w w w . a s a t s a f e . c o m

恒久安全　值得信赖
Always Safe, Always Trusted

阿萨特

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PD2023

ASAT中国：

恒久安全，值得信赖。

Always Safe, Always Trusted

ASAT中国，提供高空安全防护产品，恒久安全；

ASAT provides personal protective equipment, always safe.

ASAT中国，提供高空逃生、救援方案，值得信赖。

ASAT provides evacuation and rescue solutions, always trusted.

ASAT产品研发 Research & Development:

ASAT研发团队以二十年的现场工作体验为基础，以科学理念为指导，综合考虑不同地区人员的体质特征及不同领域的工作特点，保证产品设计理念的先进与实用。

Based on almost twenty years of field work experiences and guided by scientific concepts, the ASAT R&D team comprehensively considers the physical characteristics of personnel in different areas and work characteristics in different fields to ensure the advancement and practicality of design concepts of the products.

ASAT原材料控制 Raw material control:

ASAT原材料选择苛刻，在全球范围内选用具有技术领先优势的原材料以确保质量。

ASAT raw materials are subject to a rigorous selection process, by which the raw materials with superiority of advanced technology are selected worldwide to ensure the quality.

ASAT生产过程控制 Production procedure control:

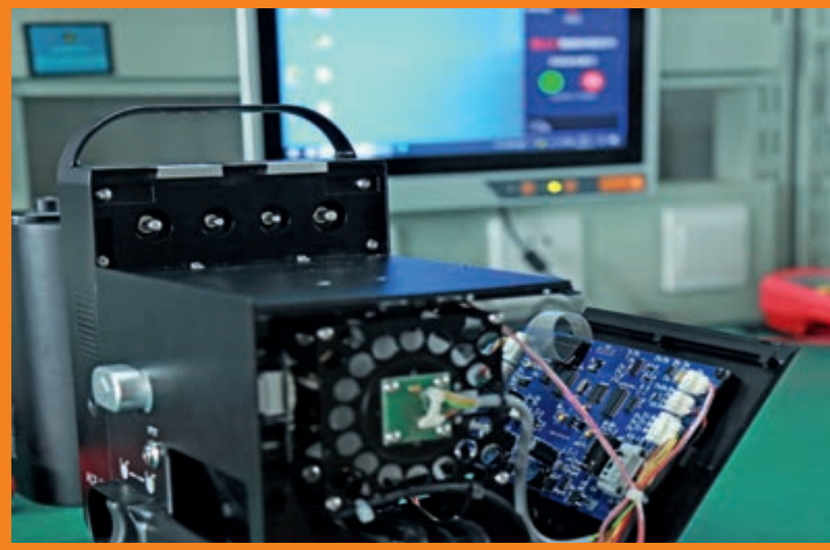
ASAT工厂严格执行ISO9001,ISO14001,ISO45001管理系统，控制每一个细节，严谨、科学、可靠。

ASAT factory implements ISO9001, ISO14001, ISO45001 quality management system, to control every detail and ensure preciseness, scientificity and reliability.

ASAT产品检测 Product test:

ASAT工厂自身建立了完善的产品检测体系，同时与国家劳保中心、法国APAVE等认证机构合作，对ASAT产品进行第三方检测和认证。

ASAT establishes a comprehensive product test system, cooperates with the certification authority, National Quality Inspection and Testing Center For Personal Protective Equipment (Beijing) and APAVE (France) to perform related third party certification and inspection on the ASAT products.



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安全带
Harnesses

工业通用安全带
General industrial Harnesses

MASTER系列

D-10101

D-10201

D-10202

D-10202C（攀风）

D-10202C-LT

COMFUST系列

D-10403

NOVO系列

D-10802（炫风）

MASTER系列

D-10202CW

D-10202C-LT

风电特装：采用特制反光织带，专为风电塔筒内作业环境设计，有效提醒作业同伴的存在位置，保护作业人员安全；
安全可靠：腹部增加应急安全绳，高空作业过程中，需要时可以和附近锚点连接，保护人员安全；
五挂点设计，胸前与背后挂点可用于连接防坠落系统；腹部挂点可配合助爬器使用；腰部两侧挂点用于连接工作限位系统。

符合欧盟标准 CE EN361、CE EN 358及国标 GB6095-2021

For wind power industry: harness with reflective webbing for dark environment inside of the wind turbine tower, which can effectively increase the visibility of the workers, limits the working risk.
Safe and reliable: ventral attachment point is equipped with an emergency safety lanyard, which can be connected to nearby anchor points when work at height. Five attachment point design, the sternal and dorsal attachment points can be connected to a fall arrest system; the ventral attachment point can be used with service lifts; the lateral attachment points on waist belt can be connected to the working position system.

CE EN 361, CE EN 358, GB6095-2021

D-10202C（攀风）

全身式安全带，五挂点设计，满足用于防坠、限位功能；
胸前与背后挂点用于连接防坠落系统；
腰部两侧挂点用于连接工作限位系统；
腹部挂点可配合助爬器使用；
宽式半坚硬腰带给予使用者良好的支撑；
加装耐磨背板，减缓安全带磨损，提升安全性；
采用铝制快插扣设计，穿着方便、快捷。
腰带配备挂物环，可承载20kg。

符合欧盟标准 CE EN361、CE EN 358及国标 GB6095-2021

Full-body safety harness, five-point design, meeting the requirements for use in fall arrest and work positioning.
The chest and dorsal attachment points are used for connection to the fall arrest system. The bilateral attachment points are used for connection to the work positioning system. The ventral attachment point can be used in cooperation with the electric climbing aid and climbing-free device.
Wide and semi-rigid waist belt provides the user effective support.
Waist wear protector provides the support to the waist of the user and reduces the wear of the waist belt effectively during the user leans against the wall of wind towers.
adopting the CLICK buckles, which are easy and quick for buckling and adjustment.
The waist belt is fitted with gear loops used for carrying tools up to 20 kg.

CE EN361, CE EN358, GB6095-2021

D-10202

全身式安全带，五挂点设计，满足用于防坠、限位功能；
宽式半坚硬腰带给予使用者良好的支撑；
采用铝制速脱安全扣，轻松调节；
加装耐磨背板，减缓安全带磨损，提升安全性；
腰带备有挂物环、小型工具袋。

符合欧盟标准 CE EN361、CE EN 358及国标 GB6095-2021

Full-body safety harness, five-point design, meeting the requirements for use in fall arrest and work positioning.
Waist wear protector provides the support to the user and reduce the wear of the waist belt effectively, and prolongs the service life of the harness.
The waist belt is fitted with gear loops and workbag.

CE EN361, CE EN358, GB6095-2021

D-10201C

全身式安全带，五挂点设计，满足用于防坠、限位功能；
胸前与背后挂点用于连接防坠落系统；
腰部两侧挂点用于连接工作限位系统；
腹部挂点用于区域限制系统；
宽式半坚硬腰带给予使用者良好的支撑；
肩带、腰带、腿带均采用铝制快插扣设计，穿着方便、快捷（只有同时打开快插扣的两个锁扣才能将其打开，以避免误操作造成危险隐患）；
腰带备有挂物环、小型工具袋。
符合欧盟标准 CE EN361、CE EN 358及国标 GB6095-2021

Full-body safety harness, five-point design, meeting the requirements for use in fall arrest And work positioning.
The chest and dorsal attachment points are Used for connection to the fall arrest system.
The ventral attachment point is used for connection to the restraint system.
Wide and semi-rigid waist belt provides the user effective support.
The shoulder straps, waist belt and leg loops, all adopting the CLICK buckles, which are easy and quick for buckling and adjustment. (CLICK buckles can be released only after two lock catches are unlocked at the same time, to avoid hazards caused by misoperation).
The waist belt is fitted with suspension loops and workbag.
CE EN361, CE EN358, GB6095-2021

D-10201

全身式安全带，五挂点设计，满足用于防坠、限位功能；
胸前与背后挂点用于连接防坠落系统；
腰部两侧挂点用于连接工作限位系统；
腹部挂点用于区域限制系统；
宽式半坚硬腰带给予使用者良好的支撑；
采用铝制速脱扣，轻松调节；
腰带备有挂物环、小型工具袋。
符合欧盟标准 CE EN361、CE EN 358及国标 GB6095-2021

Full-body safety harness, five-point design, meeting the requirements for use in fall arrest and work positioning.
The chest and dorsal attachment points is used for connection to the fall arrest system.
The bilateral attachment points are used for connection to the work positioning system.
Wide and semi-rigid waistbelt enables the user effective support.
Steel quick-release buckles adopted can be easily adjusted.
The waist belt is fitted with suspension loops and workbag.
CE EN361, CE EN358, GB6095-2021

D-10102

全身式安全带，三挂点设计，满足用于防坠、井下救援；
背后挂点用于连接防坠落系统；
肩部挂点用于救援作业；
可配合V型吊带DA-700一起使用，用于拖拽系统；
质量轻、易穿戴。
符合欧盟标准 CE EN361、CE EN 358及国标 GB6095-2021

Full-body safety harness, three-point design, meeting the requirements for use in fall arrest and down hole rescue.
The dorsal attachment point are used for connection to the fall arrest system.
The shoulder attachment points is designed for rescue.
Can be used in the hauling system in cooperation with the V-type sling DA-700.
Lightweight and easy to don.
CE EN361, CE EN 358, GB6095-2021

D-10101-W

全身式防坠落安全带；
适用于海上高空作业；
胸前与背后挂点用于连接防坠落系统。
符合欧盟标准 CE EN361、CE EN 393、CE EN ISO 12402及国标 GB6095-2021

Full-body fall arrest safety harness.
Equipped with life vest, suitable for offshore working at heights.
The chest and dorsal attachment points are used for connection to the fall arrest system.
CE EN361, CE EN 393, CE EN ISO 12402, GB6095-2021

