

ADRENALINE
CONSTRUCTIONS



Excellence in Zip line.



ADRENALINE
CONSTRUCTIONS

**The only
limit is your
imagination.**

A great story

always begins with a journey.

2005

On a trip to Costa Rica we discovered the Zip line, an adrenaline-filled experience immersed in the wilderness. Since there we understood that we should realize that fantastic experience in Italy.

2013

The Alpspitzbahn company is our first client
The first Zip Line installation in Germany is built according to the cableway safety standards.

2008

The biggest Zip line park in Europe is inaugurated, equipped with the first self-braking magnetic trolley in the world. The **Adrenaline X-Treme Adventure Park** is our entertainment milestone. Surrounded by nature and the spectacular landscape of the Italian Dolomites.



2016

Adrenaline Constructions begins to expand building the first non-EU Zip line in Rawabi, Palestine. It was the **longest Zip line in Middle East**.

2018

The longest Zip line overflying over a cruise ship is inaugurated for the MSC.

2019

After years of development and patented registrations, the most compact self adjustment braking silent trolley is brought to life, the **Magnetic Trolley 3.0**. A higher safety level standards is achieved.

2020

The new Start System 3.0 revolutionises the safety concept. Human error is eliminated during docking. Klausberg, in Italy, is the first Zip line system equipped with such a device.

Today

A decade of technology and design improvement brought Adrenaline Constructions to be the worldwide leader of Zip line systems.

New technologies are being developed to further revolutionize the Zip line world.

Start your Zip line project.

What a Zip line is

A Zip line is a cable stretched between two different altitude points.

Gravity is the only engine. Harnessed riders feel the primordial thrill of flight.

It is an attraction.
It is an amusement park.
It is a business.

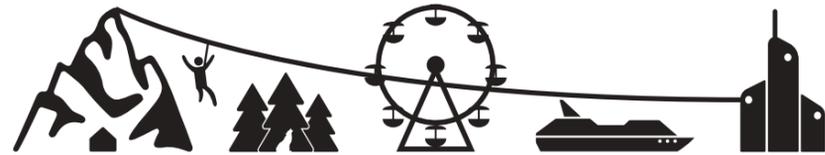
It is an economic opportunity

- Low operating costs.
- Excellent return on initial investment.
- High Media impact.
- Moderate fixed costs.
- Increasing demand.
- Minimal environmental impact.

Choose your location.

Build it almost everywhere!

All you need are two anchor points, advanced technology and creativity.



Ski area

Skiing is amazing! Sliding down snowy slopes is the best way to live the winter. But, why not take feet off the ground? A Zip Line increases also in summer the lift company's turnover.



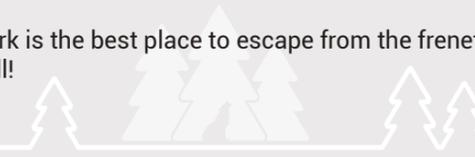
KEY STRENGTHS

- all seasons activity
- overall turnover increased
- improved brand recognition

Nature

Close your eyes. Breath. Feel the wind. Open your eyes. Watch the wild world from above.

A natural park is the best place to escape from the frenetic life. Live it all!

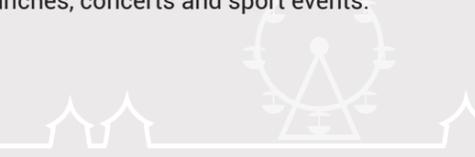


KEY STRENGTHS

- tourist arrivals increasing
- new target audience
- minimum environmental impact

Events

A Zip line is a striking experience that perfectly attracts attention of public and media. It is a perfect for a business presentations, product launches, concerts and sport events.



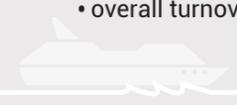
KEY STRENGTHS

- brand visibility
- more guests entertainment
- easy to install and remove

Theme parks and cruises

Are you a Theme Park owner? Are you a Cruise Ship manager? Are you in search of a place made for fun and adventure?

The Zipline is an attraction that brings the experience to another level.



KEY STRENGTHS

- broadened offer
- stand out from competitors
- overall turnover increased

Urban

Live the city. Book your experience in and relive the adrenaline- filled moments over a drink with your friends. Does it sound tempting to you?

KEY STRENGTHS

- tourist arrivals increasing
- expands the city offer
- overall turnover increased





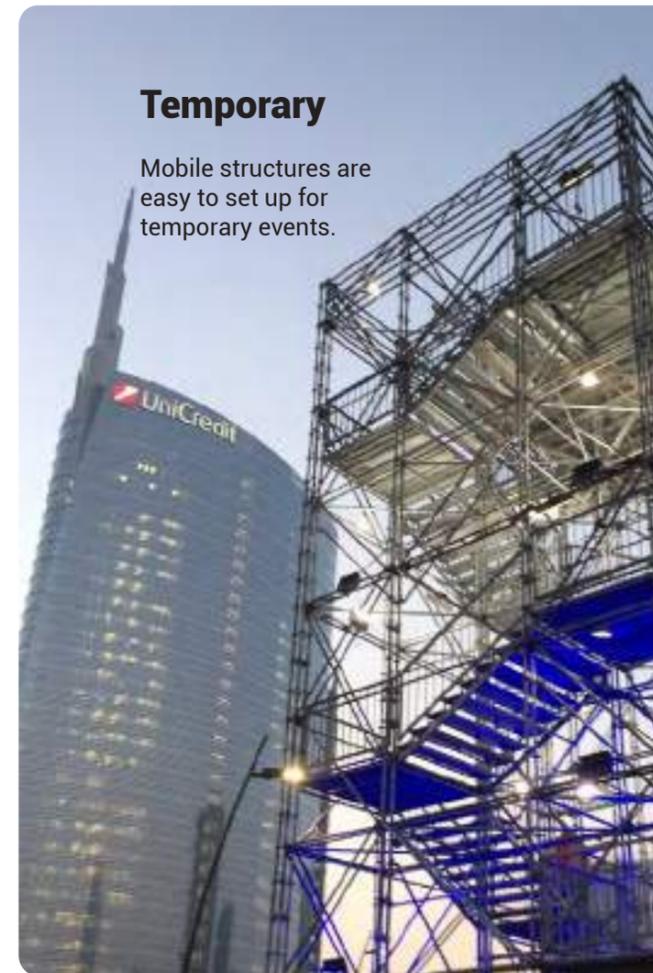
Ready for any environment.

Every location is a challenge.

Each structure is customised according to the customer's needs and site configuration.

