MADE IN SLOVENIA (EU)

3 year guarantee
3 leta garancije
Garantie 3 ans
Garantie 3 jahre
Garanzia 3 anni
Garantia 3 anos

HELI KING

A component in the system of helicopter assisted rescue



ver.08.2020

ANTHRON

EN 354:2010

QA of the production and certification

CE 0123

TÜV SÜD Product Service GmbH
Ridlerstraße 65
D-80339 München, GERMANY

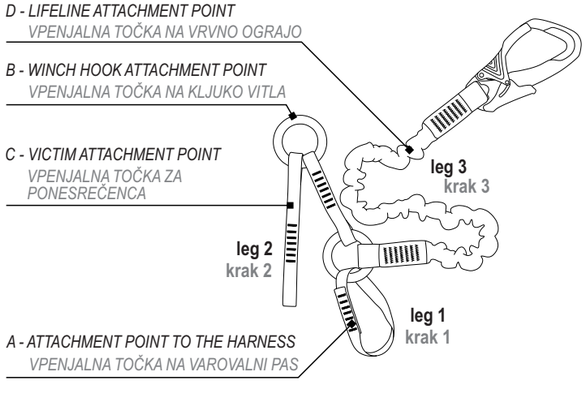
WARNING:
Activities done at heights are inherently dangerous. Understand and accept the risks involved before participating. You are responsible for your own actions and decisions. Before using this product, read and understand all instructions and warnings that accompany it and familiarise yourself with its proper use, capabilities and limitations. We recommend that every climber seeks proper training in the use of the equipment. Failure to follow these warnings can result in severe injury or even death!

HELI KING is a flexible lanyard with multiple attachment points constructed of three different legs of webbing connected by metal rings.

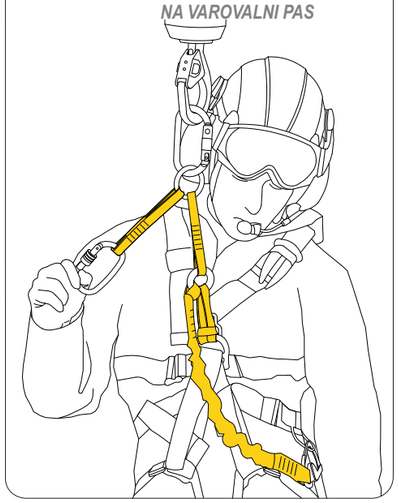
USE: helicopter rescue in accordance with the methodology and procedures set by the Mountain Rescue Association of Slovenia.

NOMENCLATURE OF HELI KING PARTS
NOMENKLATURA SESTAVNIH DELOV

RESCUE



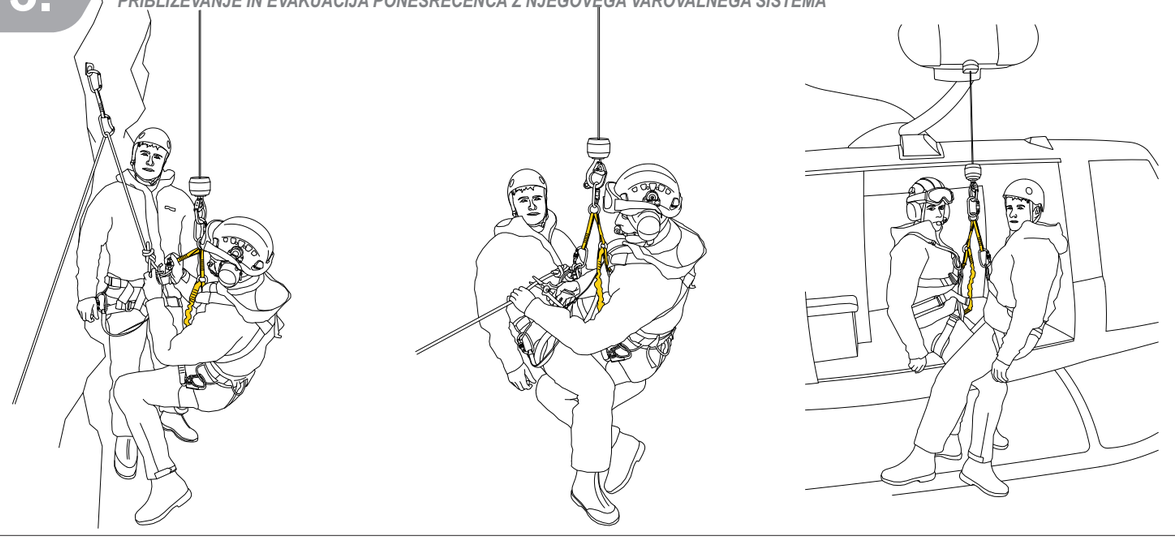
1. INSTALLATION OF THE LANYARD ON THE HARNESS
NAMESTITEV POPKOVINE NA VAROVALNI PAS



