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Who we are

With more than 30 years of experience and 2.200 employees, ALUMIL is one of the most advanced companies globally in the design and production of architectural aluminium systems, owning state-of-the art production lines in its 12 factories located in Europe.

Alumil Solar is a dedicated Business Unit of Alumil Group that provides certified PV mounting structures from high toughness aluminum alloy (Al 6005T6) and from steel. We have more than 14 years experience in PV mounting structures for field and roofs installations. The full range of PV mounting structures (with the trade name HELIOS) are internationally certified according to Eurocode 1 and 9 specifications. The innovative structure designs enable the mounting of all sizes of PV frames, the full variety of all PV technologies patterns, minimizing at the same time the installation time.

In the last few years, we have a substantial experience in large-scale PV project with installed capacity over 1,3 GW in various countries including Italy, Greece, Germany, Bulgaria, Romania, Turkey, Bosnia, England, Serbia, Cyprus, Egypt, Japan etc. The company provides also complete technical support for proper installation of the mounting structures in every large field installation.

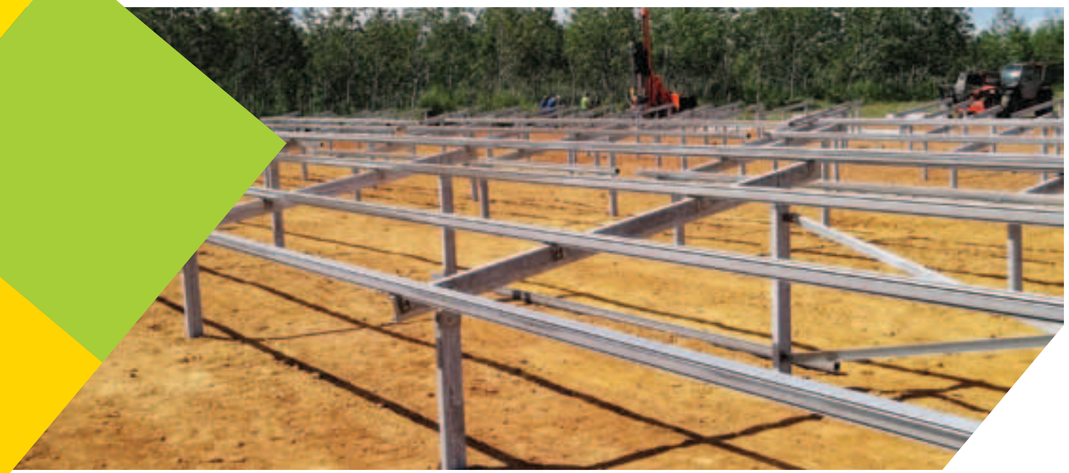
Alumil Solar can provide local technical support for any large/ small PV Projects with the support of local Alumil Group engineers in the following countries where Alumil operates with its subsidiaries: Germany, Cyprus, USA, Egypt, Hungary, Turkey, Serbia, France, Croatia, Albania, Russia, Bosnia, Romania, Bulgaria and United Arab Emirates.

What we do

- Alumil Solar is a mounting structure manufacturer and system designer with a wide product range which covers all kind of applications. We are an aluminium extruder so we control the whole value chain from the raw material, foundry, die casting, extrusion to the delivery of pre-assembled triangles to the job site.
- We offer a full range of PV mounting structures (free field, roof, flat roof) covering even the most demanding customers. Moreover, we are specialized in designing and producing new Taylor made aluminum structures for PV projects.
- We have a dedicated team of engineers to support our clients in every aspect of the PV projects.We provide analytical technical manuals of our mounting structures that provide full description of the necessary assembly and installation steps. In that sense, our products are added-value by our Customer Service as our company pays great attention to technical support by providing our clients with training and continuous support for every project needed and we do that even on-site by organizing training sessions.
- We operate one of the largest R&D facilities in South East Europe with extensive experience in designing innovative PV mounting structures since 2000.
- We provide our products with CE certification.
- We produce the PV mounting structures from high toughness aluminium alloy (Al 6005T6) in the most modern aluminium extrusion facilities in S.E. Europe
- Our state-of-the-art manufacturing facilities are ISO 9001, Qualicoat, GSB and Qualanod certified.
- Our modern anodizing plant in Kilkis (Greece) operates under the strict EWAA-EURAS guidelines offering quality coatings that resist corrosion.
- We offer advanced BI PV applications for facade and window aluminium systems atriums and pergolas.
- We collaborate with experienced PV installers which are trained extensively throughout the years.