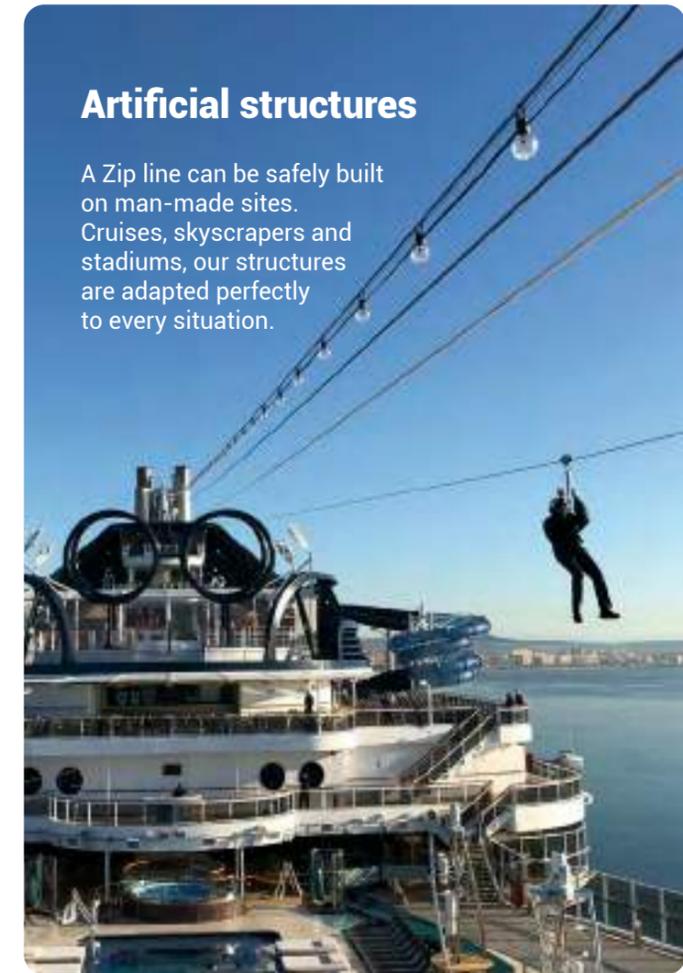
Temporary

Mobile structures are easy to set up for temporary events.



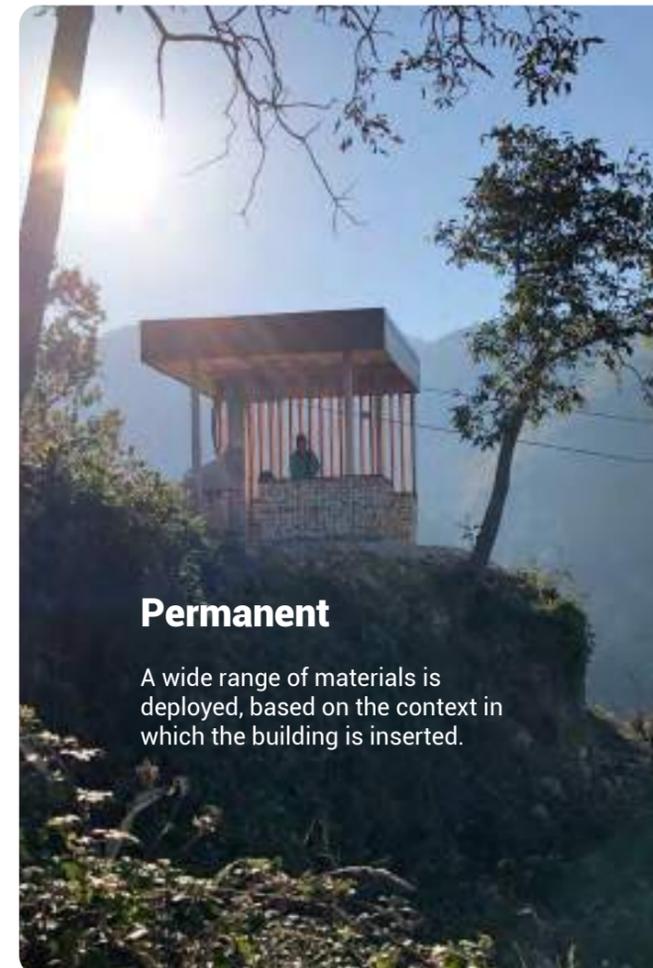
Artificial structures

A Zip line can be safely built on man-made sites. Cruises, skyscrapers and stadiums, our structures are adapted perfectly to every situation.



Permanent

A wide range of materials is deployed, based on the context in which the building is inserted.



Safety

Every station is tested and certified for every situation.

Services.

Turnkey Zip line with Adrenaline.

We take care of every step.
Our work is internationally certified.



Site inspection



Adrenaline makes a **survey of the Zip line site** using the most advanced technology.

Orthophotos, topographical maps, context photos, are the first elements we come in contact with. When **the site investigation is planned**, obstacles are recognized and measured live.

Combining both geospatial and on-site measurements, the **Feasibility Study** it is made to allows you to assess and get to know your Zip line project in depth. The cost at this stage is minimal and it is deduced from **the final project** investment.





Planning and design



Every detail is taken into account by our sector specialized professional team.

Careful design saves time and money. Accurate planning enables a rapid and smooth realisation of the installation.

Our philosophy is based on safety through technology and on design for customised structures.

It is our duty to integrate the structure in the best possible way into the surrounding context.

Construction



Our goals? Efficiency and speed.

Each professional figure works closely with Adrenaline's central office, to ensure the highest quality standards during the installation. The **most advanced machinery and equipment** are used to guarantee **safety** at every step.

We take care of **executive design, transport and installation on site of the Zip line components.** Structures are pre-assembled to optimize the time spent on site.



Maintenance



The Zip line system is designed to resist wear and tear and this **minimize running costs.**

Ordinary maintenance is easy thanks to our developers.

Services provided

- **Manuals** with all the information needed;
- **Personally handled extraordinary maintenance;**
- **Real-time remote tele-assistance**, anywhere, anytime. The use of the system is constantly monitored;
- **A wide range of extra features** for increasing efficiency and lowering costs;
- **The tensioning kit**, allows the cables to be adjusted independently and effortlessly.
- **Spare parts** are made directly in our workshop. Replacement times are fast.





Staff training



The training covers:

- **Zip line ordinary management**
Staff learn to manage the correct sequence of flight operations and the riders during all the experience.
- **Emergency procedure**
Operators are trained to know how to act in any situation.
- **On-site assistance***
During the initial period of the installation our trainers assist the operators for the ordinary management.

* on request

Cable inspections

We select the best cables on the market to ensure the unchanging of characteristics of the Zip line over time. Wear and tear is tested using our **magnetic-inductive system**.

It's easy and quick to check the integrity of the trades thanks to the **20.000 points per second detecting device**. All data is processed and sent to the lab in real-time.