D-10202CW

全身式防坠落安全带；
适用于海上高空作业；
胸前与背后挂点用于连接防坠落系统；
救生衣和安全带可拆分单独使用。
符合欧盟标准 CE EN361、CE EN 393、CE EN ISO 12402及国标 GB6095-2021

Full-body fall arrest safety harness.
Equipped with life vest, suitable for offshore working at heights.
The chest and dorsal attachment points are used for connection to the fall arrest system.
Life vest and harness can be used separately.
CE EN361, CE EN 393, CE EN ISO 12402, GB6095-2021

D-10101

全身式防坠落安全带；
胸前与背后挂点用于连接防坠落系统；
质量轻、易穿戴。
符合欧盟标准 CE EN361及国标 GB6095-2021

Full-body fall arrest harness.
The chest and dorsal attachment points are used for connection to the fall arrest system.
Lightweight and easy to don.
CE EN 361, GB6095-2021

D-10101/LS1.5

全身式防坠落安全带；
背部缓冲安全绳与安全带合二为一，整体携带方便；
两条环状胸部挂点可用于连接防坠落系统；
质量轻，易穿戴。
符合欧盟标准 CE EN361及国标 GB6095-2021

The dorsal lanyard with energy absorber is integrated into the harness, convenient to carry; Two ring chest attachment points are used for connection to the fall arrest system;
Lightweight and easy to don.
CE EN 361, GB6095-2021

NOVO系列–风电专用安全带D–10802
NOVO–Wind power harness

产品描述：Product description

全身式安全带，五挂点设计，满足用于防坠、限位与悬挂的功能；
胸前与背后挂点用于连接防坠落系统；
腰部两侧挂点用于连接工作限位系统；
腹部挂点可配合助爬器使用；
宽式半坚硬腰带给予使用者良好的支撑；
腰部耐磨背板 给使用者腰部以支撑，当使用者倚靠墙体或塔筒内壁时给予支撑，有效降低安全带腰部磨损，延长安全带使用寿命，背板可更换；
人员穿着安全带处于悬空状态时，腰带、腿带均匀受力；
肩带、腰带、腿带均采用快插扣结构，穿着方便、快捷，可从腰部打开，即便是在穿着厚重冬衣的情况下，仍可轻松穿戴安全带；
肩带、腰带与腿带配备透气衬垫，增强使用舒适感；
腰带配备挂物环，便于工具的携带和整理，可承载20kg。
符合欧盟标准 CE EN361、CE EN 358、CE EN813 及国标 GB6095–2021

Full–body safety harness, five–point design, meeting the requirements for use in fall arrest, work positioning and suspension.
The chest and dorsal attachment points are used for connection to the fall arrest system.
The bilateral attachment points are used for connection to the work positioning system.
The ventral attachment point can be used in cooperation with the electric climbing aid or climbing auto device.
Wide and semi–rigid waist belt enables the user effective support.
Waist wear protector provides the support to the waist of the user and reduces the wear of the waist belt effectively during the user leans against the wall of wind towers. Waist wear protector is replaceable.
When a person wearing NOVO harness is suspended in the air, the stress is well distributed to the waist belt and leg loops.
The shoulder straps, waist belt and leg loops, all adopting CLICK buckles, which are easy and quick for buckling and adjustment. The harness is easy to don even wearing heavy clothes.
The shoulder straps, waist belt and leg loops offer great comfort to the user, thanks to the ventilated lining.
The waist belt is fitted with suspension loops used for carrying tools up to 20 kg.
CE EN 361, CE EN 358, CE EN 813 , GB6095–2021

D-10403

全身式安全带，五挂点设计，满足用于防坠、限位、悬挂功能；
胸前与背后挂点用于连接防坠落系统；
腰部两侧挂点用于连接工作限位系统；
腹部挂点可配合助爬器使用；
宽式半坚硬腰带给予使用者良好的支撑；
加装耐磨背板，攀爬塔筒时可倚靠塔筒壁，节省体力，减缓安全带磨损，提升安全性；
肩带、腰带、腿带均采用快插扣结构，穿着方便、快捷，可从腰部打开，即便是在穿着厚重冬衣的情况下，仍可轻松穿戴安全带；
腰带备有挂物环、小型工具袋。
符合欧盟标准 CE EN361、CE EN 358、CE EN813及国标 GB6095-2021

Full-body safety harness, five-point design, meeting the requirements for use in fall arrest, work positioning and suspension. The chest and dorsal attachment points are used for connection to the fall arrest system. The bilateral attachment points are used for connection to the work positioning system.
The ventral attachment point can be used in cooperation with the electric climbing aid and climbing auto device.
Wide and semi-rigid waist belt provides the user effective support.
Waist wear protector provides the support to the waist of the user and reduces the wear of the waist belt effectively during the user leans against the wall of wind towers.
The shoulder straps, waist belt and leg loops, all adopting CLICK buckles, which are easy and quick for buckling and adjustment. The harness is easy to don even wearing heavy clothes.
The waist belt is fitted with suspension loops and workbag.
CE EN361, CE EN358, CE EN813, GB6095-2021

D-10402

全身式安全带，五挂点设计，满足用于防坠、限位、悬挂功能；
胸前与背后挂点用于连接防坠落系统；
腰部两侧挂点用于连接工作限位系统；
腹部挂点可配合助爬器使用；
宽式半坚硬腰带给予使用者良好的支撑；
加装耐磨背板，攀爬塔筒时可倚靠塔筒壁，节省体力，减缓安全带磨损，提升安全性；
肩带、腿带均采用快插扣结构，穿着方便、快捷；
腰带备有挂物环、小型工具袋。
符合欧盟标准 CE EN361、CE EN 358、CE EN813及国标 GB6095-2021

Full-body safety harness, five-point design, meeting the requirements for use in fall arrest, work positioning and suspension.
The chest and dorsal attachment points are used for connection to the fall arrest system.
The ventral attachment point can be used in cooperation with the electric climbing aid and climbing auto device.
Wide and semi-rigid waist belt provides the user effective support.
Waist wear protector provides the support to the waist of the user and reduces the wear of the waist belt effectively during the user leans against the wall of wind towers.
The shoulder straps, waist belt and leg loops, all adopting CLICK buckles, which are easy and quick for buckling and adjustment.
The waist belt is fitted with suspension loops and workbag.
CE EN361, CE EN358, CE EN813, GB6095-2021

D-10401

全身式安全带，五挂点设计，满足用于防坠、限位、悬挂功能；
胸前与背后挂点用于连接防坠落系统；
腰部两侧挂点用于连接工作限位系统；
宽式半坚硬腰带给予使用者良好的支撑；
肩带、腿带均采用快插扣结构，穿着方便、快捷；
腰带备有挂物环、小型工具袋。
符合欧盟标准 CE EN361、CE EN 358、CE EN813及国标 GB6095-2021

Full-body safety harness, five-point design, meeting the requirements for use in fall arrest, work positioning and suspension.
The chest and dorsal attachment points are used for connection to the fall arrest system.
The bilateral attachment points are used for connection to the work positioning system.
Wide and semi-rigid waistbelt enables the user effective support.
The shoulder straps, waist belt and leg loops, all adopting CLICK buckles, which are easy and quick for buckling and adjustment.
The waist belt is fitted with suspension loops and workbag.
CE EN361, CE EN358, CE EN813, GB6095-2021

DS-01

宽式坚硬设计给予使用者良好支撑；
两侧半坚硬设计避免使用者由于织带受力造成的不适；
保证长时间悬挂的舒适性与稳定性。

Wide and rigid seat provides the user effective support.
The bilateral semi-rigid design avoids the user's discomfort caused by the webbingstress and ensures the comfort and stability of suspension for long time.

DSA-01

航空铝合金材质，质轻，便携；
两步锁金属环，安全可靠；
分力板中间金属环用于连接人身安全带胸部挂点；
人体工学设计保证长时间悬挂的舒适性与稳定性。

With Aviation aluminum alloy material, which is light-weight and portable.
Fitted with twist-lock carabiners, which is safe and reliable.
The carabiner in the middle of the rigging plate connects to the chest attaching point of the harness.
Ergonomic design ensures the comfort and stability of suspension for long time.

连接装置
Lanyards

一体式缓冲连接装置
Integrated shock absorbing lanyards

LYD-5010

LYS-4020

LYS-4030

伸缩式连接装置
Lanyards with elasticated arms

LTD-3010

LTD-3020

LTS-2010

LTS-2020

缓冲器式连接装置
Lanyards with shock absorber pack

LYD-3010

LYS-2020

连接装置
Restraint lanyards

LY-1020

LY-1030

出仓工作安全绳
Safety lanyard for working outside wind turbine

PR-8010、PR-8020

限位工作绳
Work positioning ropes

PR-6010

PR-6020

一体式连接装置
Integrated energy absorbing lanyards

ASAT一体式缓冲连接装置，突破了传统缓冲连接装置的设计理念，整条缓冲连接装置都是减震器，若工作人员发生跌落，下坠冲击力会被均匀吸收，不会产生冲击力峰值载荷，避免人体受到伤害--作用在人体上的冲击力始终小于6kN。
一体式缓冲连接装置，外套保护套，所有减震及承载部件都封装在护套内，耐脏，耐磨。
一体式缓冲连接装置，内置救援环，一旦发生跌落，救援环会自动脱出，便于对坠落人员进行救援。
ASAT integrated energy absorbing lanyard, which goes beyond the design concept of traditional lanyard with energy absorber, integrates energy absorbing elements into full length of the lanyard. In the event of a fall, the impact force of falling can be evenly absorbed by the absorbing elements and no peak of the impact load occurs, so as to minimize the impact force acting on usersto less than 6 kN. The integrated energy absorbing lanyard is fitted with the protective sleeve outside.All energy absorbing and loadbearing components are enclosed in the protective sleeve, preventing against , wear and dirt.
The integrated energy absorbing lanyard is equipped with abuilt–in rescue loop.In case of falling, the loop shall slip out automatically, facilitating the rescue to the casualty.

