PA Trellising Systems

Products for viticulture and orchards

Getting innovation into shape – discover our unique hook technology

The Company

PA Trellising Systems, based in Charlottesville VA, sells high-quality galvanized steel posts and trellis material throughout the US and Canada. PA Trellising is part of the Meiser Group, a major German steel manufacturer with over 2,500 employees, known for producing a wide range of superior steel products. We have been manufacturing posts for viticulture and horticulture for over 30 years. Our annual production is roughly 10 million posts. Our posts are hot dipped galvanized at Meiser's ultra-modern facility, guaranteeing the highest standards and long-lasting protection. This provides reliable performance and long-term durability.

As a leading manufacturer, we offer our customers comprehensive support worldwide and work with them to find the best solutions for their trellis needs, including customization.

We look forward to assisting you.

Oliver Asberger
Vice President, PA Trellising Systems, Inc.

PA Trellising Systems

Galvanization

We hot dip galvanize our posts in-house with state-of-the-art processes that provide the highest quality with long-lasting corrosion protection without the need for special maintenance.

Facts About Galvanization Processes and Quality

Galvanization has two different methods to protect the steel against corrosion by using zinc. One is Hot Dip Galvanization (HDG) and the other is continuous Strip Galvanization (SG).

Hot Dip Galvanizing (with the industry standard DIN EN ISO 1461) is the highest quality galvanizing process. After being formed from black steel the posts are submerged into liquid zinc. This process ensures that all surfaces of the post, including all hooks, holes, and cuts are coated equally by the zinc. With HDG, the average zinc coating is 45 µm but is often measured between 60 µm and 80 µm.

This galvanized surface is weather-resistant for many years and guarantees durability for more than a generation.

Due to the additional labor and a thicker zinc layer, the cost of HDG posts are around 20% to 30% higher than that of strip galvanized posts.

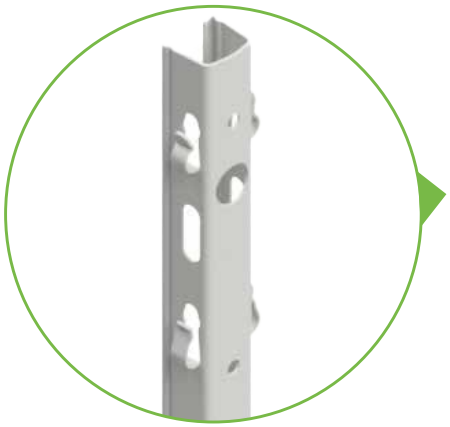
For the strip galvanizing process (with the industry standard DIN EN 10346), a liquid zinc coating is continuously applied to the steel sheets in specialty plants. This galvanized steel has a zinc coating with an average thickness of 20 µm but is often measured between 25 µm and 30 µm. Posts with this process are less expensive than those made using the HDG process, but are also less durable over time.

If we consider that the average useful lifespan of a vineyard is between 25 to 35 years, it is important to consider the cost-benefit factor of galvanization methods for posts over that time. We recommend that you consider your site soil drainage and pH, weather, and other factors which may have an impact on the life span of the galvanization. For example, galvanization will last longer in a dry climate than in a wet climate.

When comparing prices from different suppliers, pay special attention to the name of the galvanization process used. The term “Hot Dip Galvanized” is often used to describe material which is actually strip galvanized. In order to avoid any misunderstandings, we refer to specific industry protocols, as in our “HDG according to DIN EN ISO 1461” or “strip galvanized according to DIN EN 10346”.