This system is totally reliable and ensures safety while **reducing the time required for inspection** and certification.



Testing and certification



Our Zip lines are tested and certified by worldwide recognised certification bodies to ensure maximum safety in full compliance with legal requirements.

We continuously implement the integrated management system SGI which includes:

- Quality - **ISO 9001**
- Environment - **ISO 14001**
- Health and Safety - **ISO 45001**

Adrenaline is certified **SOA OS31 III-BIS**.

Systems Certifications



TÜV SÜD

Independent centre for certification, inspection, testing and training, offering certification services for quality, energy, environment, safety and products. Today is known worldwide by the name TÜV SÜD. Over time the firm has grown and expanded, and today it operates 800 branches worldwide. Present in more than 60 countries, it employs a total of 24,000 staff. It is a great partner for all kinds of certification thanks to its experience, professionalism and know-how.

Procedure Certifications



ISO 9001

ERGO SO 9001 is the internationally recognised reference standard for quality management.



ISO 14001
ISO 45001

ISO 14001 identifies a technical standard that sets out the requirements of an environmental management system for any organisation.



ISO 45001 is the first international standard to define minimum standards of good practice for the protection of workers worldwide.

The **SOA** certificate attests that Adrenaline Constructions is qualified to participate in public tenders.



IFT STUTTGART

Institute for mechanical handling and logistics, part of the University of Stuttgart.



RINA

To satisfy all requirements for or those who aim to the certification of Zipline operating in marine environments, Adrenaline collaborates with the RINA, a classifier operating in the naval field.



Components.

Having fun in maximum safety.

We took care of every detail.
Our experience is your experience.

How it's made.

The components are designed,
developed, tested and produced
by our company.

Each one complies with EU and
International Standards.

Our technology is constantly
developing and improving.



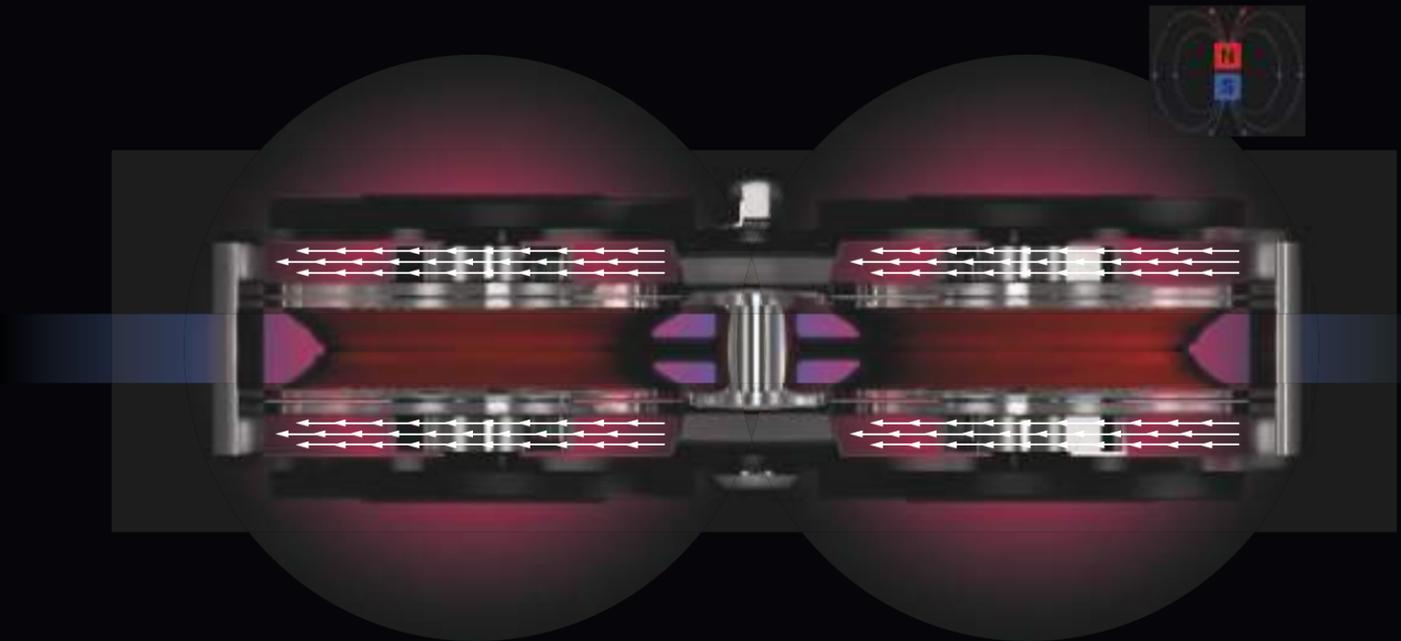


Magnetic Trolley 3.0

A step forward in the Zip line technology.

Magnetic Trolley 3.0 uses **magneto-inductive braking technology**.

The descent speed is self-regulating, there is no friction and therefore the internal mechanical wear and tear of the components is drastically reduced.



No human error.

The manual setting of the brake is removed.

Our patented system is totally autonomous.

Controlled speed.

The Magnetic Trolley brakes the client according to speed and not weight. This allows a homogeneous ride for all participants.

When the speed increases, the internal discs approach the magnets and decrease the acceleration. When it decreases, they gradually return to their initial position.

Increase efficiency.

Our Magnetic Trolley is a one-size-fits-all solution. It can be used for children and adults of any weight.

No time wasted getting guests on the scales to choose the right trolley, **saving time and money.**

Enjoy the silence.



High-strength polymer pulleys combined with speed-regulated self-braking magnets reduce the sliding noise.

The flight takes place in total discretion, without worrying about disturbing those around you. The sound produced is less than 45 db, like a fan. The 97% lower than a standard trolley.

No trembling.



The rubberized pulleys **absorb any vibrations** that may be generated. Flying has never been so smooth.

There is no abrupt braking, too slow or uncontrolled flight.

Features

Magnetic Trolley 3.0



Let me into
your world!



Augmented Reality

Point your camera at the
QR code and tap the



Color

Bodywork: Anodized black
Components: Steel gray
Pulleys: Red

Noisiness

<45 Db

Load capacity

30 ÷ 140 kg

Usage temperature

-30 ÷ 50 °C

Dimensions & weight

Length: 294 mm
Height: 100 mm
Width: 88 mm

Weight: 3,2 kg

Extreme weather conditions

Ice / Rain / Sun
Wind speed: 50 knots
Humidity: 100%
Saline environment

Materials

Stainless steel
Aluminium
Polymer
Magnets

Cable diameter

12 ÷ 20 Ø mm

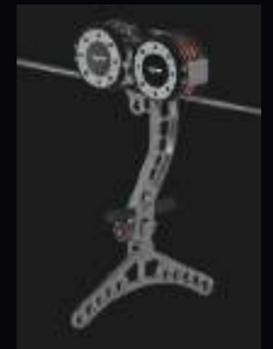
Flight mode

Standard flight
with carabiner

Standard and seating flight
with arm

Horizontal flight
with balancer

Tandem flight
with hanger



Orientation



Bidirectional positioning

The trolley can be placed on the cable in either
direction. There is no "front or back".