GROUND MOUNTED SYSTEMS

Alumil SOLAR HELIOS H2100 AS189/SS189



AS189/SS189 are the best solutions for free field application with pile foundation. They can support all kind of panel alignment (portrait, landscape) and can be designed for the optimum inclination angle. The two hot-dip galvanized steel piles with coating 80μm for corrosion resistance are combined with aluminum inclined beam and rails (AS189) or with steel inclimed beam and aluminum rails (SS189). They offer the best possible spans between triangles. The static study that accompanies each project according to meteorological and soil conditions provide the necessary security to installer. Certified according to Eurocodes and with a 20 years' warranty according to warranty conditions is delivered on the field in pre-assembled triangles and offers flexibility, security and speed to installers in every large scale free field photovoltaic installation.

TECHNICAL CHARACTERISTICS

Series	**H2100**
Type	**AS189/SS189**
Application	**Free Field**
Alloy	**6005T6**
Alignment	**Portrait / Landscape**
Inclination	**10-35 degrees**
Foundation	**pile ramming or bored cast in situ piles**
Special Characteristics	**/ Pre-assembled (AS189)** **/ Special system to prevent direct contact between steel and aluminum parts**

SS189.4L

AS189.2P

Alumil SOLAR HELIOS H2100 AS182/AS182 PLUS

AS182.2P

H2100-182 system is the evolution of the successful AS180 with a stronger horizontal beam and gives the opportunity to the installer to place less poles (Bigger distance between poles).

The advantages and the innovations of this mounting include:

- / Minimization of the installation time.
- / One pile per mounting triangle.Less time for the leveling since the installer has just to level according to East-West direction.
- / Fewer screws.
- / Certified according to Eurocodes with 20 years' warranty.
- / Structural and static study for each project after closing the deal.
- / Special system to prevent direct contact between steel and aluminum parts.

TECHNICAL CHARACTERISTICS

Series	**H2100**
Type	**AS182**
Application	**Free Field**
Alloy	**6005T6**
Alignment	**portrait**
Inclination	**25/30 degrees**
Foundation	**pile ramming or bored cast in situ piles**
Special Characteristics	**/ Pre assembled** **/ Special system to prevent direct contact between steel and aluminum parts**

H2100-182 PLUS system is the evolution of the successful AS182 with the replacement of the standard beam with a beam that can be elongated or shortened . This system is applicable not only for future build PV plants, but also for existing PV plants where AS182 mounting structure was installed. In this case, the beams of AS182 should be replaced with the adjustable beams of AS182 Plus.

The advantages and the innovations of this mounting structure include:

- / Adjustable inclination of the structure from 10º to 35º.
- / Estimated 5% to 7% additional annual productivity.
- / Fast inclination change of the tables with the usage of semi automatic system (including actuators and control box).
- / Certified according to Eurocodes with 20 years' warranty.
- / Structural and static study for each project after closing the deal.
- / Special system to prevent direct contact between steel and aluminum parts.

TECHNICAL CHARACTERISTICS

Series	**H2100**
Type	**AS182 PLUS**
Application	**Free Field**
Alloy	**6005T6**
Alignment	**portrait**
Inclination	**10 -35 degrees**
Foundation	**pile ramming or bored cast in situ piles**
Special Characteristics	**/ Pre assembled** **/ Adjustable inclination**

Alumil SOLAR HELIOS H2100 AS116

AS116.2P

AS116 is a complete aluminum structure solution for 2 panels portrait or 3 panels landscape. The system is provided with all needed clamps, connection base plates (to concrete blocks or steel piles) and stainless steel assembly screws in preassembled package. The inclination is 20 -30 / or can be customized as per exact requirements for large scale projects.

TECHNICAL CHARACTERISTICS

Series	**H2100**
Type	**AS116**
Application	**free field | flat roof**
Alloy	**6005T6**
Alignment	**portrait | landscape**
Inclination	**20-30 degrees**
Foundation	**pile ramming or concrete blocks or bored cast in situ concrete piles**
Special Characteristics	**/ Pre assembled**

Alumil SOLAR HELIOS H2500 HYBRID ALUMINUM TRACKER

The double axis tracker **HELIOS 2500** offers the sun's tracking function based on the innovative motion of "flexible geometry structure". The light weight system, which is constructed by aluminum, combines the advantages of traditional tracking systems and at the same time the reliability and flexibility of fixed structure. Because of the above hybrid design the Helios 2500 is an excellent "value for money" approach for solar projects. The tracker movement is guided by a Programmable Logic Controller using astronomical data.

