

सरदार वल्लभभाई पटेल राष्ट्रीय पुलिस अकादमी SARDAR VALLABHBHAI PATEL NATIONAL POLICE ACADEMY

(भारत सरकार : गृह मंत्रालय)

(Government of India: Ministry of Home Affairs)

हैदराबाद - 500 052

Hyderabad - 500 052

OPEN TENDER NO: 27011/2/2017-18/HS.STW(i)

PROCUREMENT OF ROCK CLIMBING EQUIPMENTS FOR STW OF SARDAR VALLABHBHAI PATEL, NATIONAL POLICE ACADEMY, HYDERABAD

Date of Tender Enquiry

: 03/10/2017

Closing date & time of submitting bids:24/10/2017 at 1700 Hrs.



Website: http://www.eprocure.gov.in

सरदार वल्लभभाई पटेल राष्ट्रीय पुलिस अकादमी SARDAR VALLABHBHAI PATEL NATIONAL POLICE ACADEMY (भारत सरकार : गृह मंत्रालय)

(Government of India : Ministry of Home Affairs) हैदराबाद - 500 052 Hyderabad - 500 052

OPEN TENDER (e-Tender)

- 1. SVP National Police Academy, Shivrampally, Hyderabad, invites <u>e-bids</u> under two bid system from reputed firms for procurement of Rock Climbing Equipments for training activities with two year warranty for STW of Academy. The store list and technical specifications are enclosed herewith.
- Salient features of the tender enquiry are as follows:-

(a)	Tender No.	27011/2/2017-18/HS.STW(i)
(b)	Description of stores	Procurement of Rock Climbing Equipments for training activities with two year warranty for STW of the Academy
(c)	Specifications	As per Annexure-1
(d)	Type of Tender	Open Tender
(e)	Bid System	Two Bid System (Two Cover Technical Bid & Financial Bid)
(f)	Earnest Money Deposit	Demand draft for Rs 18,000/- (Rupees Eighteen thousand) drawn from any of the Commercial Banks in favour of the 'The Director, S.V.P National Police Academy, Hyderabad.
(g)	Delivery schedule/ completion period	Delivery should be completed within 45 days from the date of supply order
(h)	Terms of Delivery	Free on Rail/ Road (F.O.R) Destination, SVP NPA Hyderabad.
(i)	Bid validity	Bid should be valid for 180 days from the date of opening of bid.
(j)	Address of correspondence	The Administrative Officer (Admn) SVP National Police Academy, Shivarampally, Hyderabad, Telangana – 500052
(k)	Warranty	Two year warranty support from the date of supply.
(1)	Sample	Sample of the quoted items to be submitted before TPC on or before 1700 Hrs of 20 th October 2017 (Friday). Bidder is self responsible on his own expenditure for showing the sample before board.

3. Important dates related to this tender are furnished below for information: -

S.No.	Particulars	Date	Time
1.	Date of online publication of tender	03/10/2017	1100
2.	Starting date for downloading Tender document	03/10/2017	1200
3.	Bid submission starting date	03/10/2017	1300
4.	Bid submission closing date	24/10/2017	1700
5.	Closing date & time for submission of original copies of EMD	24/10/2017	1700
6.	Opening of technical bids.	25/10/2017	1700

- 4. Interested manufacturers/ authorised dealers/ stockists/ suppliers dealing with above items can download the tender document from CPP Portal (www.eprocure.gov.in) and bid can only be submitted through the same website. Bid submitted other than CPP Portal will not be accepted. The Eligible bidders should have the valid digital signature certificate (DSC) issued from any agency authorised by Controller of Certifying Authority (CCA), Govt. of India.
- 5. The bids are invited online under two cover system (Technical bid (Cover 1) and price bid/ bill of quantity (BOQ) (Cover 2) from eligible bidders.
- 6. Bidders can access and download the tender documents from CPP Portal and can fill them with all relevant information and submit the completed tender document online on the website: http://www.eprocure.gov.in. The downloading of tender documents shall be carried out strictly as provided on the website. No editing, addition, deletion of matter shall be permitted. If such action is observed at any stage, such tenders are liable for outright rejection.
- 7. Tender shall be submitted online only at CPPP website. Bidders are advised to refer the Bidders manual kit for e-submission of the bids online through the Central Public procurement portal available at the website: http://www.eprocure.gov.in. Aspiring Bidders/ Suppliers who have not enrolled/ registered in e-procurement should enrol/register before participating through the website http://www.eprocure.gov.in. The portal enrolment is free of cost.
- 8. All the documents as per tender requirement should be uploaded online and further, no documents will be accepted offline. However, Demand Draft (EMD Earnest money deposit) hard copy should be sent to SVP National Police Academy before the due date of opening. Bidders who are not submitting any of the required documents online will summarily be rejected.
- 9. The details of the Tender document and EMD should be filled and uploaded online. Earnest Money Deposit (EMD) for Rs.18,000/- (Rupees Eighteen thousand only) (Refundable) should be deposited in form of Crossed Demand draft Drawn on any nationalized bank in favour of Director, SVP National Police Academy, payable at SBH, Shivarampally, Hyderabad. Bids without EMD will not be considered. Tender Reference Number or details should be mentioned on the backside of the original crossed Demand Draft and the same should be sent to SVP National Policy Academy, Hyderabad before due date of opening of the tender.