Start System 3.0

100% safe departure.

Start System 3.0 is the device that allows the customers to start the flight **on the Zip line in complete safety.**

Thanks to the *Safety Monitoring System*, the departure can only take place when the rope is free and the brake is in position. The innovative architecture constrains the positioning of the pulley in the provided space.

 Augmented Reality



Scan it for 3D view

Safety Monitoring System

Twin Safe automatically connects the safety devices of the departure and landing stations to each other by processing the internal data from a central computer. This **centralized system** is flexible and easily adaptable to the different technical specifications present in each project. Each Zip line is controlled by a Twin Safety, which in turn communicates with any parallel lines. This function allows you to manage multiple runs at the same time from the same control point.

Start versatility

Thanks to the centralized control by using a **single push-button panel**, it is possible to have a single launch or a **simultaneous launches.**

Flight adaptability

The Start System 3.0 allows the standard flight as well as the horizontal flight.



Features

Start System 3.0



Dimensions & weight

Length: 1698 mm
Height: 289 mm
Width: 212 mm
Weight: 35 kg

Material

Stainless steel /
 Alluminum

Noisiness

<5 Db

Usage temperature

-30 ÷ 50 °C

Extreme weather conditions

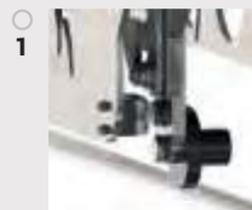
Ice
Rain
Wind speed: 50 knots
Humidity: 100%
Saline environment

Cable diameter

12 ÷ 20 Ø mm

Maximum slope

50%



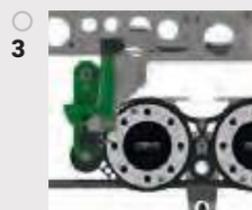
1



2

Ready position sensors

The sensors verifies that the hook is connected correctly to the release pin.



3



4

Automated release pin

An automated release pin holds the trolley in its position until the green light appears, this indicates the start possibility.



5

Electronic actuator for automatic launch

Small sized, guarantees high rides rate, zero maintenance and a 100% safe departure thanks to the Twin Safe system.

DBS 2.0 Dynamic Braking System

Augmented
Reality



Scan it for 3D view

Gradual braking for maximal fun.

DBS 2.0 is Zip line's end-of-line brake. Thanks to a system of winches and drums controlled by a motor, it intercepts the customer's descent on the rope, ahooks the trolley and retrieves it towards the landing.

The DBS recovers and re-arms itself fully automatically in efficiency. It communicates in real time via the *Twin Safe* monitoring system with the other components of the Zip line.



Features

DBS 2.0 - Dynamic Braking System



Dimensions & weight

Length: 781 mm
Height: 517 mm
Width: 388 mm
Weight: 35 kg

Material

Stainless steel /
 Polymer / Kevlar

Noisiness

<10 Db

Usage temperature

-30 ÷ 50 °C

Extreme weather conditions

Ice
Rain
Wind speed: 50 knots
Humidity: 100%
Saline environment

Cable diameter

12 ÷ 20 Ø mm

Electrical supply

3,5 kW/h

Input speed

3 ÷ 100 km/h



1

Dynamic Brake

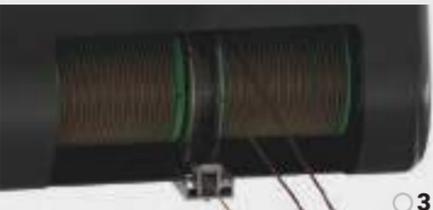
Dynamic brake depending on the speed of the trolley hooked to the bumper.



2

Emergency brake

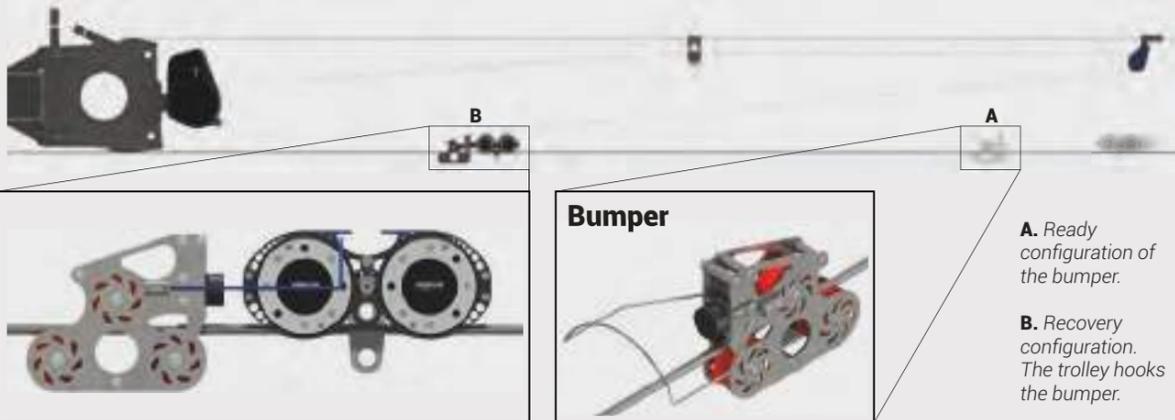
DBS is equipped with additional emergency brake integrated in case of power failure or other disturbances.