P3 Profile

The P3 profile was specifically developed for lower trellises and is versatile for vine or berry trellising.
Custom designs are available on request.
Our posts are available in 3 different types:
- Hot Dip Galvanized (HDG)
- Strip Galvanized (SG)
- COR-TEN® Steel (special request)



Depth table P3

Length [inch]	Depth [inch]
60	20
66	20
72	22
78	24

P5M Profile

The standard P5M is made with the tapered S-hook. These form large wire eyes and are suitable for use with any vineyard machinery. The new R-hook can be used here, as well as the Combi-hooks.
Custom designs are available on request.
Our posts are available in 3 different types:
- Hot Dip Galvanized (HDG)
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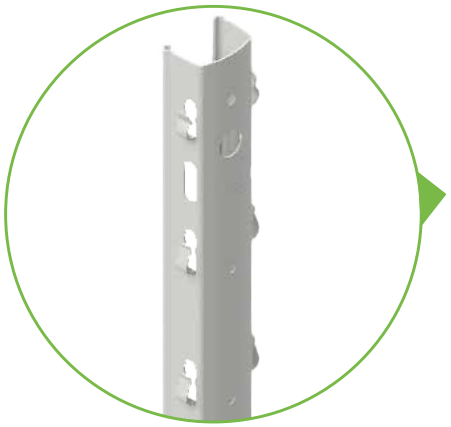
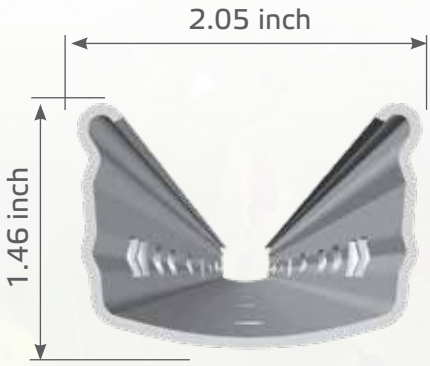


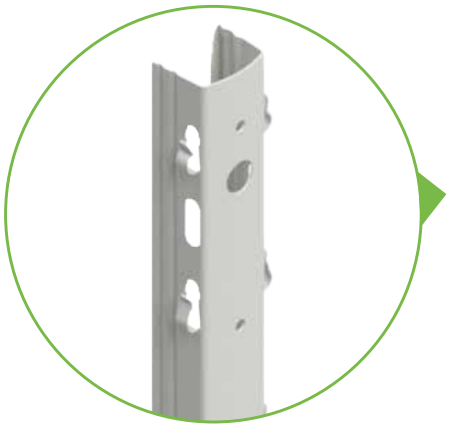


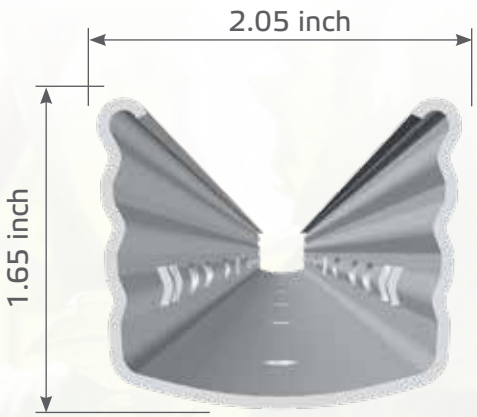
Depth table P5M

Length [inch]	Depth [inch]
96	27-30
102	31
108	34

P5L Profile

The P5L is our widest post. Its side width of 1.65-inch guarantees stability for tall and heavy load trellises of up to 7 feet above the ground.
The P5L has approximately 4 inches between hooks. The S hook is standard, but the new R-hook and Combi-hook can also be used here.
Custom designs are available on request.
Our posts are available in 3 different types:
- Hot Dip Galvanized (HDG)
- Strip Galvanized (SG)
- COR-TEN® Steel (special request)