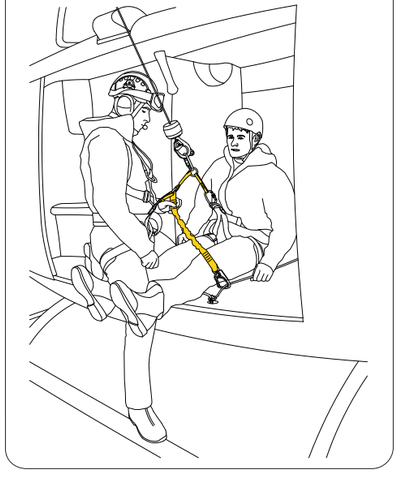
2. LEAVING THE HELICOPTER
ZAPUŠČANJE HELIKOPTERJA



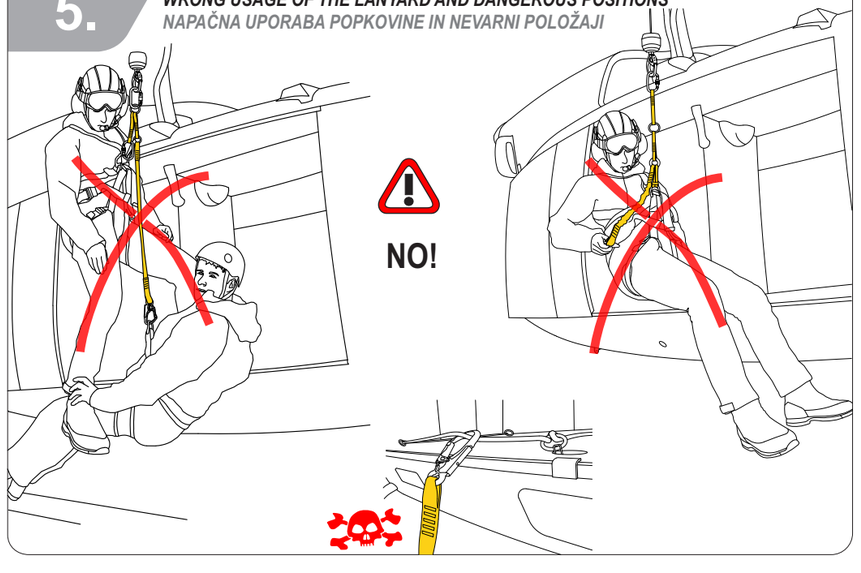
3. APPROACHING AND EVACUATING THE VICTIM FROM HIS/HER SAFETY SYSTEM
PRIBLIŽEVANJE IN EVAKUACIJA PONESREČENCA Z NJEGOVEGA VAROVALNEGA SISTEMA



4. RE-ENTERING IN THE HELICOPTER
VSTOP V HELIKOPTER S PONESREČENCEM



5. WRONG USAGE OF THE LANYARD AND DANGEROUS POSITIONS
NAPAČNA UPORABA POPKOVINE IN NEVARNI POLOŽAJI



SKYLOTEC Adriatic, Anthron d.o.o., k.d.
Trgovska ulica 3
SI - 6310 IZOLA
SLOVENIA

tel.: +386 (5) 6400150
fax.: +386 (5) 6400151
http: www.anthron.si
e-mail: info@anthron.si