LYD–5010–1.5 LYD–5010–1.8
两端双铝钩配置，轻便耐用，适合严酷工作环境；
大开口铝制安全钩最大开度60mm；
长度：1.5m, 1.8m。
符合欧盟标准 CE EN355、CE EN 354 CE EN813及国标 GB24543–2009、GB/T24538–2009
Twin support energy absorbing lanyard, fitted with aluminum hooks on both anchoring ends, is light weight, durable and applicable to the severe working conditions.
The maximum opening of aluminum hook is 60mm.
Length: 1.5m, 1.8m
CE EN355, CE EN354, CE EN813, GB24543–2009, GB/T24538–2009

LYD–5020–1.5 LYD–5020–1.8
两端双钢钩配置，坚固耐用，适合严酷工作环境；
大开口钢制安全钩最大开度60mm；
长度：1.5m, 1.8m。
符合欧盟标准 CE EN355、CE EN 354 CE EN813及国标 GB24543–2009、GB/T24538–2009
Twin support energy absorbing lanyard, fitted with steel hooks on both anchoring ends, is sturdy, durable and applicable to the severe working conditions The maximum opening of steel hook is 60mm.
Length: 1.5m, 1.8m
CE EN355, CE EN354, CE EN813, GB24543–2009, GB/T24538–2009

LYD–5030–1.2 LYD–5030–1.5
两端双铝钩配置，轻便耐用，适合严酷工作环境；
大开口铝制安全钩最大开度110mm；
长度：1.2m, 1.5m。
符合欧盟标准 CE EN355、CE EN 354 CE EN813及国标 GB24543–2009、GB/T24538–2009
Single support energy absorbing lanyard, fitted with aluminum hooks on both anchoringends, is lightweight, durable and applicable to the severe working conditions.
The maximum opening of aluminum hook is 110mm.
Length: 1.2m, 1.5m
CE EN355, CE EN354, CE EN813, GB24543–2009, GB/T24538–2009

LYS–4010–1.5 LYS–4010–1.8
LYS–4010–2
两端单铝钩配置，质量轻，携带方便；
大开口铝制安全钩最大开度60mm；
长度：1.5m，1.8m，2m。
符合欧盟标准 CE EN355、CE EN 354、CE EN813及国标 GB24543–2009、GB/T24538–2009
Single support energy absorbing lanyard, fitted with aluminum hooks on both ends, is lightweight, durable and applicable to the severe working conditions.
integrated shock absorbing lanyard is applicable to severe working environment.
The maximum opening of aluminum hook is 60 mm.
Length: 1.5m, 1.8m, 2m
CE EN355, CE EN354, CE EN813, GB24543–2009, GB/T24538–2009

LYS–4020–1.5 LYS–4020–1.8
两端单钢钩配置，坚固耐用，适合严酷工作环境；
大开口钢制安全钩最大开度60mm；
长度：1.5m, 1.8m。
符合欧盟标准 CE EN355、CE EN 354、CE EN813及国标 GB24543–2009、GB/T24538–2009
Single support energy absorbing lanyard, fitted with steel hooks on both ends, is sturdy, durable and applicable to the severe working conditions.
The maximum opening of steel hook is 60mm.
Stretched Length: 1.5m, 1.8m
CE EN355, CE EN354, CE EN813, GB24543–2009, GB/T24538–2009

LYS–4030–1.2 LYS–4030–1.5
两端双铝钩配置，轻便耐用，适合严酷工作环境；
大开口铝制安全钩最大开度110mm；
长度：1.2m, 1.5m。
符合欧盟标准 CE EN355、CE EN 354、CE EN813及国标 GB24543–2009、GB/T24538–2009
Single support energy absorbing lanyard, fitted with aluminum hooks on both anchoringends, is lightweight, durable and applicable to the severe working conditions.
The maximum opening of aluminum hook is 110mm.
Stretched Length: 1.2m, 1.5m
CE EN355, CE EN354, CE EN813, GB24543–2009, GB/T24538–2009

伸缩式连接装置
Lanyards with elasticated arms

· 紧凑便携 Compact and easy to carry

伸缩式织带结构，有效缩短连接绳长度，便于使用和携带；
展开长度1.5m的连接装置长度仅为1m；
展开长度1.8m的连接装置长度仅为1.1m。
The structure of elastic webbing shortens the connection length of the lanyard, convenient for use and carrying.
The lanyard with 1m of connection length can be stretched to 1.5 m.
The lanyard with 1.1m of connection length can be stretched to 1.8 m.

· 高强耐用 High strength and durability

伸缩式织带采用Dyneema（超高分子量聚乙烯纤维）材料，具备优异的耐磨性能；
防紫外线，适用于高原、海上作业等严酷环境；
强度高，织带破断强度不低于25kN；
缓冲器配备尼龙保护套，保护缓冲器不暴露在外，经受磨损。
Elastic webbing is made of Dyneema (Ultra High Molecular Weight Polyethylene Fiber) with excellent wear resistance.
The webbing is ultraviolet–proof, suitable for harsh environments such as on mountains and at sea.
High strength, the breaking strength is no less than 25kN.
The energy absorber is enclosed in the nylon jacket of wear resistance.

· 净空距离 Clearance

LTD–3010/3020–1.5和LTS–2010/2020–1.5(1.5m)
LTD–3010/3020–1.8和LTS–2010/2020–1.8(1.8m)
The maximum clearance distance of LTD–3010/3020–1.5 and LTS–2010/2020–1.5(1.5m).
The maximum clearance distance of LTD–3010/3020–1.8 and LTS–2010/2020–1.8(1.8m).

LTD–3010–1.5 LTD–3010–1.8
两端双铝钩配置，质量轻、体积小，携带方便；
大开口铝制安全钩最大开度60mm；
伸展长度：1.5m，1.8m。
符合欧盟标准 CE EN355、CE EN 354、CE EN813及国标 GB24543–2009、GB/T24538–2009

Twin support elastic lanyard, fitted with aluminum hooks on both anchoring ends, is lightweight, durable and applicable to the severe working conditions.
The maximum opening of aluminum hook is 60 mm.
Stretched Length: 1.5m, 1.8m
CE EN355, CE EN354, CE EN813, GB24543–2009, GB/T24538–2009

LTD–3020–1.5 LTD–3020–1.8
两端双钢钩配置，坚固耐用，适合严酷工作环境；
大开口钢制安全钩最大开度60mm；
伸展长度：1.5m，1.8m。
符合欧盟标准 CE EN355、CE EN 354、CE EN813及国标 GB24543–2009、GB/T24538–2009

Twin support elastic lanyard, fitted with steel hooks on both anchoring ends, is sturdy, durable and applicable to the severe working conditions.
The maximum opening of steel hook is 60mm.
Stretched Length: 1.5m, 1.8m
CE EN355, CE EN354, CE EN813, GB24543–2009, GB/T24538–2009

LTS–2010–1.5 LTS–2010–1.8
两端单铝钩配置，质量轻、体积小，携带方便；
大开口铝制安全钩最大开度60mm；
伸展长度：1.5m，1.8m。
符合欧盟标准 CE EN355、CE EN 354、CE EN813及国标 GB24543–2009、GB/T24538–2009

Single support elastic lanyard, fitted with aluminum hooks on both ends, is lightweight, durable and applicable to the severe working conditions.
The maximum opening of aluminum hook is 60mm.
Stretched Length: 1.5m, 1.8m
CE EN355, CE EN354, CE EN813, GB24543–2009, GB/T24538–2009

LTS–2020–1.5 LTS–2020–1.8
两端单钢钩配置，坚固耐用，适合严酷工作环境；
大开口钢制安全钩最大开度60mm；
伸展长度：1.5m，1.8m。
符合欧盟标准 CE EN355、CE EN 354、CE EN813及国标 GB24543–2009、GB/T24538–2009

Single support elastic lanyard, fitted with steel hooks on both ends, is sturdy, durable and applicable to the severe working conditions.
The maximum opening of steel hook is 60mm.
Stretched length: 1.5m, 1.8m
CE EN355, CE EN354, CE EN813, GB24543–2009, GB/T24538–2009

缓冲器式连接装置
Lanyards with shock absorber pack

由缓冲器、连接绳、端部挂钩三部分组成；
当使用人员发生坠落时，缓冲连接装置可以吸收坠落者的冲坠力，保证作用在人身上的冲坠力小于6kN；
使用缓冲连接装置需要注意必须有足够的净空距离。
Consists of shock absorber pack, lanyard and hooks at the ends.
To minimise the impact force acting on users less than 6kN in case of falling.
When using the lanyards with energy absorber pack pay attention to leave sufficient clearance.