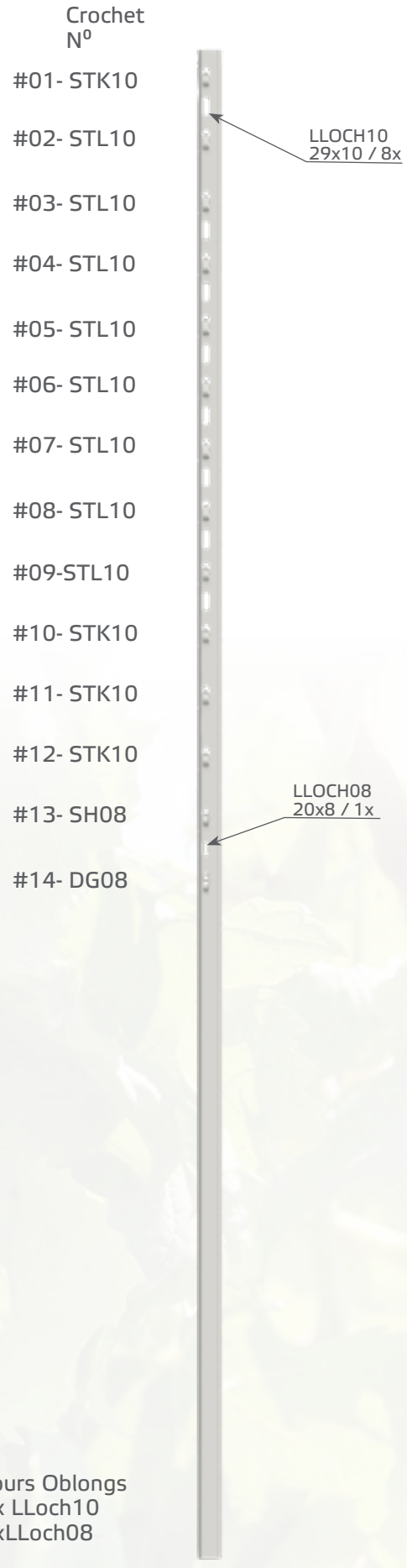


Depth table P5L

Length [inch]	Depth [inch]
96	27-30
102	31
108	33-35

Standard Hook Configuration
Profil P3, P5M, P5L

Length 7.5 – 8.5 feet



Crouchet	Hooks	Number of pairs
STK10	10 mm Short tapered S Hook	1
STL10	10 mm Long tapered S Hook	7
STK10	10mm Short tapered S Hook	4
SH08	8mm S Hook	1
DG08	8mm Double Hook	1
LLoch10	Cross Arm Slot	8

Customization:

Choosing the Ideal Hook for Your Specific Needs

Nearly all our posts can be customized based on factors like your site-specific details, mechanization, and specialized training systems. As the industry moves towards increased mechanization, we allow you to choose a hook design that accommodates your needs.

Please note that custom models are available after technical clarification, but longer delivery times should be expected, and minimum quantities are required. Please contact us if you're interested in customization.
We recommend customized orders be placed in the off-season. In the peak season (December to May), custom models may not be available.

Lower fixed wire area

Catch wire area

Upper fixed wire area

Double hook

S-hook

Short tapered S-hook

Long tapered S-hook

Combi-hook

R-hook

Short tapered S-hook

Further hook information is on page 15 & 16

D65

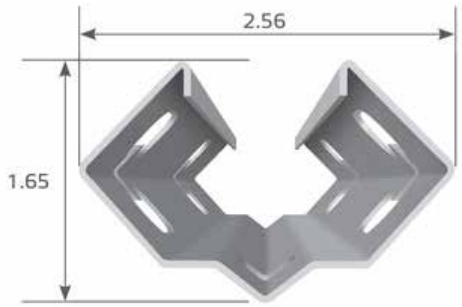
The D65 posts have slots instead of outside hooks. They facture a high degree of stability and strength giving a sturdy profile with a wide cross section.

- Horizontal slots for flat terrain
- Diagonal slots for slopes

The post can be custom tailored; please inquire with a sales specialist.

