

AT THE ORIGIN OF THE GOUJON-INSERT CONCEPT



From 2009, in view of the damage caused by the installations in our own parks, it seemed obvious to us that we had to work in another direction: eliminate the causes of injuries on the trunks, safeguard the arboreal heritage, reduce maintenance costs, facilitate the installation of gaps and their renewal.

Kujanak was founded in 2013 to bring the experimental approach around the completely innovative concept of partial drilling with inserts, first on metal platforms and then on the anchor ring. The concept is patented at this time. In the process, the LVC Clip'fil was created.

Our passion

Innovation. Kujanak has already imagined, tested, validated a ten really different products and concepts. Kujanak received the 2019 Artinov Innovation Award.

Our values

Respect for plants, the sustainability of arboreal heritage, the safety and comfort of park customers.

The aesthetics and durability of the installations.

Our experience

10 seasons of hindsight on the Clip'fil dowel-insert system. More than a hundred user parks: France, Belgium, Portugal, Morocco, Canada, U.S.A, Switzerland, Spain, Andors, Belgium, Italy ...

Our strength

A pragmatic and collective approach based on problems of the parks we manage (4 PAH in Auvergne-Rhône-Alpes) or that we build, queries from our customers. A study office and a close relationship with around twenty French companies, the majority in Ain, the first industrial department of France.

Training

We travel to train your team on site. Our concern: that you master the techniques installation so that the trees perfectly support the installations, that you gain in efficiency, in time of site and cost.

Tools

We provide you with specially developed tools (drilling guides, drill bits, pushers, etc.) that save time and ensure flawless results.

Accessories and fittings

A wide range that perfectly meets the needs identified, selected for their quality.

Equipment renovation

Because the equipment wears out, peels, tarnishes while still functional, we can give a facelift for your lifeline connectors (anodizing, replacement of wearing parts), to anchor rings (galvanization or zinc plating depending on the model).

Maintenance Building

We can provide maintenance, transformation, extension of your routes, or support your team. Or take over the entire construction process, from design to realization.

OUR SERVICES



Kujanak

Durabilité, Sécurité, Sérénité



EQUIPMENT FOR CONSTRUCTION AND RENOVATION OF PARKS

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Eco-responsible innovation

ADUNDERSTANDING HOW THE TREE WORKS FOR ADAPTING OUR EQUIPMENT APTER NOS ÉQUIPEMENTS

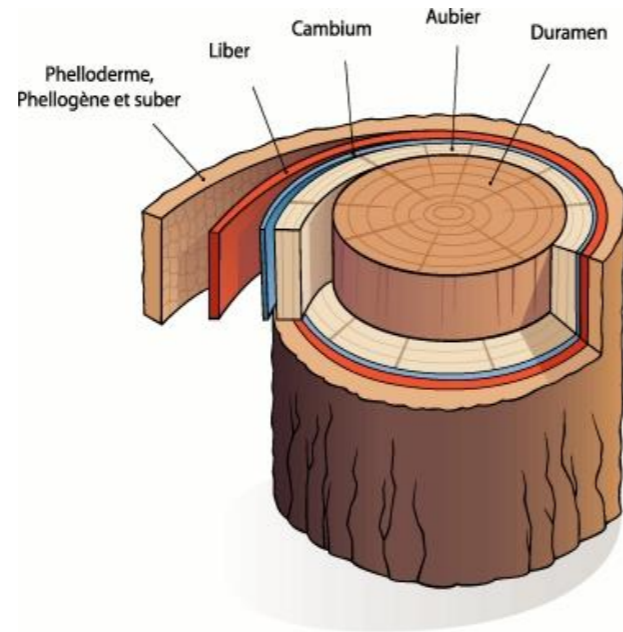
The cork of the bark (a few mm to several cm)
Dead bast cells. Like a tight skin that insulates the inside of the tree, prevents the penetration of air and pathogens. Cannot heal.

The bast or phloem (a few tenths of mm)
Distributes the elaborated sap to all parts of the tree for their growth: trunk, branches, twigs, roots.

The cambium or liberoligneous generative layer (a few cells)
produces the cells of the tree. The xylem inwards (the sapwood), and the phloem outwards (the bast).