LYD–3010–1.2 LYD–3010–1.5
LYD–3010–1.8
两端双铝钩配置，质量轻，携带方便；
大开口铝制安全钩最大开度60mm；
长度：1.2m ,1.5m, 1.8m。
符合欧盟标准 CE EN355、CE EN 354、CE EN813及国标 GB24543–2009、GB/T24538–2009

Twin support elastic lanyard, fitted with aluminum hooks on both anchoring ends, is lightweight, durable and applicable to the severe working conditions.
The maximum opening of aluminum hook is 60 mm.
Length: 1.2m 1.5m, 1.8m
CE EN355, CE EN354, CE EN813 GB24543–2009, GB/T24538–2009

LYD–3020–1.5 LYD–3020–1.8
LYD–3020–2
两端双钢钩配置，坚固耐用，适合严酷工作环境；
大开口钢制安全钩最大开度60mm；
长度：1.5m, 1.8m, 2m。
符合欧盟标准 CE EN355、CE EN 354、CE EN813及国标 GB24543–2009、GB/T24538–2009

Twin support Y–shape lanyard, fitted with steel hooks on both anchoring ends, is sturdy, durable and applicable to the severe working conditions.
The maximum opening of steel hook is 60mm.
Length: 1.5m, 1.8m, 2m
CE EN355, CE EN354, CE EN813 GB24543–2009, GB/T24538–2009

LYS–2010–1.5 LYS–2010–1.8
LYS–2010–2
两端单铝钩配置，质量轻，携带方便；
大开口铝制安全钩最大开度60mm；
长度：1.5m, 1.8m, 2m。
符合欧盟标准 CE EN355、CE EN 354、CE EN813及国标 GB24543–2009、GB/T24538–2009

Single support lanyard, fitted with aluminum hooks on both ends, is lightweight, durable and applicable to the severe working conditions.
The maximum opening of aluminum hook is 60mm.
Length: 1.5m, 1.8m, 2m
CE EN355, CE EN354, CE EN813 GB24543–2009, GB/T24538–2009

LYS–2020–1.5 LYS–2020–1.8
两端单钢钩配制，适合严酷工作环境；
大开口钢制安全钩最大开度60mm；
长度：1.5m, 1.8m。
符合欧盟标准 CE EN355、CE EN 354、CE EN813及国标 GB24543–2009、GB/T24538–2009

Single support lanyard, fitted with steel hooks on both ends, is sturdy, durable and applicable to the severe working conditions.
The maximum size of opening for the largeopening aluminum safety hook is 60 mm.
Length: 1.5m, 1.8m
CE EN355, CE EN354, CE EN813, GB24543–2009, GB/T24538–2009

出仓工作安全绳 Safety lanyard for working outside wind turbine

PR–8010–4 PR–8010–8 PR–8010–20
PR–8020–4 PR–8020–8 PR–8020–20
风电专用出仓工作安全绳，通过移动限位锁给出仓作业人员安全保护；
端部特殊挂点设计，适合多种工况；绳索长度根据需要选择，完全满足风电出仓作业需求；
特制绳索，直径16mm，安全系数极高，操作舒适；
长度：4m，8m，20m
符合欧盟标准 CE EN355、CE EN 354、CE EN813及国标 GB24543–2009

The positioning rope for working outside wind turbine, which is specialized for wind power, provide safe protection for the personnel working outside wind turbine by means of moving the tensioning device.
With special design of attachment points at the end, the positioning rope is applicable to multiple working conditions. Different lengths are available up to the choice of users.
Specialized rope of diameter of 16 mm with extremely high safety factor, comfortable for operation.
Length: 4m, 8m, 20m
CE EN355, CE EN 354, CE EN813, GB24543–2009

钢丝绳柔性吊点 Cable anchor sling

LS–8–1 LS–8–1.5
用于设置临时吊点，钢丝绳外部有一层护套，避免磨损钢丝绳及与钢丝绳接触的设备，增强钢丝绳弯曲弹性，护套为耐磨材质。
长度：1m，1.5m
符合欧盟标准 CE EN354、CE EN795

Cable anchor sling is used to set up temporary anchor points. Coated with aprotective sheath, the wire rope of cable anchor sling does not contact directly with the fixture, so as the friction and wear between them can be avoided. The protective sleeve is made of wear–resistant material.
Length: 1m, 1.5m
CE EN354, CE EN795

LS–8A–1 LS–8A–1.5
不锈钢材质，可用于有防腐要求的地方。
长度：1m，1.5m
符合欧盟标准 CE EN 354, CE EN795

Made of stainless steel, used in the cases where corrosion prevention is required.
Length: 1m, 1.5m
CE EN354, CE EN795

尼龙吊带 Nylon sling

用于设置临时吊点
LS–02–0.3 LS–02–0.6
LS–02–1 LS–02–1.5
破断力：30kN
长度：0.3m, 0.6m, 1m, 1.5m
符合欧盟标准 CE EN566、CE EN795、CE EN354

Designed for setting up temporary anchor points.
LS–02–0.3 LS–02–0.6
LS–02–1 LS–02–1.5
Strength: 30kN
Length: 0.3m, 0.6m, 1m, 1.5m
CE EN566, CE EN795, CE EN354

绳索吊带 Rope sling

适合于风电设置速降器锚点
LS–05–1.2 LS–05–1.5
破断力：25kN
长度：1.2m,1.5m
符合欧盟标准 CE EN795

Suitable for setting anchors for wind power descent devices
LS–05–1.2 LS–05–1.5
Strength: 25 kN
Length: 1.2m,1.5m
CE EN795

限位工作绳
Work positioning ropes

PR–6010–1.5 PR–6010–1.8
配合符合EN358的安全带使用，通过安全带腰部对称挂点把工作人员固定在工作点，使工作人员能够解放双手进行操作。限位锁可以调节位置，从而调节限位工作绳长度；
与符合EN361标准的安全带挂点相连接，另一端与固定吊点相连，可以作为可调节安全绳使用；
特制绳索，适合于严酷的工业环境；
长度：1.5m，1.8m。
符合欧盟标准 CE EN358及国标 GB24543–2009

Work positioning rope is used in cooperation with the harness in accordance with EN358, to secure the worker at the working position through the bilateral attachment points of the harness, so that the worker can leave both hands free to perform operation. Adjust the length of the work positioning rope by tensioning device.
Work positioning rope can be used as the adjustable lanyard, when connected to the attachment point of harness in accordance with EN361 at one end, and to an anchor point at the other end.
Specialized rope, applicable to severe industrial conditions.
Length: 1.5m, 1.8m
CE EN358, GB24543–2009

PR–6020–1.5 PR–6020–1.8 PR–6020–2
专为电网设计，增加了耐磨套，配合定位带使用；
配合符合EN358的安全带使用，通过安全带腰部对称挂点把工作人员固定在工作点，使工作人员能够解放双手进行操作。限位锁可以调节位置，从而调节限位工作绳长度；
特制绳索，适合于严酷的工业环境；
长度：1.5m，1.8m，2.0m。
符合欧盟标准 CE EN358及国标 GB24543–2009

Designed for power grid by adding a wear–resistance sleeve, work positioning ropes is used in cooperation with the harness in accordance with EN358, to secure the worker at the working position through the bilateral attachment points of the harness, so that the worker can leave both hands free to perform operation. Adjust the length of the work positioning rope by tensioning device.
Specialized rope, applicable to severe industrial conditions.
Length: 1.5m, 1.8m, 2.0m
CE EN358, GB24543–2009

高空速降器
Automatic descending device

AEM-010

救援速降器
Rescue descending device

AEM-060

救援型下降器
Rescue descender

RD2

速降营救解决方案
Descent & rescue solution

ASAT高空速降器可以双方向使用，当一个人使用此设备降到地面后，在高处的人可以用另一端的两步锁与自己的安全带连接并速降，不用等待。

经过ASAT专业培训，可以利用高空救援速降设备实现任意高度停止、自控上升、双手离绳做营救等工作。

ASAT automatic descending/rescue device can be used bidirectionally.When a person has descended to the ground, another person at height can connect his harness with triple lock carabiner at the other end of the rope,descending in a constant speed without waiting.

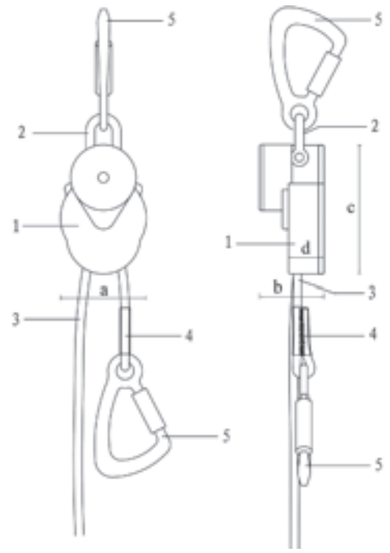
After passing ASAT professional training, the user can use the automatic descending/rescue device to perform operations of stop, selfcontrolled ascent, rescue with both hands away from the rope, and so forth at any height.

高空速降器
Automatic descending device

ASAT速降器AEM–010可用于高空速降，一次一人或两人匀速从高空工作面速降；
下降过程中操作人员可以控制上升端绳索速度控制下降速度。
当进行单次下降时：

- 最大负载250kg
- 单人下降高度可达500米

ASAT automatic descending device AEM–010 can be used in the descent from heights for one person or two persons quickly to the ground at a constant speed of 0.85m/s each time.
During the process of descent, the personnel can control the speed of descent by controlling the rope speed on the ascending side.
Maximum descent load: 250kg
Maximum descent distance: 500m for single person



1：壳体　2：连接扣　3：静态绳索　4：缝合终端　5：自锁挂钩
a:98mm　b:74mm　c:147mm　d:40.5mm

高空速降器
Automatic descending device

订货号：AEM–010
Model：AEM–010

符合标准：CE EN341：2011，Type 1*，Class A**，150kg
GB/T 38230–2019，Ⅰ型，A级，150kg

技术参数：
Technical data

◆ 壳体材料：高强航空铝
◆ 下降速度：1m/s
◆ 绳索种类：A 类静态绳索
绳索直径：9.6mm
绳索强度：25kN
最大下降高度：单人下降500米
最大下降负荷：双人（250kg）
本体重量：2.1kg
（要求锚点强度大于13kN）
Casing: Aviation Aluminum
Descending speed: 1m/s
Static rope of type A
Rope diameter: 9.6mm
Rope breaking strength: 25kN
Maximum descent distance: 500m for single person
Maximum descent load: 250kg for double persons
Weight of device: 2.1kg
(Required strength of anchor point is no less than 13kN)

注：
Type 1*：Automatic descender device (自动下降设备)
Class A**：Descent energy W more than $7{,}5 \times 10^6$ J
(下降能量W大于7.5×10^6 J)