Depth table D65

Length [inch]	Depth [inch]
96	26-30
102	30-32
108	32-34



D65 row posts hook type

Straight internal hook

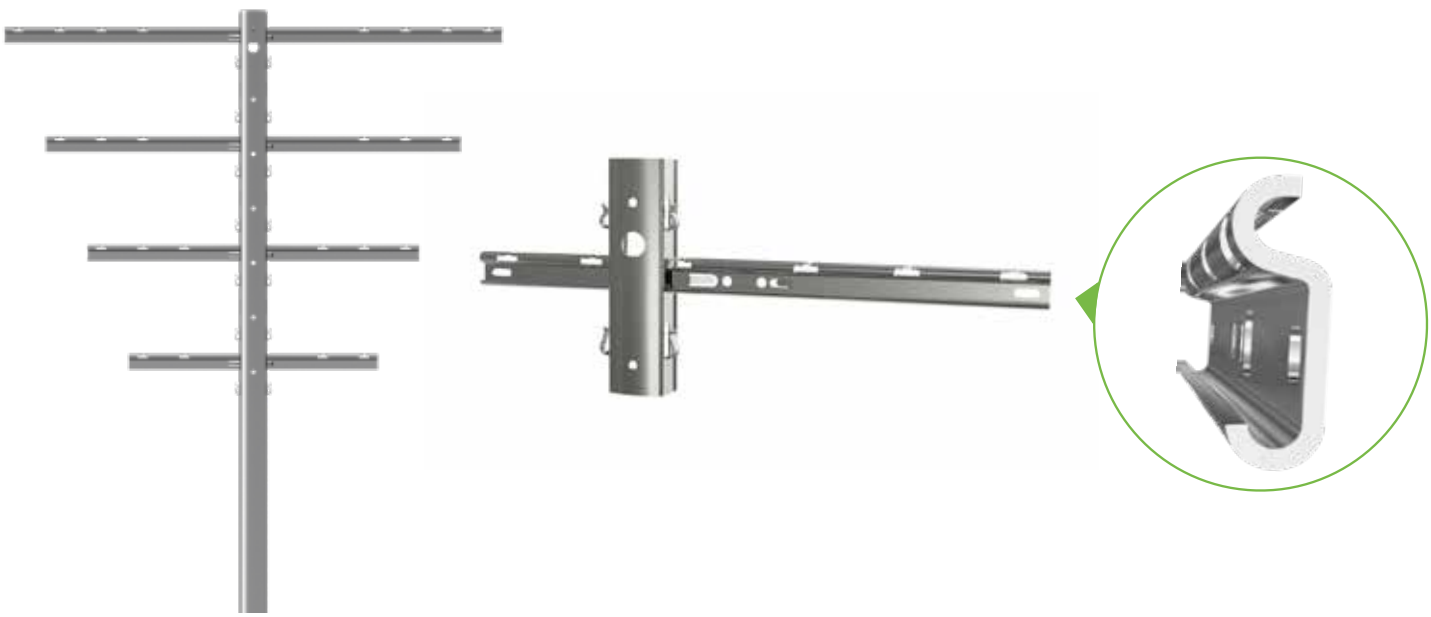
Open internal hook

Inclined internal hook

Crossarm System

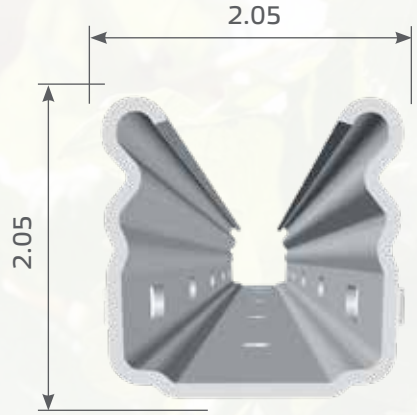
Our Crossarm Installation is one of the fastest in the industry. It comes with a click lock system that allows you to install them in seconds. They are maintenance free and require no u bolts. They can be installed on P3, P5M and P5L posts.

Length [inch]
6
12
18
24
30
36



P5E Profile

The advantages of the P5E end post are:
- Large “pull out” hole
- Holes in the back for tensioning wires
- Holes at ground level for the base plate
- The base plate can be attached using a simple plug system
- Hook brackets for chains can be attached (see accessories)
- Available in four thicknesses:
· for rows up to 80m row length use 1.65 mm thickness
· over 80m row length use 2.15 mm thickness in HDG
· over 150m row length use 2.65 mm thickness



Depth table P5E

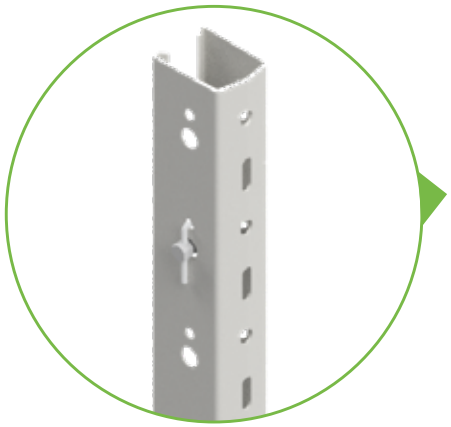
Length [inch]	Depth [inch]
96	28
108	35
120	37

Every trellis structure needs a strong base. The end post plays an important role in this. We offer solutions for all your requirements, combining different profiles and heights of posts.

