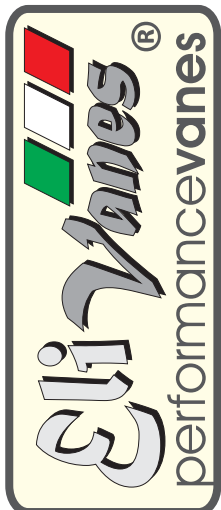


2013 BIRCHWOOD ARCHERY



THE FIRST ORIGINAL.
HELICOIDAL ITALIAN VANES



SHOOTING DIFFERENT ... SHOOTING FOR GOLD

Arrow vanes General description

Our vanes are made of a laminated plastic material with different thickness depending on the profile, and permanently bent with an helicoidal shape, to rapidly stabilize the arrow flight in archery.

The stabilizing effect is determined by the special shape of the profiles, by its plastic material, but mostly by the kind of helicoidal shape that is used to permanently bend the vane.

The specificity of the shapes, together with the helicoidal bending of the vane, determines a series of benefits in terms of arrow performance, such as:

1. Higher rotation on its axis
2. Higher conduct of the airflows that the arrow finds during its flight. This determines a higher stability during the flight.
3. Higher resistance to deviations, with respect to the estimated trajectory, that may be caused by atmospheric agents (wind/air). This happens thanks to a smaller exposed area.
4. Speed and precision boost, thanks to what we have described on 1, 2 and 3.

The benefits of using Elivanes' vanes are reached thanks to all the intrinsic features (typology/thickness) of the material used.

At the beginning the flight will be forced, thanks to the aerodynamic prodding (that is proportional to the air's speed, statistically considered motionless) exerted on the surfaces that are gradually bent.

This will make the vanes open, trying to reach a flat shape but, at the same time, without losing their own shape, that has been especially studied to stabilize within a certain amount of time.

In particular, the improvement of the functional characteristics of the Elivanes vanes is represented by the helicoidal shape that the vanes acquire after the hot-shaping process. That makes them better-performing than any other kind of vane used in archery.

To ensure a high placement stability, the ends of all our models are extended.

This way they can be fixed with some special tape without modifying the vane's shape and the arrow's flight dynamics.

You & Elivanes ... THANKS CHAMPION
"The winning choice"



Mauro Nespoli
GOLD MEDAL



Aida Roufin
SILVER MEDAL

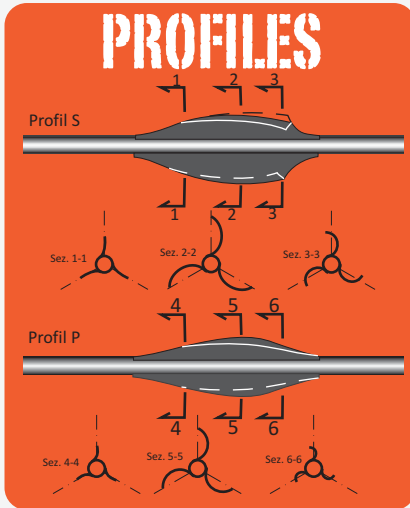


Michele Frangilli
GOLD MEDAL

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The shape/profiles can be divided into two basic typologies:

- Vanes with the "S" profile are included in the "shield"-type.

These vanes have all the characteristics we already explained, but the variation of the airflows (from laminar flow to turbulent flow) that is due to the shape of the end of the vane has an immediate stabilizing action.

Obviously the resulting expenditure of energy makes these vanes suitable for short/medium distances.

-Vanes with the "P" profile are included in the "parabola"-type.

These vanes are bent in a different way that makes them especially suitable for long distances.

Their reduced height and the tapered end help sending the airflows in the direction of the arrow's end. This means a higher stability and a higher speed.

Vanes with the "P" profile (50 pieces per bag)

Especially designed for FITA Round and 70m Round

The shape of "P" profile, with their particular helical curvature directs the airflows towards the tail of the arrow, increasing its rotation on its own axis, improving the speed and arrows stabilization.

The package includes vanes 50 + 1 roll of double-sided tape High Performance 3mmx3m + closure ribbons in black.



Parabolic vanes "P" series



Vanes "P" (parabolic) profile (50 pieces per bag)

Especially designed for FITA Round and 70m Round

Technical characteristics of the P1 profile: The very low profile and the small surface make this vane suitable for high-level compound archers.

Available RH/LH - Colours: Yellow - Light Blue, Green, Red, Magenta, White, and Blue matt.

Technical characteristics of the P2 profile: Especially designed for compound archers with a good technique, or for those who want an easily manageable vane.

Available RH/LH - Colours: Yellow - Light Blue, Green, Red, Magenta, White, Pink, and Blue matt.

Technical characteristics P3 profile: This profile is suitable for archers of every division (recurve, compound and barebow). If it is applied with a slight tilt angle it can be used even for the indoor season.

Available RH/LH - Colours: Yellow - Light Blue, Green, Red, Magenta, White, Pink, and Blue matt.

Technical characteristics P2 Hard Type profile: The same characteristics of traditional P2 vanes, but these vanes are made of very strong Polyester.

Available RH&LH - white colour only.



Vanes "S" (shield) profile - 50 pieces per bag

Perfect for 3D and H+F

The "S" profile vanes have been studied to successfully send the airflows in the curvature of the helical vanes. And, in the rear part, the shield shape of the vanes helps dissipating the diverging air puffs, therefore enhancing the stabilization capacity of the arrows even at short distances. This particular shape is recommended in Field shooting, 3D and Indoor.

The package includes 50 vanes + 1 roll of double-sided tape High Performance 3 mm x 3 m + black closure ribbons. Available RH/LH -



Shield vanes "S" series



Technical characteristics of the S1 profile: The very low profile and the small surface make this vane suitable for high level compound archers who shoot with a high draw weight.