救援速降器
Rescue descent device

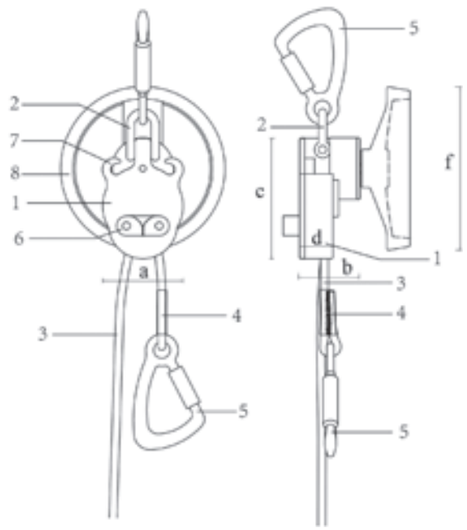
ASAT救援速降器AEM–060既可用于高空速降，也可以用于高空提拉救援；
速降时，一次一人或两人匀速从高空工作面下降；
救援时ASAT速降器AEM–060可用于提起坠落后锁住的工作人员，提升速度约0.5米/分钟，解锁后把受伤人员放下至地面。
下降及救援过程中操作人员可以通过控制上升端绳索速度控制下降速度。
ASAT rescue descent device AEM–060 can beused both in quick descent at heights and rescue.
In emergency, one or two personscan quicklydescend from the working position at height by the device.
For rescue, ASAT rescue descent device AEM–060 can be used to lift up the casualty secured on a fall arrester afterfalling at the lifting speed of about 0.5m/min and then to lower the casualty down to the ground after releasing from the fall arrester.
During the process of descent and rescue, thepersonnel can control the speed of descentby controlling the rope speed on the ascending side.

During each descent
Maximum descent load: 250kg
Maximum descent distance: 600m for single person

救援速降器
Automatic descending device

订货号：AEM–060
具有救援功能
符合标准：
CE EN341:2011，Type 1*，Class A**，150kg
CE EN1496:2017，Class A***，150kg
GB/T 38230–2019，Ⅰ型，A级，150kg

Model: AEM–060
With rescue wheel
CE EN341:2011, Type 1*, Class A**, 150kg
CE EN1496:2017, Class A***, 150kg
GB/T 38230–2019，Ⅰ型, A级, 150kg



1：壳体 2：连接扣 3：静态绳索 4：缝合终端
5：自锁挂钩 6：锁绳器 7：绳索导向器 8：手轮
a:98mm b:74mm c:147mm d:40.5mm f:200mm

技术参数：
Technical data

- 壳体材料：高强航空铝
- 下降速度：1m/s
- 绳索种类：A 类静态绳索
- 绳索直径：9.6mm
- 绳索强度：25kN

最大下降高度：单人下降500米
最大下降负荷：最大双人（250kg）
额定提升负荷：150kg
最大提升重量：250kg
本体重量：2.6kg
（要求锚点强度大于13kN）
Casing: Aviation Aluminum
Descending Speed: 1m/s
Static rope of type A Rope
Diameter: 9.6mm
Rope breaking strength: 25kN
Maximum descent distance: 500m for single person
Maximum descent load: 250kg for double persons
Rated load: 150kg
Max rated load: 250kg
Weight of device: 2.6kg
(Required strength of anchor point is no less than 13kN)

注：
Type 1*: Automatic descending device (自动下降设备)
Class A**: Descent energy W up to $7{,}5 \times 10^6$ J
(下降能量W大于7.5×10^6J)
Class A***: The rescuer can lift a casualty or himself from a lower position to a higher position by the device
（救援人员利用它从低处到高处来提升被救人员或者他自己）

救援型下降器
Rescue Descender

RD2是一款内置高效滑轮的自动制停下降器，设计用于救援，和有经验的绳索作业使用者。
当有经验的作业者使用时，自动制停机构能快速精确地在绳索上进行定位，单向转动的滑轮能带来轻松顺滑的上升。
当在锚点上使用时，RD2能在下放和提拉间快速转换，内置的高效滑轮能带来88%的1:1提拉效率。
副连接孔可以用于设置不同的高效提拉系统。
侧板的开关，可以让操作者不从系统上取下RD2，就能在RD2上进行绳索的安装或拆卸。
人体工程学手柄能进行舒适的控制，可用于双受力绳索系统。手柄上的孔可以连接辅绳进行远距离控制。
RD2可以为单纯单向滑轮在提拉时作为变向滑轮使用。
无防恐慌功能，在斜面或低重量使用时可以顺滑轻松地下放。
高硬度钢制摩擦槽提高了耐用性。
两种颜色可选，红色和黑色。

It is a self– braking descender with integrated high efficiency pulley. Designed for rescue, rope access work and experienced users.

For experienced workers used as a personal descender, the self–braking mechanism allows fast and precise positioning on rope. Easy and smooth ascending, thanks to one–way rotation pulley.

When used on the anchor, fast shift between lowering and hauling. The integrated high efficiency pulley provides up to 88% efficiency on 1:1 hauling.

The becket hole allows setting up different mechanical advantage system.

The safety–gate on side plate helps the user to install/uninstall the rope without removing the RD2 from the harness and anchor.

The ergonomic handle allows comfortable controlling and using on Twin Tension Rope Systems. The hole in the handle for distance control cord connection.

The unique frame structure allows RD2 to be used as a single one–way rotation pulley for change of direction on hauling. And a block pulley to add friction on lowering.

No anti–panic function, for a better and smooth lowering on inclined surface and light weight loading.
Hardened steel wear groove improves durability.

Two colors available: red and black.

RD2

功能参数

- 最大载荷：150kg
  The maximum load: 150kg
- 救援载荷：200kg (下降速度≤0.5m/s)
  WLL: 200kg, descent speed≤0.5m/s
- 绳索种类：10.5–11mm，符合CE EN1891:1998
  的A类静态绳索
  Static ropes of 11mm diameter, in accordance with EN1891
  Type A
- 重量：790g　　Net weight: 790g
- 符合欧盟标准：CE EN12841:2006、XF 494–2004
  Executive standard: CE EN12841:2006, XF 494–2004

RD2（工业版）

RD2（军警版）

Safly V/C 系列 垂直防坠系统
Safly V/C series vertical fall protection system

- Safly V/C系列垂直防坠系统是一款垂直方向上无间断保护的绳索式防坠落装置，符合EN353-1标准。
- Safly V/C系列垂直防坠系统可用于塔筒、塔架、压力容器、桥墩、桅杆、天线杆、建筑物。止跌扣安装在垂直钢丝绳上，并与工作人员的安全背带相连接。若发生跌落，止跌扣会锁止在垂直钢丝绳上，避免事故发生。该系统用于保护人员在高空或井下作业的安全。

The Safly V/C series vertical fall protection system is atype of cable system that provides continuous protection in the vertical direction, conforms to the EN353-1.

The Safly V/C series vertical fall protection system is designed for climing the wind turbine towers, transmission towers, pressure vessels, piers, masts, antenna poles, and buildings. The vertical fall protection system is connected to the users with the fall arrester. Users move up and down easily and smoothly along the system. Once a fall occurs, the fall arrester will be rapidly locked onto the lifeline, the shock absorber of fall arrester will be opened, to minimise the impact force acted on the user. The system is designed for protecting the safety of persons working at heights and performing downhole operation.

止跌扣 Fall Arrester

钢丝绳止跌扣 Guided type fall arrester for steel wire cable

STG-1
STG-1配合8-9mm钢丝绳使用；
止跌扣产品本体采用不锈钢和铝合金，耐腐蚀，强度高；
打开结构为联锁式两个操作步骤的打开结构，操作方便，安全可靠；
产品包含缓冲包，能够保证对人体的冲坠力小于6kN；
正常使用情况下，止跌扣沿钢丝绳上下行走顺畅；
锁止距离短，锁止灵敏，保证人员的坠落距离小；
连接结构长度合理，符合现场人员的使用习惯；
止跌扣具有万向节，使用起来更方便；
能够在垂直防坠系统上任意位置拆装。
符合欧盟标准 CE EN353-1：2014、CE EN353-2：2002及国标 GB/T 24537-2009

STG-1 is compatible with 8-9mm steel wire cable.
The body is made of stainless steel and aluminum alloy, corrosion resistance and high strength.
Opening requires two interlocking steps, which is easy to operate, safe and reliable.
Consists of shock absorber pack, which can ensure that the impact force on the human body is less than 6kN.
As long as the operation is reasonable, the device will sliding along the cable smoothly .
The locking distance is short and the locking is sensitive, which minimise the impact force acted on the use in the event of fall.
The connection structure is reasonable in length and meets the usage habits of field personnel.
Equipped with Swivel, it is more convenient to use.
Can be attached or removed conveniently at any position of the Vertical rail lifeline system.
CE EN353-1: 2014, CE EN353-2: 2002, GB/T 24537-2009

钢丝绳止跌扣 Guided type fall arrester for steel wire cable

STG-1A
与STG-1功能相同，配合8-10mm钢丝绳使用
符合国标标准 GB/T 24537-2009

Same function as STG-1, compatible with 8-10mm steel wire cable.
GB/T 24537-2009

轨道止跌扣 Fall arrester

SRL–01

止跌扣产品本体采用高强度航空铝合金，耐腐蚀，强度高；
打开结构为连续两动作的打开结构，操作方便，安全可靠；
产品包含缓冲包，能够保证对人体的冲坠力小于6kN；
正常使用情况下，止跌扣沿轨道上下行走顺畅；
锁止距离短，锁止灵敏，保证人员的坠落距离小；
连接结构长度合理，符合现场人员的使用习惯；
止跌扣具有万向节，使用起来更方便；
能够在垂直防坠系统上任意位置拆装。
符合欧盟标准 CE EN353–1：2014及国标 GB 24542–2009