Model: *Model:* **HELI KING** ***Purchase date:*** *Datum nakupa:*

Serial No.: *Serijska št.:*

Date of first use: *Datum prve uporabe:*

Year of manufacture: *Leto izdelave:*

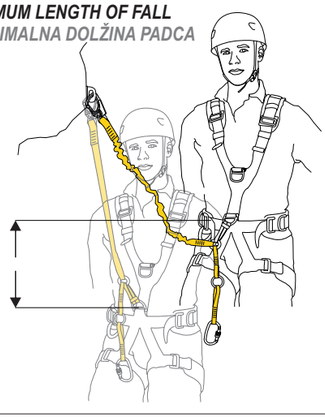
User: *Uporabnik:*

Inspection every 12 months
Kontrola vsakih 12 mesecev

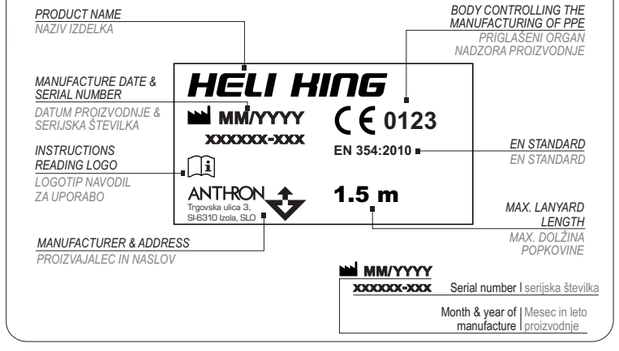
	Date / Datum	OK	Inspector / Kontroliral	Comments / Opombe
1				
2				
3				
4				
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6				
7				
8				
9				
10				

6. MAXIMUM LENGTH OF FALL
MAKSIMALNA DOLŽINA PADCA

FF = 0.5
MAX!



MARKING OF THE DEVICE
OZNAČBE NAPRAVE



ENGLISH

READ THIS NOTICE CAREFULLY

This device was designed to offer you the degree of safety expected from personal protective equipment in accordance with the European Regulation (EU) 2016/425.

SAFETY MEASURES AND WARNINGS

a) There are innumerable and even unimaginable possible modes of use of this device. Only techniques shown in the figures that are not crossed out or displaying a skull are recommended and covered by the warranty.
b) This product must be used exclusively by adequately skilled persons, otherwise the user must be constantly supervised by trained personnel, who must guarantee for the safety. This includes liability against damages, injuries and death incurred by improper use or misuse of the equipment.
c) The lifetime of this product will be extended if it is used with care. In particular, avoid rubbing against abrasive surfaces and/or sharp edges.
d) The lanyard should not be used for fall arrest purposes without any energy absorption (e.g. an energy absorber).
e) The total length of the lanyard including all paraphernalia should not exceed 2 m.
f) If loading over an edge during use represents a possibility, appropriate measures should be taken to avoid this.
g) Minimise the amount of slack in the lanyard near a fall hazard.
h) Do not expose the device to significant heat or cold (see work and stock temperature).
i) Avoid any contact with chemical reagents as they may affect the performance of this product. Contact the producer if in doubt.

FUNCTIONAL PRINCIPLES

HELI KING lanyard is constructed specifically for electric winch aided helicopter rescue operations of the Mountain rescue association of Slovenia.

Figure 1: Installation of the lanyard on the harness
Untangle the lanyard and find the attachment loop to the harness (attachment point A). It is the only sling-like loop on the lanyard. Girth hitch it to the harness' ventral attachment point be it a metal ring or a webbing loop sewn around waist and leg bridges. In latter case, girth hitch it around both bridges, not the belay loop or a single bridge.

Figure 2: Leaving the helicopter
Never forget to fasten the 3rd, elastic leg to the lifeline in the helicopter during flight. The flight technician will open the sliding cabin door, lower the hook of the electric winch and help you attach your lanyard to it. Lanyard's attachment point B goes to the hook. The flight technician will test lift you. After the test performed and in suspension you may detach from the lifeline. Any loads to be lowered with the rescuer may either be attached directly to attachment point C (victim's attachment point) or with an additional sling to the ring connected with the winch hook (attachment point B).