- / Average efficiency increase more than 30%.
- / Cost saving more than 50% comparing to traditional tracking systems.
- / Light and "easy handling" structure.Fast and easy installation.
- / Pre-assembled.
- / Calculated with finite element analysis based on Eurocode standards. Appropriate for all the types of panels (max dim 1700x1000).
- / Low energy self-consumption.
- / Minimum service maintenance requirements.

TECHNICAL CHARACTERISTICS

Series	**H2500**
Type	**hybrid double axis**
Application	**free field**
Alloy	**6005T6**
Alignment	**landscape**
Inclination	**25-30 degrees**
Foundation	**bored cast in situ piles**
Power per tracker	**1,25kw**
Control system	**PLC with standard backtracking & high wind speed protection**
Azimuth spinning	**90 - 90 degrees**
Max heigth	**2,95m**
Rotating system	**electronic**

Alumil SOLAR

ROOF MOUNTED SYSTEMS

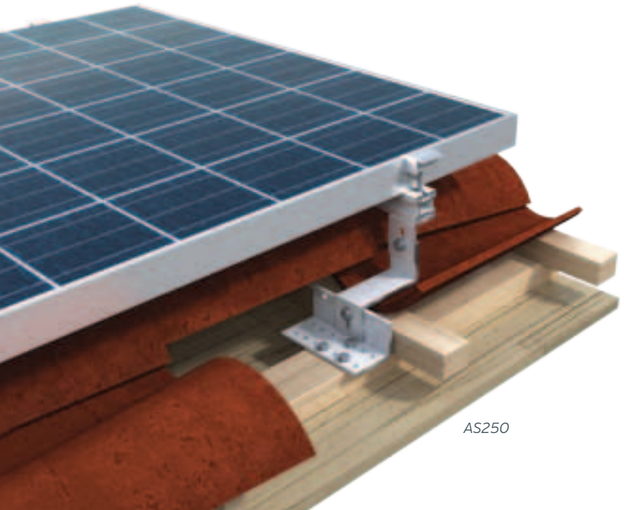
HELIOS H2200
AS250

AS250 Roof structure offer the possibility for easy assembly by achieving large spans (up to 1,8m) between the mounting points.

Depending on the requirements of each project, our structures can be adjusted in 3 dimensions, and fit in various types of tile (eg, Roman, Dutch). PV modules can be placed either in portrait or landscape position for maximum roof coverage.

TECHNICAL CHARACTERISTICS

Series	**H2200**
Type	**AS250**
Application	**tile roof**
Alloy	**6005T6**
Alignment	**portrait | landscape**
Inclination	**tangent to the tile roof**
Foundation	**hooks or hanger bolts**
Special Characteristics	**pre-assembled hooks**



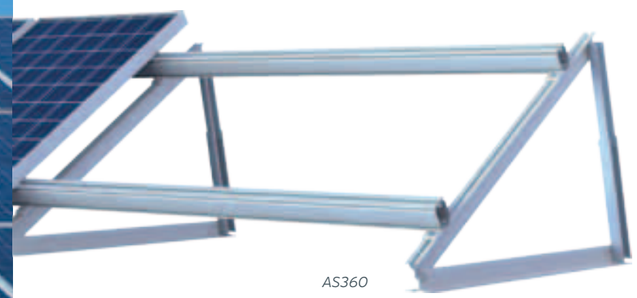
AS250

HELIOS H2300
AS360/AS370

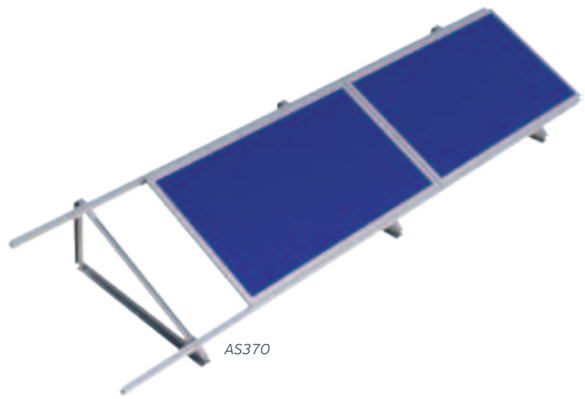
AS360 & AS370 structures are designed for easy assembly on the terrace surface.
These are lightweight structures that consist of few components.
The maximum span is 2m between the mounting points depending on the wind and snow loads. There is also the ability to change the slope from 10 up to 30 degrees.
AS360 supports portrait and AS370 landscape PV Module alignment.

