

**Arrow vanes – General description**

Our vanes are made of a laminated plastic material, with a 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, determine a series of benefits in terms of arrow performance, 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 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.

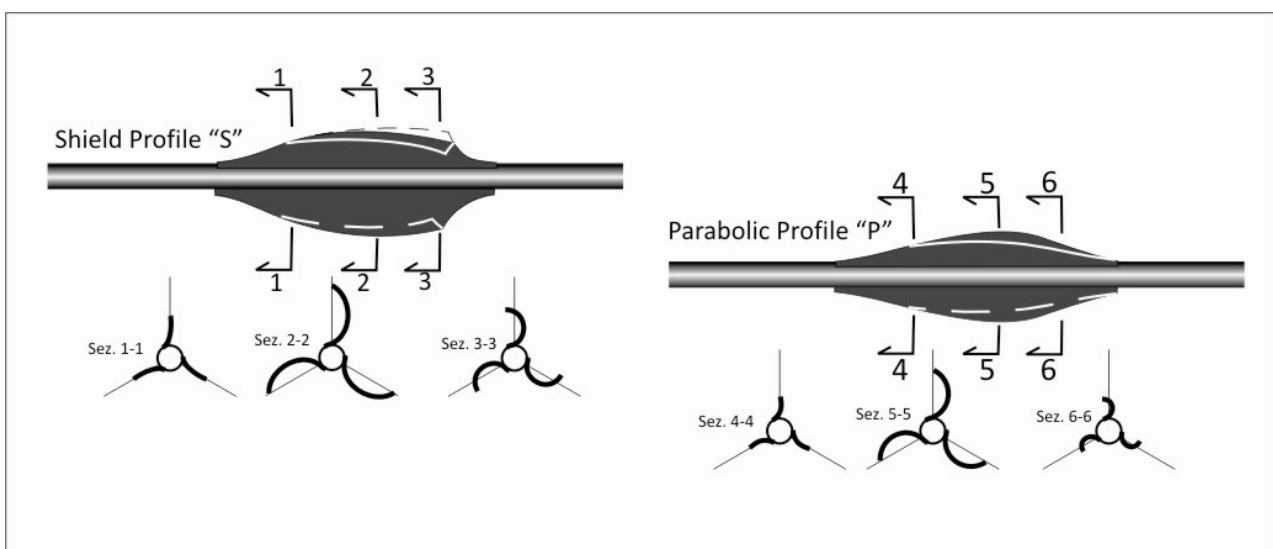
At the beginning of the flight it will be forced, thanks to the aerodynamic prodding (that is proportional to the air’s speed, statistically considered motionless) exerted on the surfaces that are gradually bent.

This will make the vanes open, trying to reach a flat shape but, at the same time, without losing its 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.



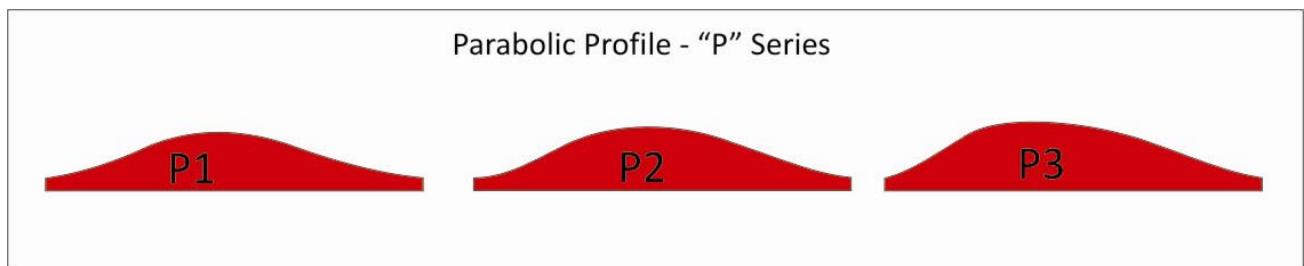
The shape/profiles can be divided into two basic typologies:

1. Vanes with the **“S” profile** are included in the “shield”-type.  
This vanes have all the characteristics we have 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 this vanes suitable for short/medium distances.
2. Vanes with the **“P” profile** are included in the “parabola”-type.  
This 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.