Terms and Conditions

- 10. The TIA (Tender inviting authority) will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders at the eleventh hour. For any queries regarding e-tendering process, the bidders are requested to contact over phone: 08826246593,07799289911 or send a mail over to cppp-nic@nic.in.
- 11. Technical bid should include information related to all specifications sought. It should also contain company brochures of all equipments and should be accompanied by relevant technical documents issued by the manufacturer in support of specifications asked for.
- 12. Delivery/installation is to be completed within 45 days from the date of Supply Order failing which, penalty @ 0.5% of the Supply Order value will be recovered per day subject to a maximum of 5% (five percent) from the final payment unless extension is obtained in writing from the office on valid ground before expiry of delivery period. Further in case of inordinate delay of 90 days from the date of Supply Order, this Supply order stands cancelled without any further notice and you will also be liable to be blacklisted.
- 13. The date of placing the order shall be the date of dispatch of order of the delivery there of to the tenderer, when such order is being delivered through some person.
- 14. If the tenderer fails to supply goods within stipulated delivery period then the purchase order will stand cancelled and the security deposits shall be forfeited. In addition, the tenderer may be blacklisted for a definite period to be decided by SVP NPA, during which no supply order would be given to the blacklisted tenderer. In this case, order for the same product(s) will be awarded to the L2 tenderer based on the same documentation & processes.
- 15. After the expiry of the stipulated delivery period, which includes extension period if any, no item shall be accepted by SVP NPA. If the tenderer applies for the extension of the delivery period, the extension can be granted on valid grounds only once and up to a maximum of 30 days.
- 16. Payments would be made only after the receipt of all the items ordered in the supply order. In cases, where part supply has been made and the supply order for the remaining items has been cancelled, payment would be made for the supplied items after deducting the penalty, if any.
- 17. No interest will be allowed on the Earnest Money Deposit or security deposites so remitted and no claim shall be entertained in respect of the same. It may specifically be noted that ordinarily payment will be made only after full supplies are completed as per orders and that no advance payment can be arranged.

- 18. The tenderer shall be responsible for the proper packing of goods so as to avoid damages under normal conditions of transport by rail, road or air and for delivery of the material in good conditions to the consignee at destination. In the event of any loss, damage breakage, leakage or any shortage tenderer shall be liable to make good such loss or shortage.
- 19. Warranty. Two year warranty support from the date of supply.
- 20. <u>Bid Validity</u>. The Bid/ Tender submitted shall necessarily remain valid for 180 days. If any bidder withdraws his tender before the said period, SVP NPA shall without prejudice to any other right or remedy, be at liberty to forfeit the bid security submitted alongwith the bid.
- 21. <u>Sample</u>. Sample of the quoted items to be submitted before TPC on or before 1700 Hrs of 20th October 2017 (Friday). Bidder is self responsible on his own expenditure for showing the sample before board.
- Performance Security Clause. The successful bidder shall have to deposit a performance security of 5% of the contract value of the supply/ purchase order rounded up to next hundred in the form of account payee demand draft/ bank guarantee from a nationalized/ scheduled commercial bank in favour of the Director, SVP NPA Hyderabad payable at SBH Shivrampally, Hyderabad within 15 days of the placement of supply order for due performance as per the provisions contained in GFR 171. Failure on the part of the firm to deposit the performance security within stipulated time the purchaser reserves the right to cancel the Supply Order. Performance Security submitted by the bidder will remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including warranty obligations. No interest will be payable for "Performance Security."
 - 23. The Director, SVP National Police Academy reserves the right to order full or part thereof of the items enclosed or accept/ reject any or all the bids without assigning any reason.
 - 24. Terms of Payment. No advance payment or payment against proforma invoice will be made. Payment will be made only after completion of supply & installation.
 - 25. Prices shall be quoted in Indian rupees only.
 - 26. The prices once accepted by the Purchaser shall remain valid till the successful execution of the complete order to the satisfaction of the Academy. The Academy shall not entertain any increase in the prices during the period. In the event there is a reduction or increase in Government levy/ duties during the period of execution of the order, the rates shall be suitably adjusted with effect from the date notifying the said reduction or increase in the Government levy/ excise duty. However, the Purchaser is not liable to any claim from the Supplier on account of fresh imposition and/ or increase of Excise Duty, Customs Duty, Sales Tax etc. on raw materials and/ or components used directly in the manufacture of contracted goods taking place during the pendency of contract.