The body is made of stainless steel and aluminum alloy, corrosion resistance and high strength.
Two consecutive actions can open the structure,
which is easy to operate, safe and reliable.
Consists of shock absorber pack, which can ensure that the impact force on the human body is less than 6kN.
As long as the operation is reasonable, the device will sliding along the cable smoothly .
The locking distance is short and the locking is sensitive, which minimise the impact force acted on the use in the event of fall.
The connection structure is reasonable in length and meets the usage habits of field personnel.
Equipped with Swivel, it is more convenient to use.
Can be attached or removed conveniently at any position of the Vertical rail lifeline system.
CE EN353–1: 2014, GB 24542–2009

内卡式轨道止跌扣 Fall arrester

SRC–02

内卡式轨道止跌扣SRC–02 是一种配合C型导轨使用的轨道坠落防护装备；
本体采用高强度航空铝合金，质量轻强度高；
本体上设置多组导向轮，滑行顺畅，耐磨损；
包含缓冲包，正常使用能够保证对人体的冲坠力小于6kN；
正常使用情况下，内卡式轨道止跌扣SRC–02沿轨道上下行走顺畅；
锁止距离短，锁止灵敏保证人员的坠落距离小；
采用的材料都具有很好的耐腐蚀性；
连接结构长度合理，符合现场人员的使用习惯；
重量：745g；
额定载荷：45~100kg ；
材质：铝合金、不锈钢；
工作环境温度：–40℃∽+60℃。
符合欧盟标准 CE EN 353–1：2014及国标 GB 24542–2009

SRC–02 guided type fall arrester is a rail fall arrest equipment that operates in conjunction with C series guide rail.
The main body of SRC–02 guided type fall arrester is made from high–strength aerospace aluminum alloy, featuring light weight and high strength.
SRC–02 guided type fall arrester contains an energy absorber, guaranteeing that the falling impact force on human body is less than 6kN.
SRC–02 guided type fall arrester moves up and down smoothly along the rail, and no accidental sticking will occur.
Sensitive lock–up, the locking distance is less than 120mm, guaranteeing a reasonable falling distance of operators.
All materials used have good corrosion resistance.
The length of the connecting structure is reasonable, in line with the using habits of on–site personnel.
The safety hook has a universal joint, easy to use.

Weight: 745g
Rated load: 45~100kg
Material: mainly aluminum alloy, stainless steel
Temperature: –40℃∽+60℃
CE EN 353–1: 2014, GB 24542–2009

尼龙绳止跌扣 Mobile fall arresters

RG–10–12 配合10.5–11mm直径，符合EN1891标准的A类静态绳使用；滑动顺畅，自动锁止灵敏。
符合欧盟标准 CE EN353–2、CE EN12841–A、及国标 GB/T24537–2009、XF 494–2004

Compatible with static rope of ϕ10.5–11mm, conforming to EN1891 A. Normally the fall arrester moves freely along the rope with the user.
In case a fall or accelerated descent occurs, the fall arrester will lock on the rope to arrest the user.
Can be attached on or removed from the rope at any position.
CE EN353–2, CE EN12841–A, GB/T24537–2009, XF 494–2004

尼龙绳止跌扣 Mobile fall arresters

RG02–11–13 配合10–13mm直径，符合EN1891A 标准的A类静态绳使用；正常使用情况下，无论是垂直或倾斜，均能跟随使用者移动；
发生坠落、下滑或不受控制的下降时，设备自动锁止并停止下坠；
重量：295g。
符合欧盟标准 CE EN353–2、CE EN12841–A

RG02–11–13
Compatible with static rope of ϕ10–13mm, conforming to EN1891 A. Normally the fall arrester moves freely along the rope with the user.
In case a fall or accelerated descent occurs, the fall arrester will lock on the rope to arrest the user.
Can be attached on or removed from the rope at any position.
Weight: 295g
CE EN353–2, CE EN12841–A

脚踏带 Foot Strap

LFA–15
脚踏处采用双层织带，硬挺便于穿脱；
长度：800–1300mm；
载荷：300kg；
采用22mm迪尼玛织带；
采用Φ5mm迪尼玛低弹力绳索。

The footrest is made of double–layer webbing, which is stiff and easy to put on and take off.
Length: 800–1300mm
Load: 300kg
Using 22mm Dyneema webbing
Adopt Φ5mm Dyneema low elastic rope

缓冲器 Energy absorber

LE–06
缓冲器用于吸收使用者发生坠落时所产生的冲击力，从而减轻坠落对人员造成的影响；
长度：15cm。
符合欧盟标准 CE EN355及国标 GB/T24538–2009

Energy absorber is designed to mitigate the impact force to the user in case of falling.
Length: 15cm
CE EN355, GB/T24538–2009

密封型速差器
Sealed Self-Retracting Lifeline

ASAT密封型速差器采用分舱结构，将离心锁止结构与缓冲吸能装置等核心机构置于密封舱内，使油、水、气、尘等外界环境与之完全隔离，即使处于恶劣环境，锁止性能也丝毫不受影响；
ASAT密封型速差器特别适用于高盐、高湿、高粉尘等海上、仓储环境，本体采用铝合金及不锈钢材质，耐盐碱、耐寒暑、耐紫外线，可适应海上的恶劣环境；
ASAT密封型速差器钢丝绳采用不锈钢材质，经2000h盐雾试验无锈蚀，5mm直径，强度更高，使用更安心；
ASAT密封型速差器配备大载荷高可靠性的内置缓冲吸能装置，采用大摩擦盘设计，150kg载荷坠落时的冲击力可以稳定控制在6kN以下。在跌落后的自救或救援过程中，如果发生再次坠落，内置缓冲器仍可正常将冲击力控制在6kN，使用与救援安全无忧；
ASAT密封型速差器特殊设计的离心锁止结构，可自动适应不同载荷，大幅减少坠落时的跳动，锁止迅速；
ASAT密封型速差器为海上风电专门设计的吊耳，可与风电塔基实现多种方式的直接连接，避免使用吊带、连接器连接，从而大幅减小速差器在海风中的摆动。吊耳兼具缓冲吸能功能；
ASAT密封型速差器经过1000次全行程拉出与回缩测试；2000次可靠性测试，稳定性好；
ASAT密封型速差器整机静态测试强度高达16kN(国标及欧标要求12kN)；
ASAT密封型速差器配备360° 可旋转安全钩，有效杜绝钢丝绳自身扭结；标配牵引绳，方便使用。

ASAT sealed Self-Retracting Lifeline uses separated inner space, the centrifugal locking mechanism, energy absorption unit and other core mechanisms are sealed in an individual case to completely isolate oil, water, air, dust and other external environments from it. Even in harsh environments, the locking performance will not be affected at all.
ASAT sealed Self-Retracting Lifeline is especially suitable for high salt, humidity, dust and other offshore or storage environments. The frame is made of aluminum alloy and stainless steel, which is resistant to salt, alkali, cold and heat, and UVs, and can adapt to the harsh marine environment.
ASAT sealed Self-Retracting Lifeline uses stainless steel wire cable, which has passed the 2000h salt spray test without rust. Safer use with 5mm high strength wire cable.
The ASAT sealed Self-Retracting Lifeline is integrated with a high load energy-absorbing device with high reliability. It adopts a large friction disc design, and the impact force can be stably controlled below 6 kN with a 150 kg load falls. If another fall occurs during self-rescue or rescue after a fall, the energy-absorbing device can still control the impact force at 6 kN, with a high safety margin.
The ASAT sealed Self-Retracting Lifeline has a specially designed centrifugal locking mechanism that can automatically adapt to different loads, greatly reducing vibration during arresting fall and locking quickly.
The attachment point of ASAT sealed Self-Retracting Lifeline is specially designed for offshore wind turbine, which can be directly connected to the wind turbine tower foundation in various ways, instead of using of sling and connectors, greatly reducing the swing in the sea wind. The attachment point can also absorb the impact force.
The ASAT sealed Self-Retracting Lifeline has passed 1,000 cycles retraction tests; 2,000 times of reliability tests, with good stability.
The static test of ASAT sealed Self-Retracting Lifeline reaches 16 kN (the GB national standard and the European standard require 12kN).
The ASAT sealed Self-Retracting Lifeline is equipped with a 360° swivel connecter, prevent the wire rope from twist. And equipped with a traction cord, easy to use.

防坠器 Sealed Self-Retracting Lifeline

FAS-0106
铝合金外壳，双缓冲结构；
锁止机构和摩擦缓冲机构置于密封舱内；
工作长度：6m；重量：8.3kg；
钢丝绳材质：316不锈钢；直径：5mm；
360° 可旋转连接器，材质：铝合金及不锈钢。
符合欧盟标准 CE EN360:2002
及国标 GB 24544-2009

Aluminum alloy shell, double energy absorbing mechanism.
The locking and energy absorbing mechanisms are placed in a sealed case.
Working length: 6m
Wire rope material: 316 stainless steel . Diameter: 5mm
360° swivel connecter. Material: light alloy and stainless steel.
Weight: 8.3kg
CE EN360: 2002, GB 24544-2009

防坠器 Sealed Self-Retracting Lifeline

FAS-0110
铝合金外壳，双缓冲结构；
锁止机构和摩擦缓冲机构置于密封舱内；
工作长度：10m；
钢丝绳材质：316不锈钢；直径：5mm；
360° 可旋转连接器，材质：铝合金及不锈钢；重量：9.3kg。
符合欧盟标准 CE EN360:2002
及国标 GB 24544-2009

Aluminum alloy shell, double energy absorbing mechanism.
The locking and energy absorbing mechanisms are placed in a sealed case.
Working length: 10m
Wire rope material: 316 stainless steel . Diameter: 5mm
360° swivel connecter.Material: light alloy and stainless steel.
Weight: 9.3kg
CE EN360: 2002, GB 24544-2009