### Profiles, dimensions and usage

#### ***Vanes with the “P” profile (50 pieces per bag)***

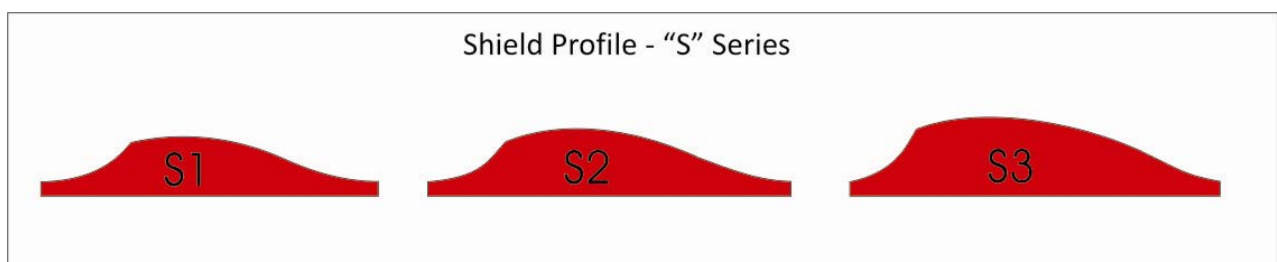
Especially designed for FITA Round and 70m Round



- **P1** The very low profile and the small surface make this vane suitable for high level compound archers.
- **P2** Especially designed for compound archers with a good technique, or for those who want an easily manageable vane.
- **P3** 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.

#### ***Vanes with the “S” profile (50 pieces per bag)***

Especially designed for 3D and H+F

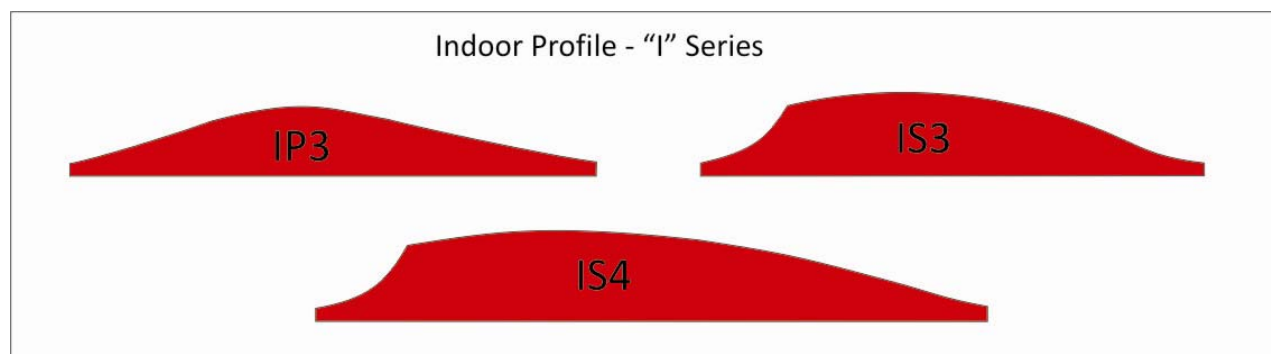


- **S1** The very low profile and the small surface make this vane suitable for high level compound archers who shoot with a high draw weight.
- **S2** Especially designed for recurve and barebow archers with a good technique, or for compound archers who want an easily manageable vane.
- **S3** This profile is suitable for recurve and barebow archers. It has proven excellent on small shafts (ACE or similar shafts).

### **Indoor Vanes - "I" Series (36 pieces per bag)**

Especially designed for large diameter shafts.

This vanes can also be applied with a slight tilt angle, in order to increase the stabilizing effect.



- **IS3** This vane is recommended for recurve and barebow archers, but even compound archers with a reflex riser and reduced brace height.
- **IS4** This vane has especially been designed for recurve and compound archers.
- **IP3** This profile is suitable for recurve and barebow archers who prefer smaller diameter shafts.

### **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 the 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  
Color Transparent  
Total thickness 2/10 mm  
Resistance to heat 200°

Liner Red Polypropylene  
Adhesive Acrylic  
Adhesiveness 700 cN/cm

**Positioning of EliVanes**

Correct positioning (min. distance 1" ¼, max. distance 1" 1/2")

Allowed tilt angle (Max.angle 2°).