3

Recovery ropes

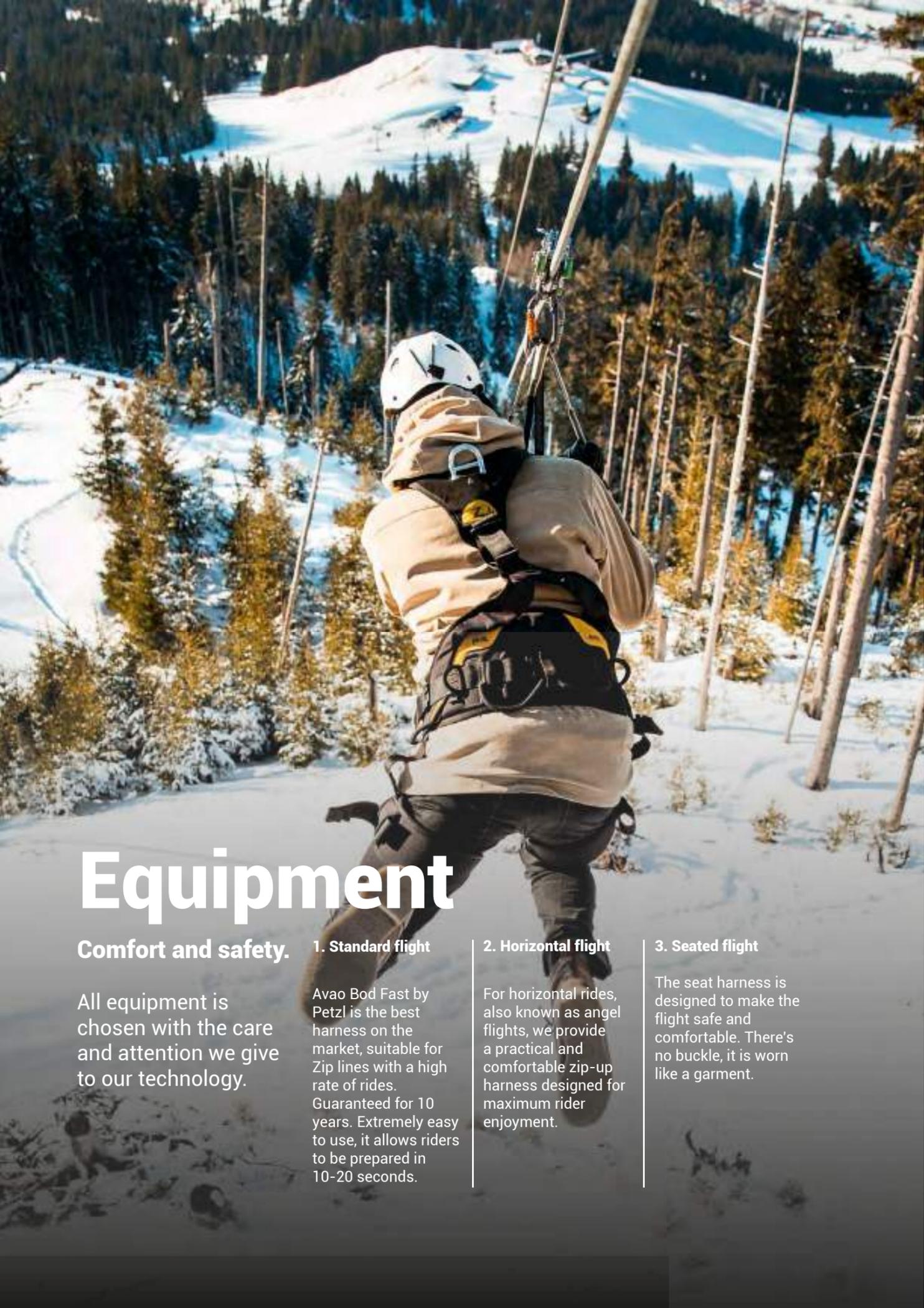
Redundant safety with 6 millimeters double braking Kevlar ropes.



Bumper

A. Ready configuration of the bumper.

B. Recovery configuration. The trolley hooks the bumper.



Equipment

Comfort and safety.

All equipment is chosen with the care and attention we give to our technology.

1. Standard flight

Avao Bod Fast by Petzl is the best harness on the market, suitable for Zip lines with a high rate of rides. Guaranteed for 10 years. Extremely easy to use, it allows riders to be prepared in 10-20 seconds.

2. Horizontal flight

For horizontal rides, also known as angel flights, we provide a practical and comfortable zip-up harness designed for maximum rider enjoyment.

3. Seated flight

The seat harness is designed to make the flight safe and comfortable. There's no buckle, it is worn like a garment.

Harnesses

The harness is an essential item of equipment to make riders feel comfortable and safe, giving them the best possible Zip line experience. They are lightweight and easy to put on, perfectly suitable for riders of every height and size. Three main types of harnesses are provided for different styles of ride: standard, horizontal and seated.



Carabiners

We use high-strength vulcan carabiners by Petzl. Made from steel and highly resistant to cable friction, these connectors are perfect for multiple and frequent use. For maximum safety, they are impossible to tamper with.

Stainless steel carabiners

Standard carabiners in superior grade AISI 316 stainless steel. Tested and guaranteed for breaking strength. Completely reliable for use in marine environments.



Lanyards and helmets

The double lanyard is contained in a sheath to prevent tangling around the rider. Helmets are easy to put on, comfortable, certified and easy to clean.



Directional Device

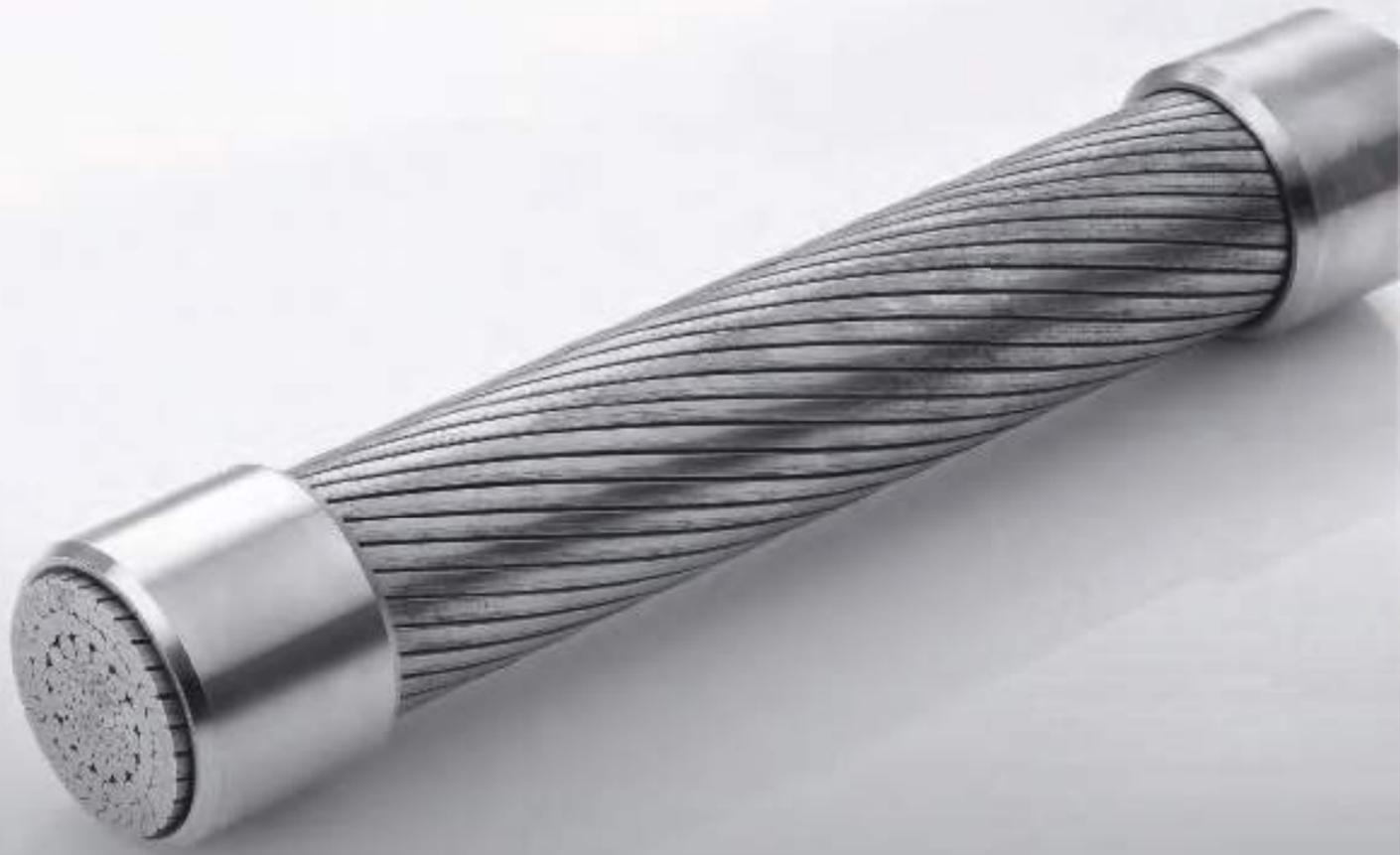
The lightweight and compact directional device is coupled to the trolley and allows the client to fly in the desired direction by holding on with their hands and preventing themselves from turning.