防坠器 Sealed Self-Retracting Lifeline

FAS-0115
铝合金外壳，双缓冲结构；
锁止机构和摩擦缓冲机构置于密封舱内；
工作长度：15m；
钢丝绳材质：316不锈钢；直径：5mm；
360° 可旋转连接器，材质：铝合金及不锈钢；重量：9.8kg。
符合欧盟标准 CE EN360:2002
及国标 GB 24544-2009

Aluminum alloy shell, double energy absorbing mechanism.
The locking and energy absorbing mechanisms are placed in a sealed case.
Working length: 15m
Wire rope material: 316 stainless steel . Diameter: 5mm
360° swivel connecter.Material: light alloy and stainless steel.
Weight: 9.8kg
CE EN360: 2002, GB 24544-2009

防坠器 Sealed Self-Retracting Lifeline

FAS-0120
铝合金外壳，双缓冲结构；
锁止机构和摩擦缓冲机构置于密封舱内；
工作长度：20m；
钢丝绳材质：316不锈钢；直径：5mm；
360° 可旋转连接器，材质：铝合金及不锈钢；重量：11.5kg。
符合欧盟标准 CE EN360:2002
及国标 GB 24544-2009

Aluminum alloy shell, double energy absorbing mechanism.
The locking and energy absorbing mechanisms are placed in a sealed case.
Working length: 20m
Wire rope material: 316 stainless steel . Diameter: 5mm
360° swivel connecter.Material: light alloy and stainless steel.
Weight: 11.5kg
CE EN360：2002, GB 24544-2009

绳索 Ropes

静态绳索
Static rope

AR-TS03-11
用于高空作业的低延展性静态绳索，标准直径，易于操作；尤其适合与机械配合做长距离下降及拖拽。符合EN1891A类标准；
直径：11mm；
延展率：3%；
重量：75g/m；
破断负荷：32kN。

It is the perfect companion for work and rescue operations at great heights. This highly static rope is certied to EN 1891 A and features particularly low stretch and high breaking forces. It is very exible , feels good to hold and is characterized by very good knot ability.
Diameter: 11mm
Elongtation: 3%
Weight: 75g/m
Breaking strength: 32kN

机械类静态绳索
Static ropes

AR-TS01-9.6
ASAT速降器设计的低延展性静态绳索，与ASAT速降器配合可以做长距离、重复逃生下降。符合EN1891A类标准；
直径：9.6mm；
延展率：4%；
重量：61g/m；
破断负荷：25kN。

It is the perfect companion for work and rescue operations at great heights. This highly static rope is certied to EN 1891 A and features particularly low stretch and high breaking forces. It is very exible , feels good to hold and is characterized by very good knot ability.
Diameter: 9.6mm
Elongtation: 4%
Weight: 61g/m
Breaking strength: 25kN

水上救援绳索
Water rescue rope

AR-TT02
ASAT水上救援绳索专为水上迅速救援设计；
破断力大；在水中可漂浮；特殊黄色设计保证高可视性；抓握性好，操作舒适；
直径：12mm；
延展率：2.6%；
破断负荷：16kN。

The water rescue ropes are specially designed for swift-water rescue.
The floating rope with High load capacity and high visibility yellow color.
Good grip ability and comfort to operation.
Diameter: 12mm
Elongtation: 2.6%
Breaking strength: 16kN

绳索保护套 Rope protective sleeves

RP-0140 RP-0180
长度：40/80cm；
柔性绳索保护套；耐用PVC材质可在绳索任意位置快速便捷安装固定。

Length: 40cm、80cm
Made of high-quality PVC, flexible, used to protect a rope at any section conveniently.

金属件 Hardware

类别 Category	产品图片 Picture	名称 Name	型号 Model	材质 Material	适用绳索尺寸 Rope diameter(mm)	重量 Weight (g)	最小破断力 Min breaking load(kN)	执行标准 Standard
分力板 Rigging plate		分力板 Rigging plate	HRP–0101	航空铝合金 aluminum	–	70	36	UIAA 130
		分力板 Rigging plate	HRP–0103	航空铝合金 aluminum	–	210	40	UIAA 130
		分力板 Rigging plate	HRP–0105	航空铝合金 aluminum	–	467	46	UIAA 130
滑轮 Pulleys		开放式小滑轮 Ultra compact pulley	HPA0101	铝 aluminum	Max.13	158	35	EN12278
		多用途小滑轮 Versatile compact pulley	HPA0201	铝 aluminum	Max.13	88	28	EN12278
		双滑轮 Double pulley	HPA0301	铝 aluminum	Max.13	340	40	EN12278
上升器 Ascent		胸式上升器 Sternal ascent locking device	HAC–03		Max.13	147		EN567 EN12841 type B
		手式上升器 Ascent handle	HAL–01 HAR–01		8–13mm	210		EN567

类型 Category	产品图片 Picture	名称 Name	型号 Model	认证 Certification	整体尺寸 Size(mm)	最大开度 Max gate pening(mm)	最小破断力 Min breaking load	重量 Weight(g)
铝制金属环 Aluminum carabiners		三步锁 Triact-lock carabiner	HA–0201	EN12275:2013 EN362:2004	110x61	18	25	86
		三步锁 Triact-lock carabiner	HA–0202	EN362:2004	134x73	20	23	93
		三步锁 Triact-lock carabiner	HA–0203	EN12275:2013 EN362:2004	124x74	23	25	114
		三步锁 Triact-lock carabiner	HA–0205	EN12275:2013	116x68	23	30	82
		万向节设计 Screw-lock carabiners with swivel	HA–0103	EN362:2004 EN12275	178x79	24	22	207
钢制金属环 Steel carabiners		螺纹锁设计 Screw-lock carabiner	HS–0101	EN362:2004	108x58	18	23	191
		两步锁设计 Twist-lock carabiner	HS–0104	EN362:2004	108x56	19	23	191
		两步锁设计 Twist-lock carabiner	HS–0106	EN362:2004	138x78	22	50	286

安全帽 Helmets

工业专用安全帽 Industrial helmets

六点式网格内衬，佩戴舒适；强力外壳具有一定弹性，发生冲击时，通过外壳形变以化解冲击力。
With six-point suspension, HM1401 helmet offers maximum comfort and can mitigate the impact fore to the user's head by the deformation of the shell.

工业专用安全帽 Industrial helmets

尺寸：53-63cm　重量：430g

HM1401-R

HM1401-B

HM1401-W

HM1401-Y

CE EN397

尺寸：54-62cm　重量：440g

HM2401-R

HM2401-B

HM2401-W

HM2401-Y

CE EN 12492:2012、CE EN 397、CE EN 50365:2002

安全帽防护面罩 Protective shields for helmet

GM-0102

GM0101

头灯 Headlamp

HL150050

采用CREE XM-L2 U2 LED，具有180度有效照明范围
高效率恒流电路，高达1000流明高亮度输出，最长680小时续航时间
五种亮度和3种特殊功能可选
自动报电压功能（精确到0.1V）
Employing CREE XM—L2 (T6), max brightness 180 degree. Sliding lever and single-handlely .
High efficiency constant current circuit, with 1000 lumens bright headlight output.
Max autonomy: 680 hours. Universal lighting design.
Five brightness and three functions are optional.
Automatic reporting function (accurate to 0.1V)

包 Bags

高级防水工具包：双肩防水方底包，500DPVC材质，蓝色；无缝接合，防水材质，精心设计的背负系统，背负重物体感舒适；
型号：BT-302060，负载：50kg；
尺寸：底部方形,长29cm,宽19cm；打开高度68cm。
Professional waterproof tool backpack: waterproof square bottom, 500D PVC material, blue color; seamless construction, waterproof material, well-designed carrying system, comfortable to carry heavy load.
Model: BT-302060, Maximum load: 50 kg
Size: square bottom, length 29cm, width 19cm; opened height 68cm.

双肩防水工具包：双肩防水圆包，500DPVC材质，橘色；无缝接合，防水材质，简易背负系统；
型号：BD-28085，负载：40kg；
尺寸：底部圆形,直径28cm，打开高度80cm。
Waterproof tool backpack: waterproof cylindrical backpack, 500D PVC material, orange color; seamless construction, waterproof material, simple carrying system.
Model: BT-28085. Maximum load: 40kg. Size: Round bottom, 28cm in diameter, opened height 80cm.

双肩防水工具包：双肩防水圆包，500DPVC材质，橘色；无缝接合，防水材质，简易背负系统；
型号：BD-30080，负载：50kg；
尺寸：底部圆形,直径31cm，打开高度80cm。
Waterproof tool backpack: waterproof cylindrical backpack, 500D PVC material, orange color; seamless construction, waterproof material, simple carrying system.
Model: BT-30080, Maximum load: 50kg.
Size: Round bottom, 31cm in diameter, opened height 80cm.

单肩防水工具包：单肩防水圆包，500DPVC材质，橘色；无缝接合，防水材质，简易背负系统；
型号：BD-28060，负载：30kg；
尺寸：底部圆形,直径28cm，打开高度63cm。
Waterproof tool shoulder bag: waterproof cylindrical shoulder bag, 500D PVC material, orange color; seamless construction, waterproof material, simple carrying system.
Model: BT-20060, Maximum load: 30kg.
Size: Round bottom, 28cm in diameter, opened height 63cm.

手提工具包：主体材质为双层涤纶,黑色；包两侧各有1个提手，使用方便；
型号：BT-30040S，负载：30kg；
尺寸：底部圆形,直径30cm，高度40cm。
Handbag: double-layer polyester material, black color; one handle on each side, easy to use.
Model: BT-30040S, Maximum load: 30kg.
Size: Round bottom, 30cm in diameter, height 40cm.

