adjust their length. To adjust the legs length locking pins are used. The legs of the hexapod are equipped with self-aligning steel feet with rubber pads. The feet have anti-slip "teeth" used when positioning the hexapod on a slippery (e.g. icy) surface.
- chain - leg chain is supplied to minimaze horizontal forces and prevent the legs spreading and collapsing.


## MAXIMUM LOAD TRANSMITTED FROM THE TM 12-2 TO THE STRUCTURE / LOADING DIRECTION

Surface, where the TM 12-2 hexapod was placed on must support the max. device load:
a) during lifting loads ( 10 kN )
b) during fall arresting for one person according to EN 795/B:2012 (6 kN)
c) during fall arresting for two people according to TS 16415.B:2013 (13 kN)

Loading direction: perpendicular to the surface on which the TM 12-2 hexapod is placed.

## SECTION 2 - DEVICE INSTALLATION <br> IT IS RECOMMENDED THAT THE DEVICE SHOULD BE TRANSPORTED AND INSTALLED BY MINIMUM TWO PEOPLE!

INSTALLING TM 12-2 BEAM COMPONENTS
During transportation all components (trolley's and lock's) mounted on the beam, are transported separately. Proper installation of all components shown in the figures below.

## LIST OF COMPONENTS:

a) Trolley "A" $\quad-1$ pcs.
b) Trolley "B" with AZO11 connector -1 pcs.
c) T-lock
d) Retaining bolts + nuts

INSTRUCTION:

1) Remove retaining bolt at the end of the beam.
2) Install all of the items from "List of components"
3) 
4) Check the ends of the beam - they MUST BE FIRMLY secured with retaining bolts (M12x80 bolts).


Components properly installed on the beam.

## INSTALLING MAIN TRIPOD

1. Place the main tripod in a upright position on a flat, stable and hard surface.
2. Make sure the feet are on firm ground and can support the load.
3. Pull out the tripod legs to the desired length and lock with the locking pin.
4. Make sure the locking pins are properly secured. The end of the locking pin must protrude above the surface of the tripod legs.
5. Adjust the length of the legs so that the head is located in the horizontal plane.
6. The main tripod should be positioned over opening so working line will be located approximately in the center of the opening. 7. Secure the tripod legs with the chain against the accidental sliding open. The ends of the chain must be fastened with a snap hook. The chain should be tight between the legs of the tripod. Remove excess slack of the chain.


## INSTALLING FULL HEXAPOD SET

1. Set both main tripods according to above instructions without chain. Legs should be pulled out and lock with the locking pin in the position suitable for beam installation.
2. Set the both main tripods beam sockets facing to each other
3. Place ends of the beam to the main tripod's beam sockets and lock with the locking pins.
4. Make sure the feet are on firm ground and can support the load.
5. The hexapod should be positioned over opening so working line will be located approximately in the center of the opening.
6. Secure the hexapod legs with the chain against the accidental sliding open. The ends of the chain must be fastened with a snap hook. The chain should be tight between the legs of the hexapod.


## LEVELING HEXAPOD BEAM / LOCKING TROLLEYS POSITION WITH T-LOCKS

Always ensure that the beam is true and level using mounted spirit level before use. Improper leveling may result in self displacement the load being lifted along the beam which can cause injury to the operator.