TECHNICAL CHARACTERISTICS

Series	**H2300**
Type	**AS360**
Application	**flat roof**
Alloy	**6005T6**
Alignment	**portrait**
Inclination	**15-30 degrees**
Foundation	**concrete**
Special Characteristics	**/ Pre assembled / ligth mounting structure**



AS360



AS370

TECHNICAL CHARACTERISTICS

Series	**H2300**
Type	**AS370**
Application	**flat roof**
Alloy	**6005T6**
Alignment	**landscape**
Inclination	**10-30 degrees**
Foundation	**concrete**
Special Characteristics	**/ Pre assembled / ligth mounting structure**

Alumil SOLAR HELIOS H2300 AS106C

AS106 is an aluminum structure solution for 2 panels portrait. The system is provided with all needed clamps, connection base plates (to concrete blocks or steel piles) and stainless steel assembly screws in preassembled package. The inclination is 20 -30 / or can be customized as per exact requirements for large scale projects.

TECHNICAL CHARACTERISTICS

Series	**H2100**
Type	**AS106**
Application	**free field | flat roof**
Alloy	**6005T6**
Alignment	**portrait | landscape**
Inclination	**20-30 degrees**
Foundation	**pile ramming or concrete blocks or combination**
Special Characteristics	**/ Pre-assembled**

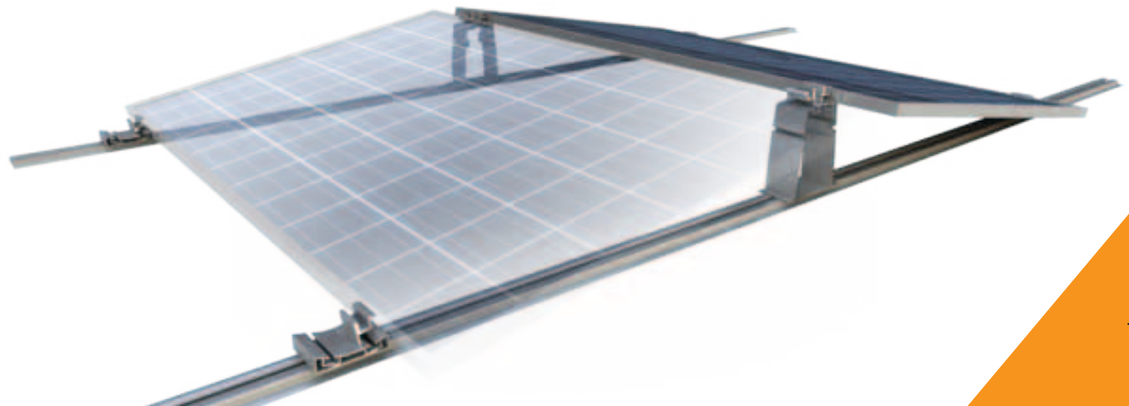
AS106.2P

Alumil SOLAR HELIOS H2300 SOLFIE

Solfie solution is a low-ballast mounting system for PV installations on flat roofs. The systems is designed to hold one panel in landscape orientation and with 10 degrees inclination. Its main goal is to offer the ability to installer not to damage the insulation of the roof by avoiding any kind of roof penetration. To achieve that we use special concrete blocks. Certified according to Eurocodes and with a 20 years warranty according to warranty conditions the system provides protection for your rooftop and offers an easy, fast and economical photovoltaic installation made by aluminum.

TECHNICAL CHARACTERISTICS

Series	**H2300**
Type	**Solfie**
Application	**flat roof**
Alloy	**6005T6**
Alignment	**landscape**
Inclination	**10 degrees**
Foundation	**Self - Ballasted / No roof penetration**
Special Characteristics	**/ light mounting structure**



Alumil SOLAR HELIOS H2400 AS410L / P

Alumil, recognizing its installers' need for quick and safe structures, improved the PV mounting system on industrial roofs considerably, by offering an innovative solution bearing numerous advantages.

- / Quick and easy assembly.
- / Adaption to various types of industrial roofs.
- / Possibility to position the PV modules in portrait or landscape inclinations for maximum cover of your industrial roof.
- / The installation time is reduced up to 50%.
- / Mini rails.