Figure 3: Approaching and evacuating the victim from his/her safety system
After being lowered to the victim, first secure safely the loads carried along on the ground to make space on the winch for the victim. Assess the victim's position and health state. If he/she is capable of suspension in the harness, clip the lanyard's attachment point C onto victim's harness ventral (or better chest) attachment point. Since the victim's safety system will supposedly not receive shock loads, clipping into his/her belay loop is possible. Never clip into rope's tie in loop! Before cutting the victim's safety rope double check that the lanyard's leg 2 holds the weight of the victim and which rope is being cut. The victim remains suspended on the lanyard ready to be winched back to the helicopter.

Figure 4: Re-entering in the helicopter
After reaching appropriate height relative to the helicopter and after the lifting has stopped, step on the skid and help the victim slide backwards in the cabin. Clip the 3rd (elastic) leg of the lanyard into the lifeline stretched on the floor of the cabin and enter the cabin yourself. The helicopter operator will help you unclip from the hook of the electric winch and slide the door of the cabin closed.

WRONG USAGE OF THE LANYARD AND DANGEROUS POSITIONS

Figure 5:
Be attentive on the already described purpose of usage of individual legs of the lanyard. While suspended and winched down to the victim, there are usually two unused legs of the lanyard.

Never attach the victim to leg 3 as it is too long and he/she will remain suspended much too low. This has two implications: the interaction with the victim during winching is impaired and the victim remains suspended too low relative to the deck of the cabin. Therefore he/she will not be able to slide unimpeded in the cabin.

Different legs of the lanyard have a purpose. Never try to use two legs for one single function and stick to the rules set in these instructions and national documents specifying helicopter rescue techniques and procedures.

Connectors break at considerably lower forces if the loads are not exerted along the long axis. Side loading, open gate loading or short axis loading may result in their breakage. Anticipate these possibilities and avoid them.

Figure 6: Maximum length of fall
The lanyard without an energy absorber is not meant for fall arrest purposes. Avoid any positions that may result in falls exceeding a fall factor of 0.5. Fall factor is given by the ratio of the height of a fall and the length of the safety system arresting the fall (i.e. the length of the leg of the lanyard).

GENERAL INFORMATION

Regular examination:
• Do not hesitate to retire the device if it shows signs of wear or after a major fall or a major impact. They could cause internal or invisible damage that may significantly weaken its strength. In case of uncertainty treat the device as damaged or consult ANTHRON.
• Regular periodical inspections should be carried out by an authorised person at least once a year. For this purpose an inspection record should be established (see the last page of these instructions). Furthermore, we would sincerely recommend one set of equipment is used by one person only as its history of use is best traced and understood in this way.
• Before each use, it is obligatory to check the lanyard and verify that all its components (webbing, stitching, connectors and rings) are faultless and in good working condition.

Packing, storage, maintenance and cleaning
Each product is packed with its INSTRUCTIONS FOR USE. Proper maintenance and storage are imperative to ensure correct functioning of the product (as well as all your equipment) and thus your safety.

Clean the product under running cold water of domestic supply. If the stains persist, clean it in warm water (maximum 30 °C) with a brush and ordinary soap. Then rinse thoroughly, wipe it with a towel and dry naturally in a shaded ventilated place away from sources of heat.

If needed, lube sparingly the moving joints of the connectors.

Temperatures
While it is permissible to use this product within the temperature range from -20°C to +55°C, it is advisable to stock it in a dry place at room temperature.

Lifetime
It is impossible to indicate the exact lifetime of this product for it depends on the frequency and mode of application, on the environment where it is used and on mechanical wear or damage. Provided its correct use (in accordance with these instructions), the lifetime of the product at average use is expected to be 7 years.

Guarantee and its limitations
This product is guaranteed for 3 years from purchase against any faults in materials or manufacture. The guarantee does not apply in cases of misuse, normal wear and tear, unauthorised modifications or alterations, improper use, improper maintenance, accidents, negligence, damage or if the product is used for a purpose it was not designed for. If you discover a defect, you should return the product to the reseller you purchased the product from or directly to ANTHRON.

ANTHRON is not responsible for the consequences of direct, indirect, accidental or any other type of damage resulting from the use of its products.