The distance between the lounge and the trolley is sufficient to avoid accidental contact of the rope with the hands.



ADRENALINE CONSTRUCTIONS
IS OFFICIAL SELLER OF





Cables

Solid. Technical. Certified.

Cable is the Zip line's main component. Our suppliers are world leading manufacturers of cables certified for the transport of people, with minimal wear and the highest safety levels.

Flexpack Cable

Non-turning, high load, stable and flexible. These specific qualities make Flexpack a winning choice. Its particular design, based on **modular compacted strands**, allows for high performance constructions, even in the most severe conditions.

The non-turning cables surface treatment allows a further increase in corrosion protection and therefore a longer life span of the rope. A cable is composed with 41 sections, each section is composed by 7 twisted ropes.



Full locked Coil Cable

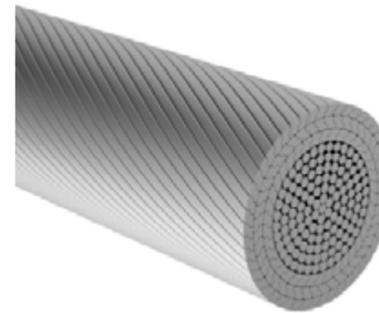
Galfan Full Locked Coil Ø 18 mm, strands have a high metallic cross section - this guarantees a higher breaking load and elastic axial stiffness with a smaller/reduced diameter.

The outer Z-shaped layers give the rope a **smoother profile**, which allows for better clamping. The locked external surface, the internal compound Tensofill and the zinc-aluminium alloy coating (Zn95Al5) of each external wire allow for a high corrosion protection.



Improved corrosion resistance.

A combination of the closed design construction of a FLC cable, with Galfan coated outer Z shaped wires and an internal zinc rich paste blocking compound that cables use result in a finished cable that has several stages of corrosion resistance.



Features

Geometry

Strong and compact

Material

Galvanized steel

Cable diameter

12 ÷ 20 Ø mm

Average operation time

10 year
(twice the logevity as a standard cable)

Noisiness

Reduce friction and noise

Temperature

-30 ÷ 50 °C

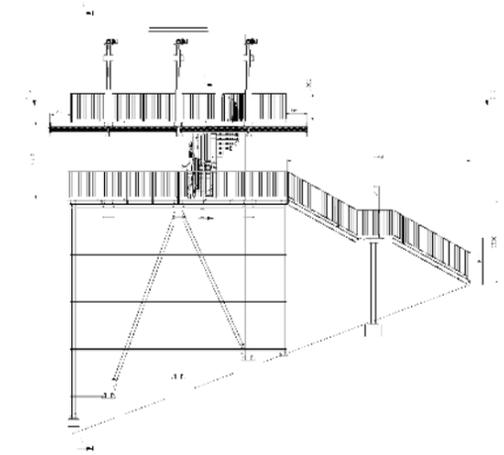
Design

Endless solutions.

Each project has its own design. Adrenaline Zip line platforms are the result of the encounter between technology and landscape. Every structure is carried out with respect for environment and visitor comfort.

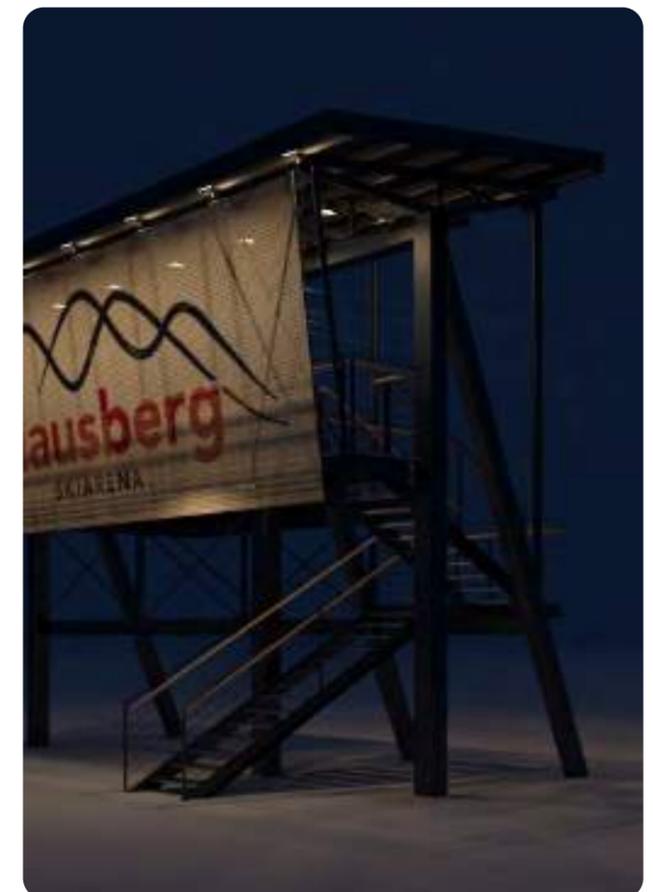
Cornerstones of our design

1. Minimal maintenance
2. Adaptable
3. Structures that can be set up quickly
4. Design inspired by nature
5. Solid steel structures.
6. Certified welding
7. Design adaptation to customer's expectations
8. Wide range of equipment options
9. Special designs



The perfect structure for any location

The platforms vary in size to accommodate different numbers of participants and operators. The individual parts of the structure are dimensioned so, that they can also be flown by helicopter.