27. Following scanned documents in **pdf file** format must be enclosed in cover duly sealed and stamped.

First Cover (In pdf): -

- (a) Firm Registration Certificate as per the Companies Act of India.
- (b) ISO Certification.
- (c) Banker details.
- (d) Details of previous experience/ supply.
- (e) Authorization certificate from OEM.
- (f) Sales Tax clearance & VAT/GST Registration.
- (g) Income Tax Returns and details of last year turnover.
- (h) Certification from UIAA.
- (i) Scanned copy of EMD Demand Draft drawn in favour of 'The Director, S.V.P. National Police Academy, Hyderabad' submitted in portal followed by original copy before closing of tender date at the address of the Administrative Officer (Admn.), SVP National Police Academy, Shivarampally, Hyderabad. Offers received without the prescribed EMD will be rejected summarily.
- (j) Firms should be submitting only required documents and numbering of all the pages is necessary. Checklist of all the important documents should also be enclosed in the bid.

Second Cover: -

(a) Financial bid (In excel file like BoQ): - The rates i.e. unit rate of each item and total amount including all taxes, labour charges, if any, are to be quoted explicitly both in words and figures. The Price Bid/ BOQ template must not be modified or replaced by the bidder; else the bid submitted is liable to be rejected for this tender.

28. Taxes and duties.

- (a) Vendor shall be entirely responsible for all taxes, duties, license fees etc. incurred until delivery of the contracted services to the Academy.
- (b) No bid will be considered unless and until all the pages / documents comprising the bid are properly numbered, signed and stamped by the person/s authorized to do so.

29. <u>Right to cancel the order</u>. The Director, SVP National Police Academy reserves the right to cancel the purchase order without any financial repercussion on either side and without seeking the consent of the supplier at any stage of purchase process. No further correspondence in this matter will be entertained.

Yours faithfully,

(R. Jayanthi) Administrative Officer (Admn.) SVP NPA Hyderabad

Copy to: Programmer with a request to please get the above requirement posted in NPA Website and provides a link

Gram: 'POLACADEMY' e-mail:administrator@svpnpa.gov.in Tel: 91-040-24015151 to 24015158 Fax: 91-040-24015179



STORE LIST

Ser No	Name of Contents	Qty
1.	Full Body Harness	05 Nos
2.	Seat Harness	10 Nos
3.	Rappelling Gloves	20 Pair
4.	Carabineer Screw Lock	10 Nos
5.	Carabineer Plain	10 Nos
6.	Rope Protector	04 Nos
7.	Descender	02 No
8.	Self Breaking cam based descender	04 Nos
9.	Self Breaking based descender with fall arrester	04 Nos
10.	Ascenders Jummer	04 Nos
11.	Foot Loop for Ascender	04 Nos
12.	Cam loaded Rope Clamp	02 Nos
13.	Chest Ascender	02 Nos
14.	Secure Shoulder strap	04 Nos
15.	Mountaineering Helmet	10 Nos .
16.	Mobile fall Arrester	02 Nos
17.	Drop Proof pulley for long Tyrolean traverses	02 Nos
18.,	Transport Pulley	04 Nos
19.	Simple Pulley	04 Nos
20.	Double Prusik Pulley	02 Nos
21.	Ropes 10mm	05 Nos
22.	Head Lamp	05 Nos