Sapwood or young/peripheral wood (several rings)
Wood or xylem. Active cells composing the conductive vessels. Ensures the transport of the raw sap, from the roots to the leaves, to be transformed by photosynthesis. Store them nutrients and contributes to stiffness.

The heartwood or heartwood or heartwood
Provides rigidity. The sapwood cells have «filled» with lignin, tannins, resins.



Any pressure on the bark (wedge, cable, plank sling, threaded rod, ratchet strap...) permanent and important, leads to the death of the bast and the cambium, stops the flow of elaborated sap and stops the production of cells.

THIS CONCEPT RESULTS FROM A VISION BORN FROM OBSERVATION = TO ELIMINATE THE DAMAGE SUFFERED BY TREES DUE TO INSTALLATIONS, ALL SUPPORT ON THE BARK MUST BE BANNED

This concept is the result of a vision born of observation = to eliminate the harms suffered by trees as a result of installations, we must ban all support on the bark:

- > No contact or pressure on the bark.
- > No injuries to the trunk, no mechanical weakness, no weakening of the living support.
- > The cables of the equipment (monkey bridge, footbridge, net...) are no longer attached to the trunk but to the platform structure or ring.



The structure is distant from the trunk, which grows freely. The elaborate sap circulates without obstacle to irrigate trunk and root network.

A healing bead forms around the insert. It contributes to the watertightness and reinforces the interlocking.

After 4 seasons, on this birch, the heartwood is perfectly intact around the insert.

The insert penetrates 12/15 cm for the platforms and 8/10 cm for the rings. The core is not pierced. The drilling seems intrusive but experience shows that the tree can live with it if the rules of sealing, disinfection of tools and reported elements are respected.

WHEN FACILITIES HURT AND ENJOY YOUR ARBORICULTURAL HERITAGE

The conventional means of anchoring proceed by support, directly on the trunk or by inserting wooden martyrdoms. Consequence: the strong pressures on the trunk cause serious physiological damage. At the junction of bark and sapwood, the heartwood and cambium die.



Cable injuries

Injury by platform structure

The portion of living bark, capable of conducting the elaborated sap, is reduced to less than 50% of the periphery of the trunk. This facility was de- placed after 7 seasons. It will create new wounds above the first.

These areas are dead, the cambium has disappeared, although the old bark is still in place. The production of cells is permanently stopped. Wounds form entry points for pathogens: fungi lignivores, xylophagous insects, bacteria, viruses.

AN ECONOMIC STRATEGY AND ENVIRONMENTAL WINNING



ANCHORING OF CONVENTIONAL INSTALLATIONS

- > Permanent tree damage, which hurts the customers.
- > A obligation of move the facilities periodically... which creates new injuries.
- > Labor time equivalent to new construction.
- > Materials that are often lost.
- > High uncertainty about the future of the tree and the course.
- > A significant economic cost.
- > The park is losing its value.



ANCHORING WITH THE DOWEL INSERT SYSTEM, WITHOUT ANY SUPPORT ON THE BARK

- > Facilities may remain in place for an unlimited period of time.
- > Maintenance is reduced.
- > In case of dismantling the equipment can be reused on another tree (no new investment).
- > After disassembly, no metal parts remain in the trunk.
- > Phyto-sanitary safety.
- > Investment amortized in 5 years = economic efficiency.
- > Your assets will increase in value, and when you sell them, your park will be attractive

PLATFORM



FIELDS OF APPLICATION

DAP Platform. A clear, clean and neat floor Perfect horizontality on any surface

SHAFT CONNECTION

Via 4 inserts and dowels, no pressure on the bark, free circulation of the sap, free growth of the trunk. All tree species, from 25 cm in diameter, up to 1 m and more. 10 seasons of feedback.

CONSTITUTION

Zinc-nickel treated steel studs, hot-dip galvanized bolts and screws electro-galvanized, polycarbonate inserts. Patented stud / insert concept. Designed and produced in France .



PARK GUESTS VOTE



> > The tree-friendly concept is very popular with customers, who appreciate the wedge-free, unrestricted system. The trees are really protected.



> The aesthetics, the quality and the solidity aspect reassure the customers who consider the park as designed with solid and reliable materials, with care and exigency.