P7E Profile

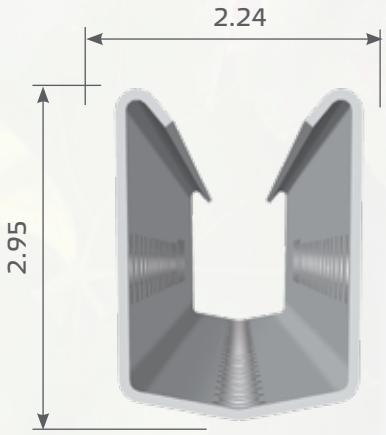
Modern vineyard labor is becoming increasingly automated, so the modern trellis needs to be flexible and resistant. The wires can be installed to be fixed or movable with the accessories that are specially developed for the P7E.
The 75 mm width and material thicknesses of up to 2.65 mm gives the P7E robust stability.

- Holes in the back for tensioning wires
- Holes at ground level for the base plate
- base plate can be attached using a simple plug system
- Hook brackets for chains can be attached (see accessories)
- Available in four thicknesses:
  - for rows up to 80m row length use 1.65 mm thickness
  - over 80m row length use 2.15 mm thickness in HDG
  - over 150m row length use 2.65 mm thickness



Depth table P7E

Length [inch]	Depth [inch]
96	28
108	35
120	37



Every trellis structure needs a strong base. The end post plays an important role in this. We offer solutions for all your requirements, combining different profiles and heights of posts.

Please note: end posts must always be approx.
4“ - 7“ inch deeper than the first or the last row post.

Special Models

Please note, that special models are available according to demand and after technical clarification. However, longer delivery times must be expected. We therefore suggest to clarify and order special models already in the early season between June and September. In the peak season from January to May, special models are mostly not available.
For more information, please contact our sales departments.

Profil P4

The P4 is ideal for low and medium trellis system heights of up to 5 feet above the ground.

Profil P5

The P5 is the smallest of our P5 series posts. It should be used with lighter weight loads then P5M or P5L.

Profil P5X

The P5X was developed for use in rocky ground. Due to its almost square shape and compact profile, it is very stable and robust, whilst maintaining flexibility for use with all types of machinery

Profil P6

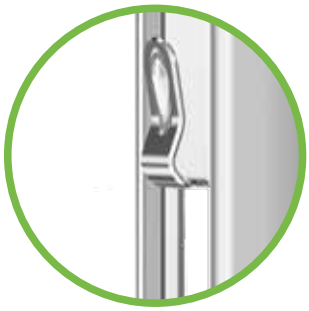
With its interior notches, the P6 is a solution for users of more traditional types of posts. Due to varied requirements, we offer the P6 with 3 different notch designs.

E55 & E66

With an overall width of 2,17" (E55) and 2.36" (E66) the allrounder for the highest standards of stability.

Hook Designs

R-hook



The R-hooks is our newest hook and is the best for moveable catch wires.

The unique design of the R-hook has several advantages. It speeds up manual labor, is ideal for cane pruning technology and harvest machines. The catch wires can be easily removed both manually and mechanically.

The harvesting machinery cannot push the hook into the post because it is bent upwards away from the punched hole.

A small nub on the inside of the hook keeps the catch wires in place and is ideal for undulating terrain.

