Vineyards, Fruit & Crop Protection

Brochure
Platipus Anchors are market leaders in the design, manufacture and supply of Percussion Driven Earth Anchoring Solutions (PDEA’s®) for a wide range of market sectors. Founded in 1982, Platipus is renowned for providing some of the most innovative and cost effective anchoring solutions for the Civil Engineering, Landscape and, more recently, the Vineyard and Fruit Growing Industries.

Technology in the vineyard and fruit growing industry improves almost with every harvest. The anchoring point for any trellis or crop protection system, light or heavy, is usually the most important part of the structure, particularly when the fruit is ripening and the canopy is at its largest. Without a secure reliable anchor point the result could be catastrophic and costly.
BENEFITS OF THE PLATIPUS ANCHORING SYSTEM

- Over 30 years experience
- A simple effective design & concept
- High grade heat treated aluminium alloy anchor head
- Unique anchor head design ensures installation in most compacted soils, including chalk
- Superior strength stainless steel solid wire with unique connection
- Fast and easy installation
- Immediate quantifiable loads, if required
- High performance standard anchor systems with an ultimate load up to 1000kg, subject to soil conditions
- Up to 25 year anchor system design life in balanced neutral soil
- Ideal for new establishments or general maintenance
- A cost-effective alternative to traditional anchoring techniques

General Maintenance  New Establishment

HOW A MECHANICAL ANCHOR WORKS

There are three steps to the installation of an anchor system:

1. DRIVE THE ANCHOR
2. REMOVE THE ROD
3. LOADLOCKING

TYPICAL ANCHOR BEHAVIOUR

<table>
<thead>
<tr>
<th>LOADLOCK</th>
<th>COMPACTION AND LOAD</th>
<th>MAXIMUM LOAD RANGE</th>
<th>BEARING CAPACITY FAILURE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Anchor - The unique design of the Platipus anchor means it can be rapidly deployed in most compacted soils, including chalk. It’s chisel drive point and streamlined shape make installation easy, in most cases, using simple hand or power tools.

It is made of a high grade aluminium alloy which is specially heat treated to provide maximum strength and corrosion resistance. Available in a variety of sizes to suit all load requirements; the Platipus anchor is the perfect solution for trellising, soft fruit and crop protection applications.

The Wire - The wire is made of a superior grade of stainless steel. It’s construction and high strength characteristics mean that it can outperform any flexible or solid strand galvanised wire tendon of an equal diameter.

Available in standard 3mm diameter size it has a unique ‘patented’ connection which makes anchor system assembly quick and easy.

The Platipus Anchoring System - By using high quality products we are able to deliver a range of standard anchoring systems with a design life up to 25 years in a balanced neutral soil. Using conventional installation equipment, they can be proof tested to an exact holding capacity and made fully operational immediately. The standard S4V1S and S6V1S have an ultimate load of 1000kg depending on soil conditions.

The anchoring systems perform exceptionally well in granular soils, stony ground and most chalks, often allowing a smaller size of anchor to be used. In weaker cohesive soils, like soft alluvial clays, a larger anchor may be needed.

<table>
<thead>
<tr>
<th>Soil type</th>
<th>Soft</th>
<th>Medium</th>
<th>Hard</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPT / CPT*</td>
<td>0 - 10</td>
<td>10 - 30</td>
<td>30+</td>
</tr>
<tr>
<td>Shear angle</td>
<td>0 - 30º</td>
<td>30 - 38º</td>
<td>38º+</td>
</tr>
<tr>
<td>Anchor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S4</td>
<td>0 - 300kg</td>
<td>300 - 600kg</td>
<td>600 - 1000kg</td>
</tr>
<tr>
<td>S6</td>
<td>0 - 500kg</td>
<td>500 - 1000kg</td>
<td>1000 - 2000kg</td>
</tr>
<tr>
<td>S8</td>
<td>0 - 1000kg</td>
<td>1000 - 2000kg</td>
<td>2000 - 3000kg</td>
</tr>
</tbody>
</table>

*SPT = Standard Penetration Test  CPT = Cone Penetrometer Test
To complement our range of high performance anchoring systems we can offer a selection of simple end post kits for metal / wooden posts to suit all budgets. The kits come complete with a pre-cut length of flexible galvanised wire tendon suitable for either single or double-leg connections, an end stop termination and a choice of tensioning devices.

For premium applications we can offer the Revolution tensioner. Made from a superior grade of stainless steel it is designed with simplicity in mind. Installation requires only a 13mm spanner or socket for tensioning. Apart from the design life one of the main advantages of this tensioner is that it can be reused time and time again.

For situations with a limited budget we can offer a range of simple tensioners made from 100% metal providing excellent strength and durability. The tensioners require a simple tensioning tool for installation and when combined with Platipus 3mm and 4mm diameter high strength galvanised wire delivers an ultimate load of 400kg and 600kg respectively.

Popular grape varieties are often established on compacted soils and chalk. A high quality grape also requires high quality trellising and secure anchor points.

The Platipus S4V1S and S6V1S anchoring systems are ideal for vineyard trellising. Both systems will match the design life of most trellising and have an ultimate holding capacity of up to 1000kg, depending on soil conditions. The unique anchor design makes installation into the hardest chalk easy, allowing over 300 anchors to be installed in one day when using the correct equipment.
Larger fruits and heavier flowering plants, such as apples and hops, often use taller trellising, longer rows and produce a more intense crop. This means that a more substantial anchoring point is generally required.

The S6 and S8 anchor systems are perfectly equipped to handle a potential increase in load. Compatible with a variety of stainless steel solid wire diameters we are able to offer a number of different solutions to suit individual design life and load requirements.

Table-top trellis systems are fast becoming the preferred method for growing soft fruits, such as strawberries. It offers a number of benefits over traditional bed grown techniques. Raising the plant helps protect it against frost and disease, it makes it easier and faster to pick and can also increase the yield.

The load generated by table-top fruit can increase significantly during the growing season. Choosing the correct anchor system to support growth is a vital consideration. The S4V1S and S6V1S have an ultimate holding capacity of 1000kg depending on soil conditions, and are perfect for table-top trellis systems.
Protective solutions like polytunnels, shade fabric, bird and hail netting have revolutionized soft fruit production.

Although these lightweight materials can remove weather dependence and improve production they can also act as a large sail area when exposed to strong winds, putting additional stress on the structure.

The correct choice of anchor system is crucial to the structures’ overall stability. The S6 and S8 anchors are ideal for this type of situation and when combined with the high strength stainless steel solid wire we can provide a range of solutions to suit all load requirements.

Basic tools are essential in the installation process. Other pieces of equipment make the general procedure easier and faster. Where multiple anchor installations are required we recommend using powered equipment to install the anchors.

<table>
<thead>
<tr>
<th>ANCHOR</th>
<th>DRIVE RODS</th>
<th>ROD REMOVERS</th>
<th>LOADLOCKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>S4</td>
<td>HDRS4ED / PDRS4ED</td>
<td>RR1</td>
<td>PH1</td>
</tr>
<tr>
<td>S6</td>
<td>HDRS6 / PDRS6</td>
<td>RR1</td>
<td>PH1</td>
</tr>
<tr>
<td>S8</td>
<td>HDRS8 / PDRS8</td>
<td>RR1</td>
<td>SJ1</td>
</tr>
</tbody>
</table>

All our tools have been tried and tested over many years. A full twelve month replacement warranty is offered (subject to inspection) should any tool fail during the normal installation process.