Extra Features

Make your Zip line unique.

It is possible to add more solution for the customization of your project. The extra features include new control devices, additional mechanical automations, all kinds of requirements.



Automation

A cutting-edge system for the automatic management of the Zip line:

- wear monitoring;
- constant remote assistance;
- speed up of ordinary activities;
- maximum safety and performance.



Lifting platform

Rider is always hooked on a cable higher than the access platform, to prevent accidental collisions. By the push-button panel the electric or hydraulic platform is raised to easily hook and unhook the customer. Once the operation is complete it disappears into the station floor.

Weather station

Weather station measures 24/7 the wind speed and keep on eye all weather alert parameters.



Cable release system

This system allows a temporary, easy and controlled removal of the cable within everyone's reach.



Traffic light system

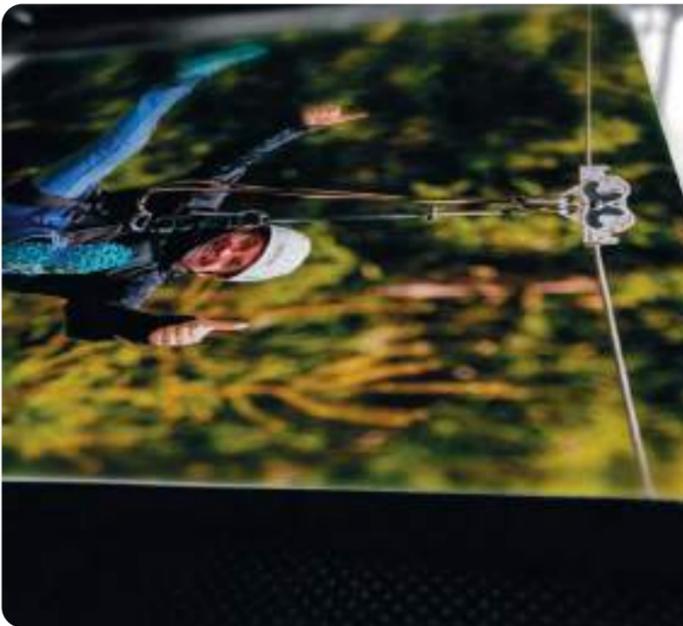
The traffic light system uses LED lights to prevent premature departure or collisions between riders. It only turns green when all the safety measures are activated.



Magnetic-induction cables control

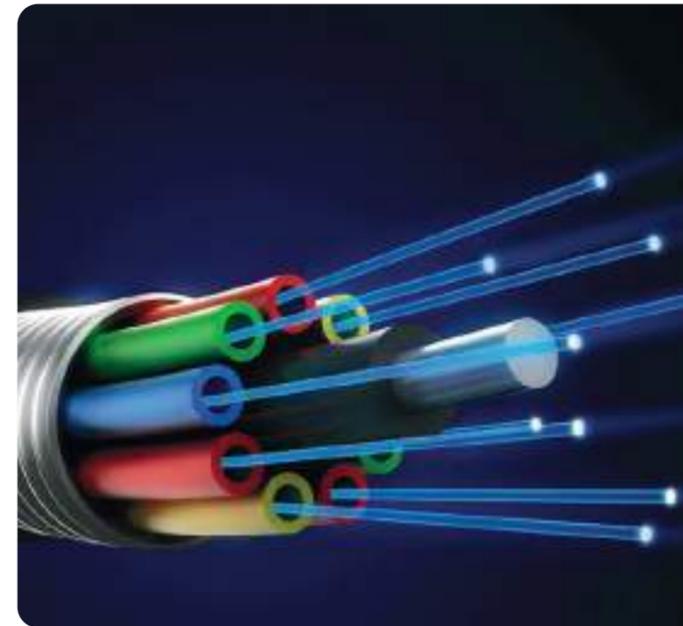
The most effective and safest method of inspecting a steel cable is magnetic inductive testing. Adrenaline, in collaboration with a university, has developed this device, which is adapted to the specific requirements of zipline cables.

It reads 20,000 points per second. It is absolutely reliable and enables cable inspection in just a few minutes.



On-ride camera

It is a system of cameras placed in strategic points to take fantastic high quality shots, which riders can buy as an unforgettable souvenir of their flight. The professional SLR cameras operate in any weather conditions.



Electrical supply

Electrical supply of the stations is guaranteed also in the most inaccessible places. Fiber optic cables placed on the signal cable allow the effortless transportation of data and power.

Video surveillance

Webcams surveil the Zip line system 24 hours a day. The technologically advanced cameras guarantee excellent night vision. The thermal image makes it possible to detect people even in the dark.



Photovoltaic panels

Stations can be totally autonomous thanks to the addition of photovoltaic panels. When the sun is not shining, the battery pack provides 48 hours of operating time.



Safety net

There are many possibilities to increase the security of your station. We supply each platform with fall arrest devices of any kinds. The stations should not have fences on the Zip Line start and arrival sides and must therefore be surrounded by a safety net.



Skywalk

Adventure has no limits. The skywalk route is only one of the adrenalin-filled design solutions that could be added to the zipline experience.



Laser show

A beam of light connects the valley station to the mountain station. It can vary in tone and effect, implementing the visibility and scenic presence of the installation.



Articulated arm

The control panel can be installed on an ergonomic mechanical arm which allows for quick and easy operation of the Zip line system. The operator is free to move and carry the controls with him.

Nocturnal lighting

Do you want to increase your Zip line productivity? By integrating the lighting system, night flights will be possible. Living the night is an irresistible attraction.



Remote assistance

Technical off-site support is always guaranteed. A timely and advanced technological communication system guarantees the perfect functioning of the attraction. Maintenance operations and the correct functioning of the system are constantly supported.



Equipment transportation

Perfect for quickly transporting components along the cable. Operators place pulleys and harnesses inside the box at the valley station. An automatic lifting system brings them back to the start.



Special effects

Optional extras include water screens, steam tunnels, and every possible imaginable solution.

References.

Our experience.

We successfully master all locations with any weather conditions.

All we need is a starting and an arrival point, our advanced technology and a lot of creativity.