TECHNICAL SPECIFICATIONS

Ser No	Name of the Equipment	Specification	Compliance Yes/No
1.	Full Body Harness	The full body harness should be a proper rescue harness & not a sports harness.	
		It should be made of high strength nylon & polyester fabrics	
		The harness should be a padded full body harness with load bearing metallic anchor points for a fall	
		safety, victim pick up & work positioning: -A dorsal (back shoulder), a sternal (front chest), a ventral (front waist) & Two lateral (side waist)	
		attachment / anchor points. The harness should have a cross back design (X) to distribute load & lower pressure points during a	
		rescue operation. It should have a wide & cushioned waist belt, leg loops & shoulder straps with breathable lining material for comfort to the rescuer during long	
		suspensions. The waist belt, shoulder straps & leg loops should be	18 g ()
	0	size adjustable. The harness should have minimum five to six tool holder loops.	
		It should be available in various sizes to fit every Indian human physique The waist belt sizes should fit to size 60-110 cm Leg loops should fit to size 45 - 65 cm	
	*	The weight of the harness should not be more than 2100 gms	
	N N	The harness should be CE EN 361, CE EN 358, CE EN 813 certified.	
2.	Seat Harness	It should be compatible with a chest harness to convert to a full body harness	
		Waistbelt and leg loops should be lined with breathable perforated foam for comfortable suspension	ill u
		It should have Ventral attachment point to distribute the load between the waist belt and the leg loops during suspension	*
		It should have a rear attachment buckle for attaching the chest harness The waistbelt and leg loops should be equipped with	
		two self-locking DoubleBack buckles for quick and easy adjustment	
		It should have 4 equipment loops (two large rigid ones in front and two small flexible ones in back)	65
		It should have two slots for tool holder Sizes: It should be available in two sizes. Size 1 should fit the waist size 70 - 120 cms, leg loops 50-65 cms & Size 2 should fit waist size 80 - 140 cms, leg loops 60 - 75 cm.	
		Weight: Size 1 & 2 should not weigh more than 850 gms & 950 gms respectively.	
		It should have certification(s): CE EN 358, CE EN 813, CE EN 361 (en association avec le torse TOP), EAC	

Ser No	Name of the Equipment	Specification	Compliance Yes/No
3.	Rappelling Gloves	The glove should be a natural, high-quality leather	
	y a a live in the s	It should have durable double layer of leather in	•
	× ×	high-wear areas (fingertips, palm, between thumb	
		& index finger)	0.0
	. 80	Back made of breathable stretch nylon	
		Neoprene cuff with Velcro closure	
		Carabiner hole to attach gloves to harness	
		Material(s): goat skin leather, stretch nylon	
	Para Aure e F	Certification(s): CE EN 420, CE EN 388 (3133)	
		Should be available in sizes: XS, S,M,L,XL	
		Weight: 100 gm, 105, 115 g, 118 gm	
4.	Carabineer Screw	It should be a screw lock carabineer made from light	12
٠.	Lock	weight aluminium	
	LOCK	It should have Certification(s): CE EN 362, CE EN	
		12275 type B, UIAA	
		Weight: Maximum 50 gm	2
		Major axis strength: Minimum 23 kN	
	5	Minor axis strength: Minimum 8 kN	
Trans.			New York A. D. C.
- 1-	The state of the s	Open gate strength: Minimum 9 kN	
_	0 11 511	Gate opening: Minimum18 mm	
5.	Carabineer Plain	The carabineer should be made of light weight	
		aluminium.	
	8	It should have a Keylock system helps avoid the	
		carabiner snagging during maneuvers	
		It should have certification(s): CE EN 12275 type B, UIAA	
	9	It should have a straight gate	. 0
	1 11	Weight: Maximum 50 gm	<i>E</i>
	1 1	Major axis strength: Minimum 23 kN	
		Minor axis strength: Minimum 8 kN	
		Open gate strength: Minimum 9 kN	je.
		Gate opening: Minimum 24 mm	
,		Capacity: Minimum 24 mm	
6.	Rope Protector	It should be a metal rope protector which should	
		help protect a moving rope from abrasion	
		It should have modules to connect with quick links	
		& designed in a way that the number of modules	. 1
		can be varied according to the terrain	=
		Each module should be designed be positioned	
		independently to adapt to the terrain	
		It should have minimum 4 modules + 6 quick links	
	50	The rope protector shouldn't weigh more than 1050	
		g: ± 10 gms.	-
7.	Descender	Should be square shape to reduce twisting of the	h
*	Doooonidor	ropes	
		Material(s): aluminum	
		Weight: 100 gm	
	J* J* J*	Should be compatible for use on 8 - 13 mm	-
	I W	diameter ropes	