Combi-hook

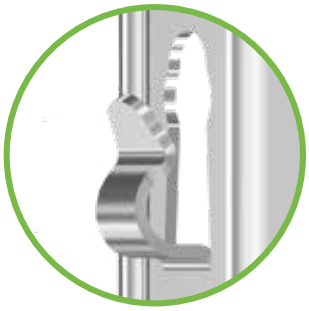
- Features an interior post notch.
- Large wire opening
- The ridge ensures wires stay in place

10 mm long tapered S-hook

- Patented technology makes this hook resistant to harvester rod strikes
- The shape of the hook means it will not be pushed into the hole
- Versatile for fixed or moveable wires and mechanization

10 mm short tapered S-hook

- Ideal for fixed wires
- Open hook: easy wire insertion
- Closed hook: wire is fixed but not rigid.
- Extremely stable
- No damage to harvester rods; the hook head lies flat when pushed closed



8 mm S-hook

Ideal for irrigation or other fixed wires.

8 mm Double hook

- For positioning of catch wires during winter
- Avoids leaving wire on the ground
- Prevent wire entanglement by machinery

Accessories

Impact protector

Prevents the posts and its galvanization from being damaged by post drivers.

Each post model has an corresponding protector size.

Plastic hooks

Plastic hooks for S- and R-hook

Protects plastic and plastic-coated wires from damage. The plastic hook can also be used as a replacement hook and can prevent wires from pulling out on undulating terrain. In more extreme slopes, the plastic hook can be turned by 180º to create an inverted hook, eliminating unwanted wire movement.

Install key

The install key is used to attach the plastic hooks to the post.

Push fit tensioner (P7E)

Ideal for irrigation or other fixed wires.

Hook bracket P5E

The hook bracket is inserted into a hook pair on the P5E end posts. Chains or wire tensioners can be attached to the ends of the bracket

Hook bracket P7E

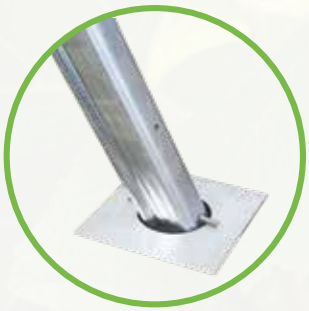
The hook bracket is clicked into the eyes of the end post P7E. Chains or wire tensioners can be attached to the bracket.

Plastic wire protector

Protects plastic and plastic-coated wires from damage. An additional plastic tab prevents the wires from jumping out.

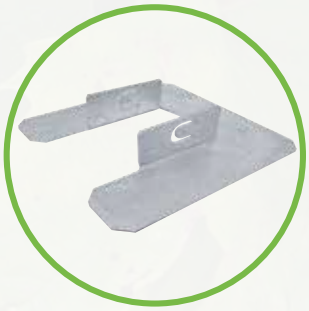
Base plate P5E

The base plate prevents the end posts from sinking.
The locking pin on the base plate is not included.



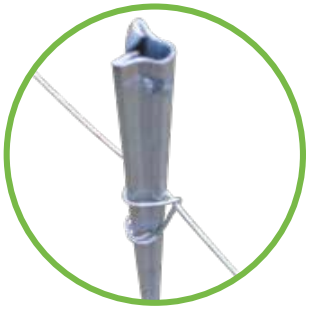
Base plate P7E

The base plate prevents the end posts from sinking.



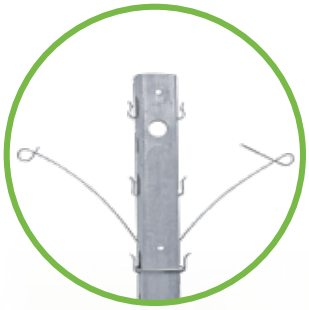
Plant stake

Our stakes are light and not ribbed, which means they are easily removed from the ground after use. The triple sided profile prevents the stakes from being bent and protects your plants from machinery.



Wire spreader

The wire spreader is used with the catch wires. They are opened during winter pruning which ensures that the shoots will grow between the wires that are now wider apart. After the shoots have reached the desired height, the wire spreader should be closed. Depending on the variety and the growth of the vines, this can then be repeated in the upper areas. This substantially reduces manual labor during the growing season.



Water lance

To rinse the placement holes in dry and stony ground.

Manual post driver

The specific design of the manual post driver offers protection for the posts during installation and avoids damaging the hooks on installation.

For low and high trellis systems
Available with or without sound insulation

ONLY FOR USE WITH HEARING PROTECTION!

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