COMMON FEATURES OF THE MODELS

- > Compatible with all species.
- > Trunks from 25 cm in diameter.
- > No contact or pressure on the bark, free circulation of the elaborated sap.
- > No more wounds on the trunk, no more risk of weakening the living support.
- > Perfect horizontality even on leaning trees.
- > Exceptional durability.
- > Resistance: 2 tons, the cables of the foot apparatus are fixed to the structure and no longer on the trunk. The floor is free, the whole is much more aesthetic with a beautiful aspect of cleanliness.
- > After removal, no metal elements remain in the trunk.

A clear, clean and neat floor



Perfect horizontality on any surface



SIMPLICITY AND SPEED OF WORK



- > The design allows the platform to be set up easy and very fast, with a reduced tooling: drill and screwdriver.
- > Particularly recommended for self-construction, the installation technique is immediately understood. We train your team in half a day on your site and provide you with tools that simplify the task, save you time and ensure impeccable results.
- > Time saving during maintenance, reduced to cutting the floor around the trunk every 4 to 6 years (5 min with a jigsaw).



PLATFORM KujanaK

- > Completely redesigned for gains :
- > Preparation and assembly time (fewer operations).
- > Of materials, of price, of maintenance.
- > Large component cross-section = rigidity and stability.
- > Durability: in Douglas fir, excluding sapwood, greater than 15 years.
- > Efficient price positioning = quality service ratio/ exceptional price

ZIPLINE RECEPTION

The interest of placing an inclined panel at the edge of the platform

- > Secures the arrival by eliminating bumps against the edge of the platform.
- > Facilitates reception by providing a support area for both children and adults.
- > More aesthetic than a foam mattress.
- > Format of the reception tray : 75 x 150 cm. Made of Douglas fir, excluding sapwood, with strong sections.
- > Adaptable to different platform models.



6-RAFTER PLATFORM OR 6 ROUNDERS

- > A classic drawing and a very careful realization. It offers a known aesthetic.
- > Large sections of components, rafters or logs.
- > Durability: in Douglas fir, excluding sapwood, greater than 15 years.

SQUARE PLATFORM ON ANCHOR RING

- Pure aesthetics.
- Quick to install
- > Durability: in Douglas fir, excluding sapwood, greater than 15 years.
- > Maintenance savings.
- > Preservation of your arboreal heritage.



ENVIRONMENTALLY FRIENDLY



- > The best possible protection for your trees, no more sling cables or wedges pressing on the bark.
- > No metallic elements in the trunk after dismantling, which could generate accidents in case of felling and passage in the sawmill.
- > The dowels can be removed and used to build a platform on another tree, another site, your investment is not lost.
- > Studs can be reconditioned to extend their life.
- > All recyclable materials

THE RIGHT ECONOMIC CHOICE



- > A very efficient price positioning, equivalent to a conventional platform, for a very superior service.
- > Reduces construction/maintenance costs and time.
- > Durable, your investment is amortized over a long period.
- > Replaceable studs, your investment is never lost.
- > Enhances the value of your property thanks to the good health of the woodland, its durability and reduced maintenance.

LIFELINE CONNECTOR CONTINUE



KN011

FIELDS OF APPLICATION

Mobile connection device for continuous lifeline.
Class E lifeline component, the highest in the safety system classification. For Ø 12mm, 7x19 or non-rotating cable.

STANDARDISATION

PPE against falls from height. APAVE certified, PPE class 3 standard EU17109 : 2020

CONSTITUTION

High strength anodized aluminum 7075T651, R= 2800 daN.
Cable output resistance higher than the standard (+50%). Designed and produced in France. User parks : France, Belgium, Morocco, Portugal, Canada ...



KN012

A WELL STUDIED ERGONOMICS

- > The large internal dimensions of the shuttle allow it to pass smoothly through cable ties, even those with cap nuts.
- > A wide passage slot (7 mm) for an easy passage of the flanges (5 mm). And with the new shuttle guide adapted to Clip'Fil flanges, it's even easier!
- > Children as young as 3 years old will quickly get used to it.



NEW

The KN012 model is equipped with a latch that allows the hook to be removed from the cable in an instant. Only the operators have the opening tool.