The full declaration of conformity can be found under: www.anthron.si/downloads.

SLOVENŠČINA

PRED UPORABO NATANČNO PREBERITE NAVODILA

Ta naprava je zasnovana za zagotavljanje ravni varnosti, ki jo je mogoče pričakovati od osebne varovalne opreme v skladu z Evropsko uredbo (EU) 2016/425.

VARNOSTNI UKREPI IN OPOZORILA

a) Ta naprava se lahko uporablja na nešteto načinov, ki so lahko celo nepredstavljivi. Priporočljive (za katere velja garancija) so le tiste tehnike prikazane na slikah, ki niso prekrižane in ob katerih ni prikazan simbol lobanje.
b) Ta izdelek lahko uporabljajo izključno ustrezno usposobljene osebe. V nasprotnem primeru mora biti uporabnik pod stalnim nadzorom usposobljenega osebja, ki mora zagotoviti varnost. To vključuje odgovornost v zvezi s škodo, poškodbami in smrtjo zaradi nepravilne uporabe ali zlorabe opreme.
c) Ob skrbni uporabi tega izdelka boste podaljšali njegovo življenjsko dobo. Še posebej bodite pozorni, da preprečite drgnjenje ob abrazivne površine in/ali ostre robove.
d) Popkovina brez integriranih blažilnih elementov (npr. blažilnik sunka) ni namenjena zadrževanju padca.
e) Največja dolžina popkovine z vsemi dodatki ne sme presegati 2 m dolžine.
f) Če obstaja možnost obremenitve popkovine preko roba, morajo biti sprejeti s tem povezani ustrezni zaščitni ukrepi.
g) Na mestih, kjer obstaja možnost padca, zmanjšajte dolžino nenapete zanke v popkovini na minimum. Naprave ne izpostavljajte veliki vročini ali mrazu (glejte delovno temperaturo in temperaturo shranjevanja).
h) Naprave ne izpostavljajte veliki vročini ali mrazu (glejte delovno temperaturo in temperaturo shranjevanja).
i) Preprečite stik naprave s kemičnimi reagenti, saj lahko ti poslabšajo njeno delovanje. Če ste v dvomih, se obrnite na proizvajalca.

NAČELA DELOVANJA

Popkovina HELI KING je izdelana posebej za potrebe helikopterskega reševanja z elektromotornim vitlom po postopkih določenih v Gorski reševalni zvezi Slovenije.

Slika 1: Namestitev popkovine na varovalni pas
Razprite in po potrebi razpletite popkovino ter najdite vpenjalno točko na varovalni pas (vpenjalna točka A). Gre za edino neprešito zanko na popkovini. S kavbojskim vozlom jo pritrdite na trebušno vpenjalno točko pasu bodisi, da je to kovinski obroč bodisi običajni sistem iz trakov. V zadnjem primeru napeljite kavbojski vozel neposredno v obe zanki pasu ne pa v manevrsko zanko ali zanko za opremo.

Slika 2: Zapuščanje helikopterja
Nikoli ne pozabite pripeti tretjega, elastičnega kraka popkovine v vrvno ograjo helikopterja med poletom. Tehnik letalec bo odprl drsna vrata kabine, spustil kljuko elektromotornega vitla in vam pomagal pri vpenjanju vaše popkovine vanjo. V kljuko elektromotornega vitla vselej vpnite vpenjalno točko B. Nato vas bo tehnik letalec s pomočjo vitla preizkusno dvignil. Šele za tem se lahko izpnete iz vrvne ograje helikopterja. Vsakršna morebitna bremena, ki morajo z reševalcem letalcem do ponesrečenca je dovoljeno vpeti v drugi krak popkovine (vpenjalna točka C) ali z dodatno zanko neposredno v obroč povezan s kljuko elektromotornega vitla (vpenjalna točka B).