TECHNICAL CHARACTERISTICS

Series	**H2400**
Type	**AS410L/AS410P**
Application	**industrial roof**
Alloy	**6005T6**
Alignment	**landscape/portrait**
Inclination	**tangent to the industrial roof**
Foundation	**self drilling rivets or self drilling screws**
Special Characteristics	**/ ligth mounting structure / mini rails**

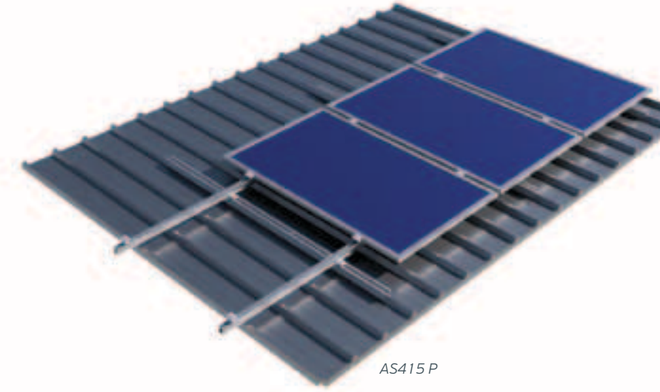
Alumil SOLAR HELIOS H2400 AS415L / P

Alumil, recognizing its installers' need for quick and safe structures, improved the PV mounting system on industrial roofs considerably, by offering an innovative solution bearing numerous advantages.

- / Quick and easy assembly.
- / Adaption to various types of industrial roofs.
- / Possibility to position the PV modules in portrait or landscape inclinations for maximum cover of your industrial roof.
- / New H2216 profile which is light and strong and therefore reduces the weight on the carrying structure of the industrial roof.
- / Due to the dimensions of the profile, panels are better ventilated; as a result, the installation performs better in high temperatures.
- / Continuous rails.

TECHNICAL CHARACTERISTICS

Series	**H2400**
Type	**AS415L/AS415P**
Application	**industrial roof**
Alloy	**6005T6**
Alignment	**landscape/portrait**
Inclination	**tangent to the industrial roof**
Foundation	**self drilling rivets or self drilling screws**
Special Characteristics	**/ ligth mounting structure / Continuous rails**



AS415 P

CERTIFICATES

Alumil plant is located in the Industrial area of Kilkis, possesses all the products and certificates required for a state of-the-art plant, i.e. Management Systems Certificates, Production Process Certificates and Quality Control Certificates:

QUALITY MANAGEMENT SYSTEM (as per ISO 9001)
The scope of the Quality Management System is the design, manufacture and distribution of unpainted /painted aluminum profiles as well as the purchase-production and distribution of accessories from Alumil factories in the industrial area of Kilkis.

ENVIRONMENTAL MANAGEMENT SYSTEM (as per ISO 14001)
To ensure the harmonious coexistence of its business activities with the natural environment, since 2002, Alumil, in its Kilkis plant, is certified as per ISO 14001:1996: Environment Management for aluminum extrusion, electrostatic paint, wood effect paints and the production of thermally broken profiles.

MANAGEMENT SYSTEM FOR HEALTH AND SAFETY AT WORK (as per the national standard ELOT 1801)
The company applied a certified Health and Safety at Work System since the beginnings of 2003, aiming at detecting, assessing and addressing risks at work and compliance with the relevant legislation. The value of human life is priceless. Our constant efforts to protect it define the way in which the company confronts potential risks.

QUALICOAT CERTIFICATION
(certificate of quality painting Aluminum Profiles)
Quality control and certification of electrostatically painted and anodized aluminum products, on a European level, are determined by QUALICOAT and QUALANOD specifications.

GSB – INTERNATIONAL
(quality certificate for Aluminum Profile Painting)
Since July 2003, Alumil is entitled to use the GSB Quality mark of the Quality Association of GSB International based in Germany, regarding the quality of aluminum profile painting. GSB International certification body goes to a greater extent of controls compared to the Swiss Qualicoat.

QUALANOD
(quality certificate for anodized Aluminum profiles)
The Group Anodizing Plant is certified since the beginnings of 2008 bearing the QUALANOD quality mark for the anodized aluminum profiles, issued by the Aluminum Association of Greece.

Mauritania - H2100 - AS189 - 16 MWp

Egypt
H2100 - AS116
1 MWp

Greece Trikala
H2200 - AS250
7 kWp

United Kingdom West Hill - H2100 AS189 - 13.4 MWp