THE FEATURES

- > Compatible with all pulleys.
- > Easy overtaking and crossing with your rope lanyards.
- > Certified compatibility with several existing continuous lifeline models.



Interchangeable stainless steel



CONTROL & MAINTENANCE

- > The stainless steel wear parts are interchangeable. The change is a quick operation that can be done on a daily basis.
- > The control of the passage slot is carried out with a \varnothing 8 mm pin supplied.
- > Anodizing is not affected by humid environments. However, storage must be done in a dry environment.



PARK GUESTS VOTE



> Usable from 3 years old.



> An ergonomic shuttle with a pleasant touch.

> 215g! A champion of lightness.



ENVIRONMENTALLY FRIENDLY

- > The shuttle can be reconditioned to give it a new luster after years of intensive use.
- > 100% recyclable material (aluminum and stainless steel).



THE RIGHT ECONOMIC CHOICE

- > Its ergonomics improves the fluidity and thus the number of customer visits.
- > A remarkable quality-price ratio.
- > Reconditionable, to further extend its life at a lower cost.



RECYCLABILITY

Aluminum can be recycled almost infinitely, without altering its properties or losing weight. secondary (recycled) aluminum requires only 5% of the energy needed to extract it from bauxite ore. The overall recycling rate for aluminum is currently 49%. The overall recycling rate for aluminum is currently 80% in Europe.

MULTI-PURPOSE ANCHOR RING



Metal ring

4 inserts

FIELDS OF APPLICATION

Lifeline and PAH equipment, net sheet, guy ropes, protection net, zip line with turns, canopies, forest walkways ...

CONNECTION TO THE SHAFT

Via 4 inserts and dowels, no pressure on the bark, free sap flow, free trunk growth. All tree species, from 25 cm diameter.

10 seasons of feedback

CONSTITUTION

High-strength steel, hot-dip galvanized or zinc-coated lanthanum finigard, polycarbonate. R=7000 to 9000 daN. No back up required. Designed and produced in France.