Slika 3: Približevanje in evakuacija ponesrečenca z njegovega varovalnega sistema
Po spustu do ponesrečenca morebitna bremena najprej varno pritrdite na podlago. Ocenite ponesrečenčev položaj in zdravstveno stanje. Če je sposoben visenja v varovalnem pasu, pripnite vpenjalno točko C v ponesrečenčevo trebušno (ali bolje prsno) vpenjalno točko. Ker predvidoma dinamičnih obremenitev na ponesrečenčev varovalni sistem ne bo, je mogoče tudi vpenjanje v manevrsko zanko. Nikoli ne vpenjajte v zanko vozla ponesrečenčeve varovalne vrvi. Pred rezanjem vrvi se resnično dobro prepričajte, da je krak 2 prevzel težo ponesrečenca oziroma, da se je vrv razbremenila ter katero vrv je treba prerezati. Ko ponesrečenec varno obvisi pripet pod kavljem vitla, je pripravljen za dvig k helikopterju.

Slika 4: Vstop v helikopter s ponesrečencem
Po zaustavitvi dviganja oziroma pridobitvi ustrezne višine glede na kabino helikopterja stopite na sanko in pomagajte ponesrečencu vzvratno zdrsniti v kabino. Pripnite tretji, elastični krak popkovine v vrvno ograjo razpeto po tleh kabine helikopterja. Vstopite v helikopter. Tehnik vam bo pomagal odpeti popkovino s kljuke elektromotornega vitla in bo za vami zaprl drsna vrata helikopterja.

NAPAČNA UPORABA POPKOVINE IN NEVARNI POLOŽAJI

Slika 5:
Bodite pozorni na funkcije, ki jih opravljajo posamezni kraki popkovine. Med visenjem sta neuporabljena običajno dva kraka.

Nikoli ne pripni ponesrečenca na krak C, ker je predolg in bo zaradi tega obvisel mnogo prenizko. To ima dve posledici. Interakcija s ponesrečencem je ovirana (morebitna pomoč je precej težja) in ponesrečenec ne doseže zadostne višine za neovirano vkrcanje v kabino helikopterja.

Posamezni kraki popkovine imajo točno določen namen. Nikoli ne izkoristite dveh krakov popkovine za isti namen ter se držite napotkov podanih v teh navodilih in nacionalnih dokumentih, ki specificirajo postopke in reševalne tehnike pri helikopterskem reševanju.

Povezovalni elementi (vponke in obroči) se zlomijo pri pomembno nižjih silah, če sile niso usmerjene vzdolž dolgih osi. Stransko obremenjevanje ter obremenjevanje preko kratke osi ali odprtih vratc lahko za rezultat porušitev. Take situacije skušajte predvideti in se jim izogniti.

Popkovina brez integriranih blažilnih elementov ni namenjena zadrževanju padca. Zaradi tega se izogibajte vsem položajem, ki imajo lahko za posledico padec s faktorjem padca večjim od 0,5. Faktor padca je razmerje med dolžino padca in dolžino varovalnega sistema namenjenega zadrževanju padca.

Slika 6: Maksimalna dolžina padca
Popkovina brez integriranih blažilnih elementov ni namenjena zadrževanju padca. Zaradi tega se izogibajte vsem položajem, ki imajo lahko za posledico padec s faktorjem padca večjim od 0,5. Faktor padca je razmerje med dolžino padca in dolžino varovalnega sistema namenjenega zadrževanju padca.

SPLOŠNE INFORMACIJE

Redno pregledovanje:
• Če na napravi opazite znake obrabe oz. po padcu z velike višine ali močnem udarcu, napravo brez odlašanja zavrzite, saj lahko v pride do prostemu očesu nevidnih poškodb, ki lahko občutno zmanjšajo njeno nosilnost. Če niste prepričani, ravnajte z napravo, kot da je poškodovana ali pa se posvetujte s podjetjem ANTHRON.
• Pooblaščena oseba mora izvajati redne preglede naprave enkrat na leto. V ta namen vodite evidenco pregledov (glejte zadnjo stran teh navodil). Prav tako resnično priporočamo, da en komplet opreme uporablja le ena oseba, saj lahko tako najbolje spremljate in razumete zgodovino njene uporabe.
• Pred vsako uporabo obvezno preverite napravo in se prepričajte, da so vse njene komponente (trakovi, šivi in povezovalni elementi) brez okvar in v dobrem delovnem stanju.