Ser No	Name of the Equipment	Specification	Compliance Yes/No
8.	Self Breaking	Cam based compact self-braking descender.	
65	cam based	Should have a multi-function handle to control of the	
	descender	descent speed and positioning	
	24.91	It should have a safety clip to enable the device to	
		remain connected with the harness	
		It should have an automatic return system on the	
		handle.	
		It should lower heavy loads up to 200 kg	
		Should be compatible with rope diameter: 10.5 mm -	
		11.5 mm	
		Weight not more than: 400 gm	
		It should have certification(s): EN 341 classe A, CE EN	
_	0 ((0))	12841 type C, NFPA 1983 Technical Use, EAC	
9.	Self Breaking	The device should be Self Breaking cam & teeth based	
	based descender	Descender.	
	with fall arrester	The handle should allows the user to unlock the rope and	
	100	control the descent with the hand on the free end of the	
	34	rope.	
CEON	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	It should have an Anti-panic function which should	Property of the second
		activate if the user pulls too hard on the handle	
		It should have an Anti-error catch to minimise the risk of	
	9	an accident due to incorrect installation of the device on	
	18	the rope The shape of the cam is designed to improve	
	20	rope glide when ascending	
	**	It should have a feature that prevents dropping the	5 52
		device and facilitates rope installation when passing	
		intermediate anchors	
		It should also be useful to make a progress-capture haul	
		system	
		It should enable to lowers heavy loads up to 250 kg	
		It should be compatible for rope diameters 10 to 11.5	
,	2	mm	
		Weight (Maximum): 550 gm	
		It should have certification(s): EN 341 classe A, CE EN	
	*.	12841 type C, ANSI Z359.4, NFPA 1983 Technical Use, EAC	
10.	Ascenders	It should have a wide opening to allows the handle to be	
,	Jummer	easily grasped even with thick gloves.	
		The safety catch should be totally integrated into the	
9		body of the ascender to help prevent snagging	
	8	The cam with teeth should have self-cleaning slot to	
		optimise performance under any conditions (frozen or	
		dirty ropes)	
		The ascender should have a wide lower hole for	
		carabiners of any lanyard and foot loop to be easily	
	-	attached	
		It should have a hole for clipping a carabiner around the	
	a a		
		rope	V
		It should be available in left-handed and right-handed	*
		versions	
		The ascender should be made of aluminium, stainless	
		steel, plastic, rubber, nylon	
	1	Weight: not more than 175 gm	
		Weight. Hot more than 175 gm	
		It should be compatible with 8-13 mm ropes	Ť.

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Se		Specification	Compliance Yes/No
11.		The foot loop should be designed to attach to the ascender	
		It should have an abrasion-resistant underfoot strap	
	a' y	It should have an adjustable elastic to keep the foot in the foot loop with any type of shoe	. 22
		It should have a DoubleBack buckle for easy and quick length adjustment of the foot loop	
		It should be made of strong nylon with steel buckles	
**		Weight: Not exceeding 75 gm	
12.	Cam loaded Rope Clamp	It should be designed for use in haul systems as a progress capture device	
		It should have an openable cam to allow installation or removal of the rope clamp at any point on the rope	
		It should have independent safety catches on each side of the device for easy opening & to minimise the risk of accidental opening. The safety catches must have an unlocked indicator.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		It should have an integrated cam spring to avoid accidental snagging and prolong durability	ed
		It should be made of aluminium, stainless steel & nylon materials.	
		Weight: Not more than 275 gm	
		It should have certification(s): CE EN 567, CE EN 12841 type B, EAC, NFPA 1983 Technical Use	
		It should be compatible with 9-13 mm ropes	
13.	Chest Ascender	It should be a compact, lightweight chest rope clamp	
9		It should have a stainless steel toothed cam with self- cleaning slot to perform under any conditions (frozen or muddy ropes)	
		The lower hole should be angled to keep the device flat on chest while ascending	
		Material(s): aluminium, stainless steel, nylon	
1 -		Weight: Maximum 100 gm	
-	* 1	It should be compatible with 8-11 mm ropes	
81	, 11	It should have certification(s): CE EN 567, CE EN 12841 type B, EAC	
14.	Secure Shoulder	Should be simple construction for easy donning	
	strap	Should have Front and rear buckles for easy, quick adjustment	v -
		Should mounts on seat harnesses with rear rings	
		Weight not to exceed 150 gm	