耐磨吊装包：材质为耐磨尼龙布；容量大，耐磨，适合吊装运输需要保护的设备；
型号：BL-40085，负载：300kg；
尺寸：底部圆形,直径40cm，高度85cm。
Durable lifting bag：wear-resistant nylon material, large capacity, wear-resistant, for equipment lift, transportation and protection.
Model: BT-40085, Maximum load: 300kg.
Size: Round bottom, 40cm in diameter, height 85cm.

担架 Litter

AS8

AS8-S

此担架的构造着眼于急救的特殊性，如崎岖的山区、空中或海上救援；框架坚固耐用，简便可靠的装置让操作人员能够安全快捷的采取急救措施；实现野外救援；担架配有可调节的担架吊带套装，材质采用无毒无污染的材料，具有防火和耐磨损性能，AS8-S可拆分成两个部分，便于携带。
Its reliable fittings enable first-aid personnel to operate rapidly and safely. With its special sling eauipment, the stretcher is ideal for lifting and transport by helicopter.
It has an adjustable feet-securing mechanism, safety belts and a mattres.
It is also designed for to be secured inside the helicopter.
All the materials used have dimensions suitable to work and they are fire-proof.
They don't release any toxic or polluting substances and they a protected to obtain high resistance to wear and corrosion.

	展开尺寸 Open size	折叠尺寸 Folding size	自重 N.W
AS8	218*62*18cm	-	17kg
AS8-S	218*64*18cm	123*64*22cm	18kg

担架吊带套装配置表 LST-0402-6
Recommeded configuration for stretcher sling set LST-0402-6

名 称 Name	型 号 Model	数 量 Qty
尼龙吊带 Nylon sling	LS-04-0.6	2
尼龙吊带	LS-02-0.3	4
金属环 Carabiners	HS-0101	6
分力板 Rigging plates	HRP-0101	1

MINI版安快特
Powered Ascending Device

ACE-31

安快特MINI版，本体重量仅8kg，可装在背包里随身携带；
最大负载210kg，无级变速，遥控距离180米；
电池可拆卸，携带多块电池，不受续航里程限制；
可以垂直、横渡、斜向运动；
具有遥控对讲功能；
尺寸：26cm*16cm*24cm；
拥有迷你版安快特，你将卸掉负重，轻装前进。
MINI Powered Ascending Device, gross weight of 8kg, which is compacted and can be stored in a backpack.
Maximum load of 210kg, continuously variable speed, 180m remote control.
Swappable battery.
Running in any direction, including vertically, horizontally and in high angles.
With remote control and intercom.
Size: 26cm*16cm*24cm.

可用于众多领域：
Applications:
◆ 风电叶片维修 Wind turbine blade maintenance
◆ 电网高空不带电作业 Power grid maintenance
◆ 电厂检修作业 Power plant maintenance
◆ 桥梁检查 Bridge inspection
◆ 高楼建筑维护 High buildings cleaning and maintenance

产品性能 Product performance

绳索 Rope	专用静态绳索（EN1891A 直径11mm） Static rope Φ11mm EN1891A
额定载荷 Rated working load	120kg
最大载荷 Working load limit	210kg
工作方式 Operation mode	垂直上升/ 下降、横渡、斜拉上升/ 下降 Ascending and descending vertically/traversing horizontally/ traversing inclinedly
上升速度 Ascending speed	0–30m/min
下降速度 Descending speed	0–40m/min
可拆卸电池 Swappable battery	√
电池 Standard battery	2.0kg
本体重量 Weight	8.0kg（不含电池 without battery）
外型尺寸 Size	26×16×24cm
行程（垂直运行时） Running distance (with standard battery)	往复行程400m（120kg）; 持续行程160m（120kg） 400m@120kg travel compacity of ascending and descending alternatively, 160m@120kg travel compacity of ascending continuously
遥控/对讲距离 Remote control/ intercom range	0～180m（空阔环境 open space）
充电时间 Charging time	＜60min
整机防护等级 Ingress Protection	IP54
温度范围 Operating temperature range	–20℃~+60℃

安全帽 HM1401

安全带 D–10503

手式上升器
HAL–01 & HAR–01

下降器 RD2

分力板
HRP–0105

绳索止跌扣 RG–10–12

金属环 HS–0101

脚踏带 LFA–15

座板 DS–01

座椅 DSA–01

通用版安快特
Powered Ascending Device

ACE–01

负载大，行程长是其主要特点；
能够满足大多数环境对于上升、下降、横渡、安全性和可靠性的需求。
使用通用版安快特，检查和维修养护人员可以安全、高效、经济的方式，轻松上升、下降和横渡。

Heavy load and long running distance are the main features of this equipment;
Meet the needs of most environments for ascent, descent, in any direction, safety and reliability.
By using the ASAT powered ascending device, the inspection and maintenance personnel can ascend, descend or in any direction easily in a safe, efficient and economic manner, which is the optimal choice for the places difficult to access and impossible to access in other manners.

适用于众多工业领域：
Powered ascending device could be applied for many industries:

- ◆ 清洁能源行业 Renewable energy
- ◆ 电信和电力行业 Energy and network
- ◆ 检修行业 Inspection and maintenance
- ◆ 救援 Rescue
- ◆ 高楼清洁维护 Cleaning and maintenance of high buildings

产品性能 Product performance

绳索 Rope	专用静态绳索 (EN1891A 直径11mm) Static rope Φ11mm EN1891A
额定载荷 Rated working load	200kg
最大载荷 Working load limit	280kg
上升速度 Ascending speed	0–30m/min (无级调速 Stepless speed)
下降速度 Descending speed	0–40m/min (无级调速 Stepless speed)
横渡速度 Traversing speed	0–30m/min (无级调速 Stepless speed)
行程 (垂直运行时) Running distance(Vertical)	往复行程700m (150kg); 持续行程300m (150kg) 700m@150kg travel compacity of ascending and descending alternatively, 300m@150kg travel compacity of ascending continuously
单次充电时间 Charging time	<60min
温度范围 Operating temperature range	–30℃~+60℃
过热保护 Overheat protection	√
本体重量 Weight	14.6kg
电池重量 Standard battery	3.4kg
外型尺寸 Size	30×23×35cm
抗摔能力 Fall protection	0.5m (水泥地面 concrete ground)
遥控距离 Remote control range(L)	0~150m (空阔环境 open space)
手动下降功能 Manual descending	√
可拆卸电池 Swappable battery	√
整机防护等级 Ingress Protection	IP56
CE认证 CE certification	√

安全带 D–10402

连接装置 LYD–3010

限位工作绳 PR–6010

缓冲器 LE–06

下降器 RD2

机械静态绳索 AR–TS系列

座板 DS–01

绳索止跌扣 RG–10–12

金属环 HS–0101

座椅 DSA–01

风电高空培训方案
Wind energy Working At Height training plan

1 定期的高空作业培训——真正安全的保障

针对风电行业作业高度高，作业频繁的特点，国际通用办法是定期重复进行专业的高空作业培训，以不断强化作业人员安全意识，提高作业技能。

塞卡尔（SKYER）培训团队针对风电作业特点设置风电培训一级培训、二级培训、海上逃生与救援培训，对通过培训人员发放塞卡尔（SKYER）公司培训证书。

风电培训一级课程，目的是让风电高空工作人员掌握如何正确使用 PPE 个人高空作业防护用品，并能够熟练操作；同时要有高空作业营救和逃生的基本知识。

风电培训二级课程，内容包括：团队救援、担架救援、安快特救援。为风场培养专业的应对、处理突发高空事故的人员，在突发事故时能冷静应对，迅速处理。

风电海上逃生与救援课程，目的是认识海上风机高空救援和逃生的特殊性与重要性，掌握海上风机营救逃生器材的使用以及转运伤员的方法。

塞卡尔（SKYER）培训团队自 2004 年开展高空培训以来，经过近二十年的发展，已形成每年培训过千人次能力；累计为风电及其他行业培训万余人次。

塞卡尔（SKYER）培训团队已经多次为华能新能源、大唐新能源、国华新能源、华电新能源、国电投新能源、中广核新能源、金风、海装、南车、湘电、华锐、VESTAS SUZLON REPOWER NORDEX 等风电行业客户进行了培训。

2 培训相关资质及证书

SKYER-塞卡尔(北京)工业技术有限公司是 SPRAT(国际绳索作业技术协会)合作会员单位,SKYER-塞卡尔公司经过 SPRAT(国际绳索作业技术协会)严格审核,可以为高空作业人员提供高空自救、救援培训,经过培训并考试合格可以获得SKYER-塞卡尔公司颁发的资质证书。

SKYER-塞卡尔公司的高空培训团队,构建于2004年。

SKYER-塞卡尔高空培训团队多年来系统化地与SPRAT开展合作,团队目前有四名SPRAT三级培训师;一名SPRAT二级培训师;多名SPRAT一级培训师;

SKYER-塞卡尔高空培训团队广泛与国内外救援、探险等组织合作;

SKYER-塞卡尔高空培训团队获得AXCESS RESCUE救援机构的高级绳索救援证书;

SKYER-塞卡尔高空培训团队获得AXCESS RESCUE救援机构的消防救援证书;

SKYER-塞卡尔高空培训团队获得海上石油作业安全救生培训证书;

SKYER-塞卡尔高空培训团队获得野外高级急救证书;

SKYER-塞卡尔高空培训团队获得中海油系统颁发的海上作业安全救生培训证书;

SKYER-塞卡尔高空培训团队经过近二十年的现场及基地培训磨练,积累了大量的风电、电网、水电、火电、石化、消防等行业的高空工作、救援经验,是国内工业领域最专业的高空作业培训团队。

SKYER-塞卡尔高空培训团队目前已经为风电、电网、石油、石化等行业制定出高空作业、高空逃生、高空救援的系统方案;同时也为高层楼房逃生救援、山地救援制定出系统方案。

SKYER-塞卡尔高空培训团队可以根据客户的实际需求,通过现场考察交流,为客户量身打造符合自己需求的培训内容和个性化方案。