Embalaža, shranjevanje, vzdrževanje in čiščenje
Vsak izdelek je zapakiran skupaj z NAVODILI ZA UPORABO. Pravilno vzdrževanje in shranjevanje je nujno potrebno za zagotovitev pravilnega delovanja izdelka (in vaše opreme) in posledično vaše varnosti.

Izdelek čistite s krtačo pod tekočo hladno vodo iz domačega vodovoda. V primeru trdovratnih madežev izdelek očistite v topli vodi (največ 30 °C) z navadnim milom. Nato ga temeljito sperite, kovinske dele obrišite z brisačo in naravno posušite v senčnem prezračenem prostoru, ločeno od virov toplote.

Po potrebi gibljive spoje zmerno namažite z oljem na osnovi silicija.

Temperature
Izdelek lahko uporabljate v temperaturnem območju med –20°C in +55°C, vendar pa je priporočljivo, da ga shranjujete na sobni temperaturi v suhem prostoru.

Življenjska doba
Nemogoče je določiti natančno življenjsko dobo izdelka, saj je ta odvisna od pogostosti in načina uporabe, okolja uporabe (morsko, jamsko, korozivno okolje) ter mehanske obrabe ali poškodb. Ob pravilni uporabi (v skladu s temi navodili) je pričakovana življenjska doba povprečno uporabljanega izdelka 7 let.

Garancija in njene omejitve
Za ta izdelek velja garancija za obdobje 3 let od nakupa za primer kakršnih koli poškodb materiala ali izdelave. Garancija ne velja v primerih zlorabe, običajne obrabe, nepooblaščenih posegov ali sprememb, nepravilne uporabe, nepravilnega vzdrževanja, nesreče, malomarnosti, poškodbe ali če izdelek ni bil uporabljen za predvideni namen. Če odkrijete okvaro, izdelek vrnite prodajnemu posredniku, pri katerem ste izdelek kupili, ali neposredno podjetju ANTHRON.

Podjetje ANTHRON ne odgovarja za posledice neposredne, posredne, naključne ali kakršne koli druge vrste škode, ki izhaja iz uporabe tega izdelka.

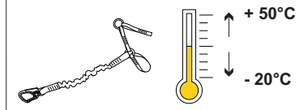
Celotno izjavo o skladnosti je mogoče najti na spletnem naslovu www.anthron.si/downloads.

OPOZORILO:
Dejavnosti na višini so nevarne same po sebi. Pred izvajanjem teh dejavnosti se seznanite s prisotnimi tveganji in jih upoštevajte. Sami odgovarjate za svoja dejanja in odločitve. Pred uporabo tega izdelka preberite in se prepričajte, da ste razumeli vsa navodila, ki so povezana z opozorili, ter se seznanite s pravilno uporabo ter možnostmi in omejitvami glede uporabe izdelka. Priporočljivo je, da vsak/-a plezalec/-ka opravi ustrezno usposabljanje za uporabo te opreme. Neupoštevanje teh opozoril lahko povzroči resne poškodbe ali celo smrt!

HELI KING je gibka vrv z zaključnimi zankami iz trakov, sestavljena iz treh ločenih krakov in vmesnih kovinskih obročev.

UPORABA: helikoptersko reševanje skladno s postopki določenimi v okviru Gorske reševalne zveze Slovenije.

TEMPERATURE / Temperatura



STORAGE / Shranjevanje



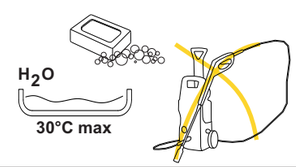
additionally away from sources of heat!

DANGEROUS PRODUCTS / Nevarni produkti



IN CASE OF DOUBT, CONSULT PRODUCER OR VENDOR!
V PRIMERU DVOMA, SE POSVETUJTE S PROIZVAJALCEM ALI DOBAVITELJEM!

CLEANING / Čiščenje



MATERIAL:
• **WEBBING: PES, UHMPE** / TRAKOVI: PES, UHMPE
• **RINGS & CONNECTORS: Al alloy** / OBROČI IN SPOJNI ELEMENTI: Al zmes