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Se No		Specification	Compliance Yes/No
15		The helmet should be lightweight & durable	
	Helmet	The helmet shell should be of injected ABS & expanded polystyrene foam liner	
20	-	It should have sliding shutters to adjust ventilation	
		It should have adjustment buckles, placed to the sides, away from the chin	6
		It should be totally adjustable according to head size	
	The second second	It should have integrated clips / slots for headlamp	
0	i	It should have sizes to fit head circumference 50 - 65 cms	
		Weight not more than 450 gm	1 2
		Certification(s): CE EN 12492, UIAA	
16	Mobile fall Arrester	The mobile fall arrester should arrest falls, slides, and uncontrolled descents	20 00
	C	It should work on vertical or angled rope	
		It should lock on the rope even if grabbed during the fall	
d. 133	Tours var maries durant	It should moves up or down the rope without any manual manipulation of the device	erang pangang Pangang.
		Material(s): aluminum, stainless steel	
		It should have certification(s): CE EN 353-2, CE EN 12841 type A, EAC	
		Weight with carabineer: Maximum 375 gm	
17	Drop Proof pulley for long Tyrolean	Should be a drop proof double pulley with integrated wire lock carabineer	
	traverses	Two in-line sheaves for good stability	111-70
		Sealed ball bearings	- 41 _
		Front and rear fairings	
		2 supports for the carabiners for protection from cable wear	
		Cable / Rope diameter: 9 to 13 mm	
	- W	Weight: 400 gm	
	,	Material(s): aluminum, stainless steel, nylon	(4)
		Certification(s): CE, EAC	
18.	Transport Pulley	It should be a double pulley	50%
		It should have the sheaves mounted on self-lubricating bushings for good efficiency	- PA
	E William Co.	The Maximum allowable speed: 10 m/s	
		The attachment point should accept up to three carabiners	
		It should have CE EN 12278, UIAA Certifications	
	t)	Weight: Maximum200 gm	
		Max. rope diameter: 13 mm	
		Sheave diameter should be 21 mm	
		Efficiency not less than 71 %	
		Working load should be10 kN or more	

Ser No	Name of the Equipment	Specification	Compliance Yes/No
19.	Simple Pulley	Lightweight, compact pulley	
	*	Fixed side plates	
	9	Sheave mounted on self-lubricating bushings	1.00
		Material(s): aluminum side plates & aluminum sheave	
		Weight: 100 gm	
		Working rope diameter: 7 mm to 13 mm	
		Sheave type: self-lubricating bushings	
	I.	Sheave diameter: 21 mm	
		Efficiency: 71 %	
		Working load: 5 kN	
		Breaking strength: 23 kN	
		Certification(s): CE EN 12278, UIAA	
20.	Double Prusik	It should be a double pulley parallel with movable plates.	
	Pulley	It should have parallel mounted sheaves and an	•
		attachment point for creating different types of hauling	
		systems.	is the second of the second
		The Sheave should be mounted on sealed ball bearings	
		for excellent efficiency	
		It should have aluminium side plates and sheaves	61
		It should have CE EN 12278, UIAA certifications	
		Weight: Max 150 gm	_
		It should be compatible with rope diameters: 7 - 11 mm	
		The Sheave diameter should be 25 mm	
		Efficiency should not be less than 91 %	
		Working load should be minimum 6 kN	
		Breaking strength should be minimum 23 kN	
		Working load on one rope strand should be minimum 1.5 kN	
21.	Ropes 10mm	Diameter: 10 mm	10
		Certification(s): CE EN 1891 type A, UIAA	
		Breaking strength: 28 kN	
	, J	Strength tied with figure-eight knot: 16 kN	
		Impact force (factor 0,3): 4,8 kN	
		Number of factor 1 falls: 10	*
		Weight per meter not more than: 70 gm	A
		Construction: 32 carrier	
	(A)	Percentage of sheath: 41 %	
		Static elongation: 3 %	
		Material(s): polyester, nylon	
22.	Head Lamp	Light output: 150 lumens	
		Weight less than: 100 gm	
		Beam pattern: wide	
		Energy: Three AAA/LR03 batteries should be included	
		Battery compatibility: rechargeable Ni-MH)*
		Certification: CE	
		Watertightness: IP X4 (weather resistant)	

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