4 studs attached to the ring

PARK GUESTS VOTE

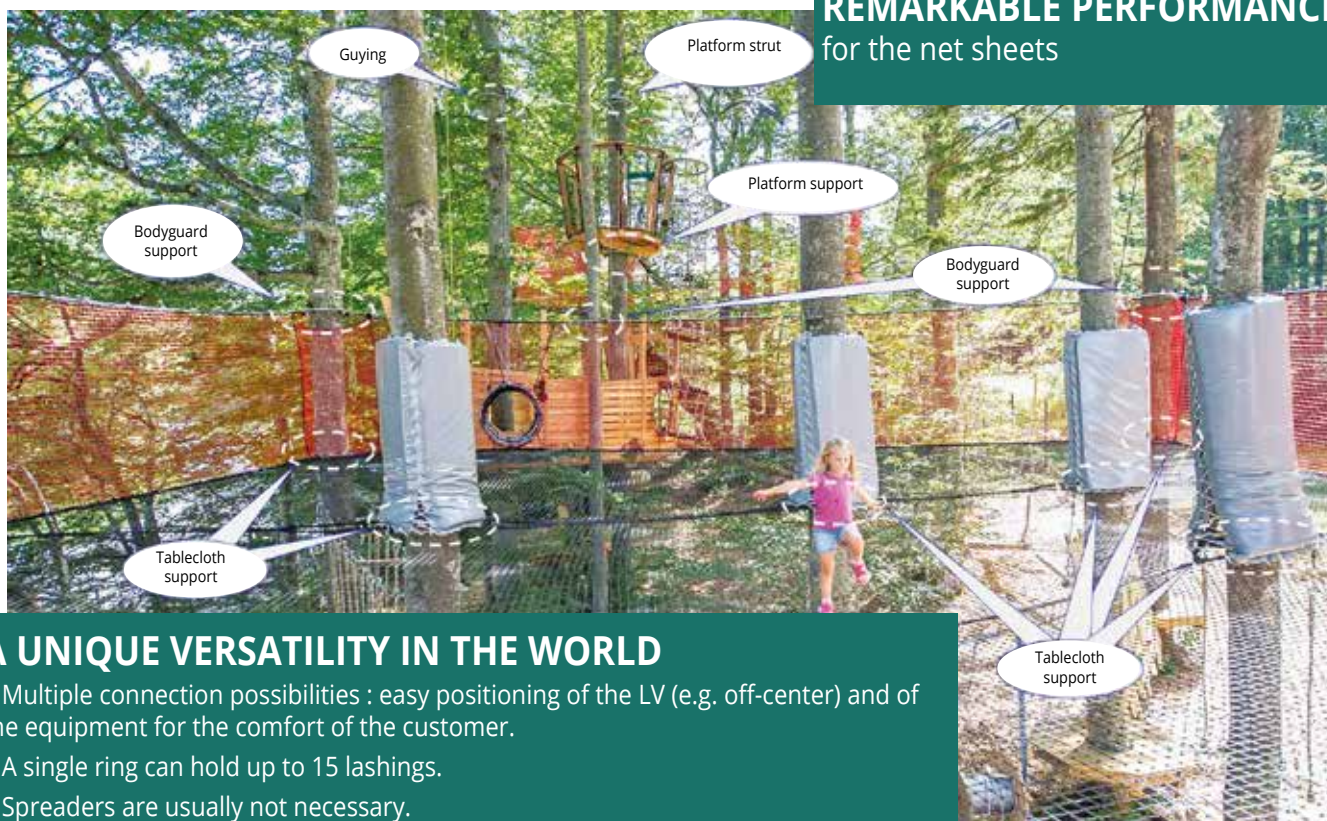


> The tree-friendly concept, the aesthetics and the solidity aspect are very much appreciated by the customers who appreciate this system without wedges and without choking. The trees appear to be really protected.



> The quality of the installations reassures the customers who consider the park as designed with solid and reliable materials, with care and exigency.

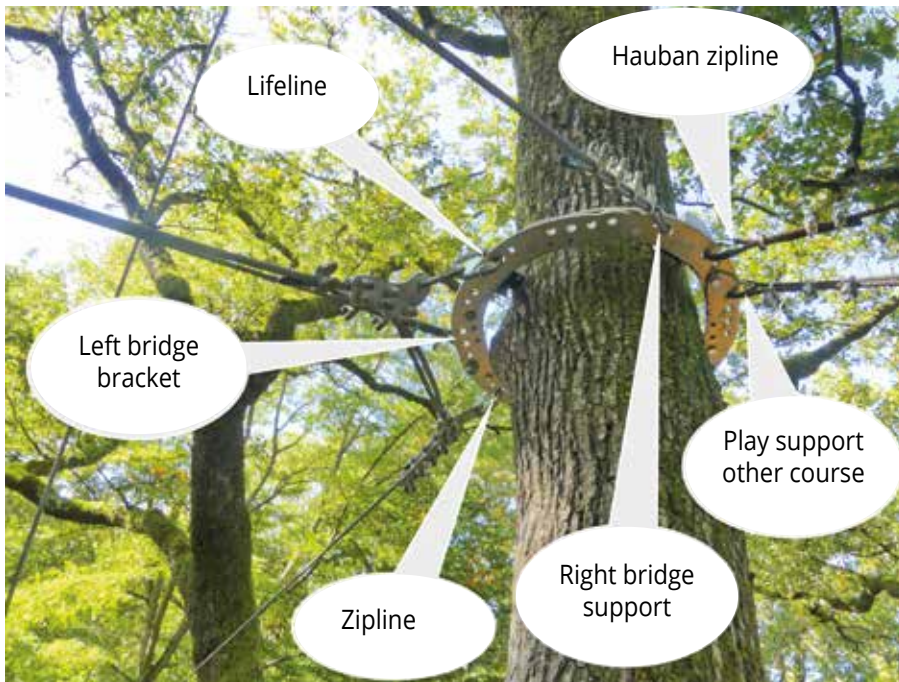
REMARKABLE PERFORMANCE for the net sheets



A UNIQUE VERSATILITY IN THE WORLD

- > Multiple connection possibilities : easy positioning of the LV (e.g. off-center) and of the equipment for the comfort of the customer.
- > A single ring can hold up to 15 lashings.
- > Spreaders are usually not necessary.
- > Your inventiveness is boosted.