MSC Seaside Cruise Ship
2017 Miami - USA

MSC Seaview Cruise Ship
2018 Rio - BRA



Rawabi Extreme
2016 Rawabi - Palestine



Astennick Winterberg
2018 Winterberg (NRW) - DE



Alpspitzkick Nesselwang
2013 Nesselwang, Allgäu - DE



Klausberg Zipline
2020 Klausberg (BZ) - IT



Adrenaline X-Treme Adventures Dolomites
2008 San Vigilio di Marebbe, (BZ) - IT



Majella Extreme
2019 Pacentro (AQ) - IT



BMW Urban Zipline
2015 Milan - IT



TIM Zipline
2019 Milan - IT



Dream Cruises Global 1
Honk Kong - CN

Dream Cruises Global 2
Singapore



"It was a pleasure to work with Adrenaline Constructions and achieve a historic result: the first and longest Zip line over the sea! We're proud to have chosen this serious, professional Italian company to create a new concept of entertainment on board of MSC cruise ships."

The project was extremely demanding, but Carlo Trebo, Samuel Miano and their team worked tirelessly. It was great to see such attention to detail in design and execution, and their strive to ensure that everything ran perfectly!

After months of work on tight deadlines, we had the pleasure of testing the Zip lines over the sea. What a joy to discover we had absolutely nailed all the goals we had discussed years before! We were very impressed with their reliability, punctuality, technical expertise and dedication to the work."

Mimmo Lubrano
New Building Project Manager
MSC Crociere



NUOVA BMW X1.



MOSTRATI
PER QUELLO CHE SEI
NUOVA BMW X1.

"We worked with Adrenaline Constructions on a very ambitious project: to bring a Zip line to the center of Milan for the launch of the new BMW X1.

Despite the very limited time available, we found in the guys a cooperative spirit and great professionalism, which allowed us to arrive at the inauguration on time.

The event lasted a whole week, during which we had more than 2,300 people flying through the skies of Milan! The Adrenaline staff were tireless and always with a smile on their faces. It was a challenge we met together and a great experience."

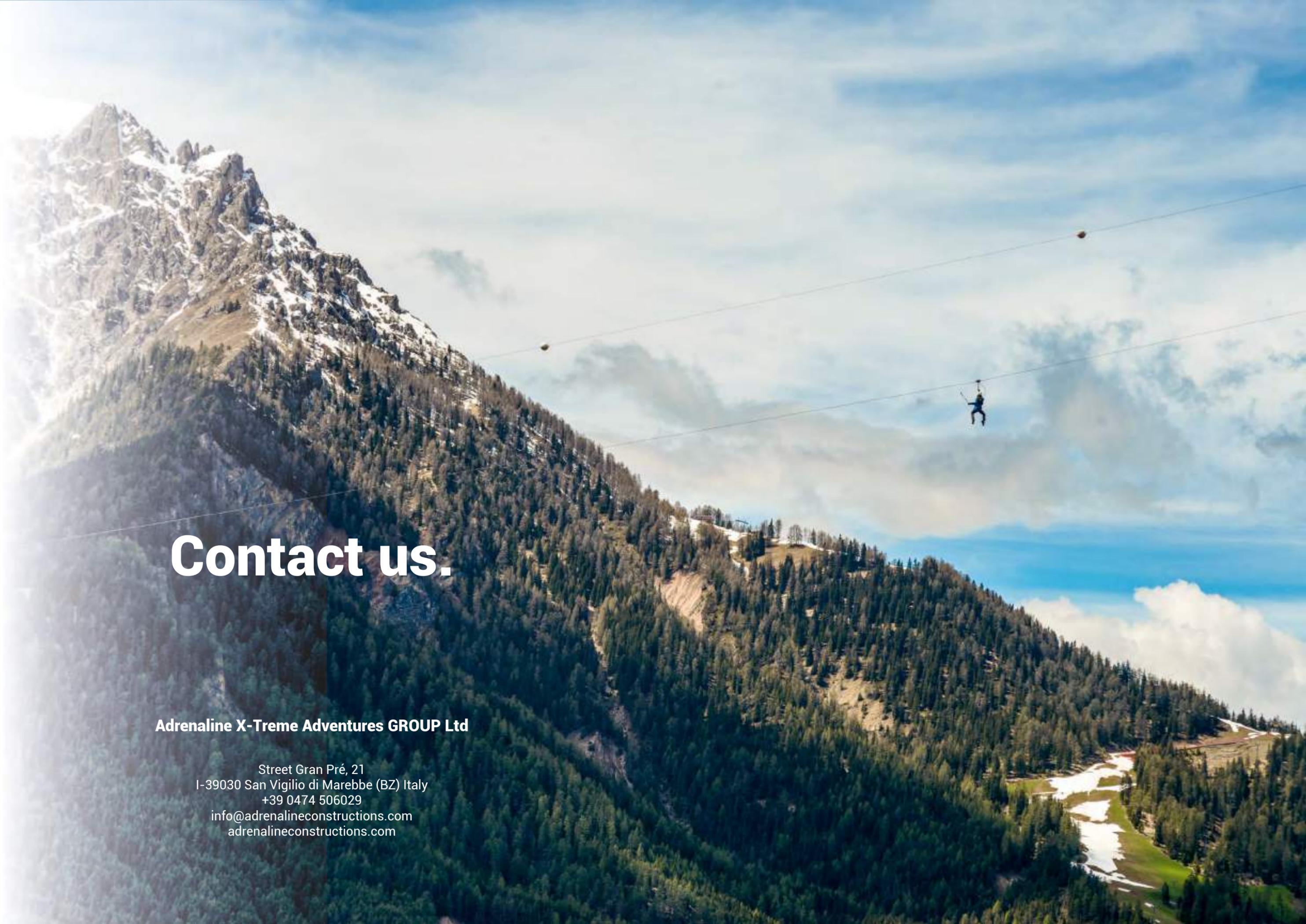
Marta Marini
New Building Project Manager
MSC Crociere



"In the heart of the Majella Park, on the slopes of the Morrone, arises the ambitious project of the Zip line by the Adrenaline Group. We're in Pacentro. The challenge to combine the emotion of a breathtaking experience is associated to the possibility to enjoy a beautiful and varied landscape: from the splendid skyline of the silent village to the majestic beauty of the Morrone that wraps the flight.

A mix of emotions within minutes make the Majella zip line a unique experience, made possible by the professionalism and cooperation of the Carlo Trebo staff, wich has handled with competence and optimism the complexy of the place, both from a physical and procedural point of view, for the transposition of all the authorizations of the institutions involved."

Dott. Guido Angelilli
Mayor of Pacentro

A person is seen ziplining across a vast, forested mountain valley. The valley is filled with dense green trees, and a winding path or stream is visible in the lower right. In the background, a large, rugged mountain peak is partially covered in snow under a blue sky with scattered white clouds. Two parallel ziplines stretch across the sky, with a person suspended on the lower one.

Contact us.

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