Available RH/LH - Colours: Yellow - Light Blue - Green - Red - Magenta - White

Technical characteristics S2 profile: Especially designed for recurve and barebow archers with a good technique, or for compound archers who want easily manageable vanes.

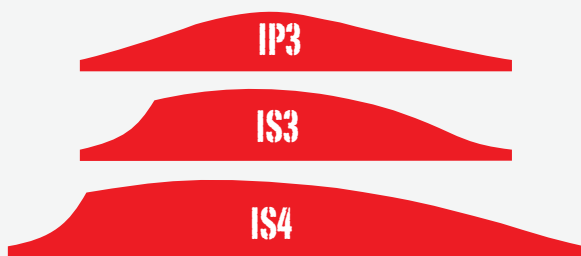
Available RH/LH - Colours: Yellow - Light Blue - Green - Red - Magenta - White

Technical characteristics S3 profile: This profile is suitable for recurve and barebow archers. It has proven excellent on small shafts (ACE or similar shafts).

Available RH/LH - Colours: Yellow - Light Blue - Green - Red - Magenta - White

Technical characteristics of the S3 Hard Type profile: These vanes have the same characteristics of the traditional S3 vanes, but they are made of very strong Polyester. Available RH&LH - white colour only.

Indoor vanes "I" series



Indoor vanes - "I" series (36 pieces per bag)

Especially designed for large diameter shafts.

The shape and the profile of the vanes "IS" (that come in sizes 3 or 4 inch and are particularly suitable for large diameter arrows) has been studied to convey air flows properly towards the rear part of the vane. And its shielded form allows the dispersion of diverging air puffs, increasing the stabilizing efficiency of the shaft even at short distances.

The Elivanes vanes with parabolic "IP" profile are perfect for

small diameter shafts (ACE, X10, Nano, Victory VAP and similar shafts).

These vanes can also be applied with a slight tilt angle in order to increase its stabilizing effects.

The Elivanes with parabolic profile "IP" are perfect to be used on small diameter shafts (ACE, X10, Nano, Victory VAP and similar shafts). The package includes vanes 36 + 1 roll of double-sided tape 3mm x 3m High Performance (3mm x 4m in packs of IS4) + black closure ribbons. Available RH / LH.

Technical characteristics of the IP3 profile:

Initially designed for recurve bows and for shooting FITA, these vanes proved exceptionally efficient even in Indoor shooting. They guarantee a perfect and immediate stabilization of the arrow. They can also be applied with a slight angle to increase their efficiency.

Available RH/LH - Colours: White, Black.

Technical characteristics of the IS3 profile:

This vane is recommended for recurve and barebow archers, but also for compound archers with a reflex riser and reduced brace height. They are recommended with large diameter arrows.

Available RH/LH - Colours: Yellow - Light Blue, Green, Red, Magenta, White, and Blue matt.

Technical characteristics of the IS4 profile:

This vane has especially been designed for recurve and compound archers. They are recommended with large diameter arrows.

COLOURS



SHARK



"Shark" Series (50 pc. per bag)

Profile "Shark" to be used on small diameter arrows. These vanes are the ideal for Field and 3D competitions, both for Recurve, Barebow and Compounds divisions. In particular, these vanes should be used the Compound 50m Round and in the Indoor competitions for RB and BB. The particular shape of a "shark fin" has been inspired by military aircraft with tilting wings that modify their wing surface in order to determine a greater or lesser air lift during the phases of take-off, landing or normal flight.

In the "Shark" profile vanes, the tip is left free, so that it can wrap on itself during the first stages of the flight. Following the shaft's movements, the vanes open up to offer a greater surface and it helps stabilizing the arrow in a faster way. Once the arrow takes its correct direction of flight, the Shark vanes tend to close themselves to offer a smaller surface and, therefore, less friction. This is a great advantage for the speed of the arrow.

The package includes 50 vanes + 1 roll of double-sided tape High Performance 3 mm x 3 m + black closure ribbon.

Available in white, in right (RH) or left (LH).



High Performance Tape (126 cm x 4 mm)

High efficiency adhesive tape, available in die-cut sheets of 4mm width and 126 length. The black tape is included in all bags. Available in the following colours: green, yellow, orange, white, red, gold, silver, violet, black and pink.



High Performance Tape for Elivanes assembly (double adhesive)

The best tape available. It associates a high quality and a great adhesive capacity.

It is available in 3 ways:

- BIA03 High Performance Tape in a 3mm x 3m roll.
 - BIA04 High Performance Tape in a 3mm x 4m roll.
 - BIA25 High Performance Tape in a 3mm x 25m roll
- Very useful for clubs, or for those who want to have a stock of tape always available.

Specifications:

Material	Transparent polyester
Liner	Red Polypropylene
Color	Transparent
Adhesive	Acrylic
Total thickness	2/10 mm
Adhesiveness	700 cN/cm
Resistance to heat	200°



PLACEMENT OF ELIVANES

Correct placement



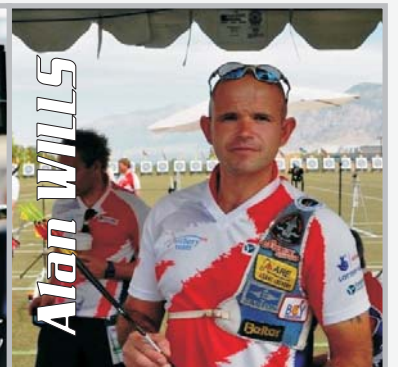
Min. distance 1¹/₄
Max distance 1¹/₂

Allowed placement



Min. distance 1¹/₄
Max distance 1¹/₂

maximum angle 2°



You & Elivanes
"The winning choice"