REMARKABLY EXTENSIVE FUNCTIONALITY

- > Multiple connection possibilities: easy positioning of the LV (e.g. off-center) and of the equipment for the comfort of the customer.
- > A single ring can hold up to 15 lashings.
- > Spreaders are usually not necessary.
- > Your inventiveness is boosted



Half ring for your games in height



SIMPLICITY AND SPEED OF WORK

- > The design allows for easy and very fast ring placement with reduced tooling.
- > Saves time in the assembly of LV, apparatus, tablecloths and nets.
- > Changing games is very easy, very fast, you don't hesitate to bring something new in your courses.
- > The tension of the cables is not influenced by the growth of the tree: no time is wasted in re-setting the lifelines to respect the initial conditions of the calculation note, in slackening the supports of the games, in rectifying the speed of the zip lines...

> We forget: the wedges to be repositioned, the lifelines that turn, the equipment that slips...that annoy and give a bad image to the customers.

> Evolves with the growth of the trunk by extension of the segments composing the ring.

ENVIRONMENTALLY FRIENDLY



- > The best possible protection for your trees, no more sling cables or wedges pressing on the bark.
- > No metallic elements in the trunk after dismantling, which could generate accidents in case of felling and passage in the sawmill.
- > The ring can be dismantled and used on another tree, another site, your investment is never lost.
- > The ring can be repackaged to extend its potentially infinite life.
- > All recyclable materials.

THE RIGHT ECONOMIC CHOICE



- > Reduces construction/maintenance costs and time.
- > Durable, reusable and reconditionable: your investment is amortized over a long period.
- > Enhances the value of your assets thanks to the good health of the forest, with durability and reduced maintenance and with ease of evolution of the courses.



FIELDS OF APPLICATION

The flanges ensure the connection of the lifeline cable to the support (shaft, element, etc, artificial, rock wall...)

CONNECTION TO THE SHAFT

The flanges are connected to the support via various intermediaries such as the ring anchoring, cable and textile slings or fixed directly on artificial or rocky supports. 10 seasons of experience feedback, France, Belgium, Canada and Morocco.

CONSTITUTION

High resistance stainless steel 304L and 316L (unless specified).
R7500 daN (unless specified). Designed and produced in France. Registered mode



NEW

The cover hides the cable ties and guides the shuttle. Suitable for all bridles! Choice of color possible.

PARK GUESTS VOTE



The little ones appreciate the shuttle guide added to the bridle. The passage of the shuttle is smooth and fluid.



ORIGINAL FEATURES



THE CURVED DESIGN OF THE FLANGES NATURALLY ORIENTATES THE CABLE

The LV is far from the trunk, which is therefore not subject to the friction of the safety hook.

> In addition, it increases the sliding resistance of the cable.










COMPACT SPLICING OF TWO CABLES

> On two flanges, a small footprint that ensures easy passage of the shuttle.

> The curved shape increases the resistance to sliding

LES OUTILS

	Réf.	Utilisation
	KB3	For the lifeline
	KB5	For zip lines < 150 m
	KB8	Reinforced eye R9000 daN for zip lines > 150 m
	KBD3	For start and finish. To be fixed to a suspension cable or to a post
	KBEQVF	To be fixed on the rock (or via ferrata) or an artificial vertical support
	KBS115	To support the cable loops around the trunk. In 2 lengths
	MR12	The flanges are fixed with a 12mm quick link Steel 7500 daN or stainless steel R11000 daN

AIGUILLAGE

- > No mechanism
- > Intuitive shuttle passage



KBA005
Anodized aluminum R 6000 daN



KBA008
Stainless steel 304L,
R 9000 daN



THE ARDICÔNE FOR A COMFORTABLE AND SECURE VERTICAL LIFELINE

Positioned under the crimping of the ardillon (finial), it allows the passage of the shuttle without the customer having to release a hand or interrupt his progression. This one becomes fluid and pleasant, the playfulness takes over!



ENVIRONMENTALLY FRIENDLY

- > All recyclable materials (steel, aluminum).
- > Stainless steel flanges can be refurbished without loss of material or strength.



THE RIGHT ECONOMIC CHOICE

- > Improves fluidity and thus the number of customer-passes.
- > Sustainable, your investment is amortized over a long period.
- > Reusable, your investment is never lost.