

PVKIT[®] 2.0 & S-5-H Mini Case Study — MicroTech, Costa Rica



At-A-Glance

Project Name

Micro Technologies

Location Alajuela Province – San José, Costa Rica

EPC Energías Limpias de Centroamerica (Verde o Nada)

Inverter Manufacturer

Yaskawa-Solectria

Roof Profile

1" Double-Fold Standing Seam Metal Roof

Industry

Commercial/Industrial

Situation

In line with MicroTech's desire for new-world technology and its "forward-thinking manufacturing" approach, the company wanted to go-solar and supplement the power generation at its manufacturing facility with renewable energy sources.

The Result

Together, the **S-5-PVKIT®2.0** and the **S-5-H Mini** clamp provided a simple, secure and economical solution for mounting solar PV to the metal rooftop of MicroTech's manufacturing facility. The non-penetration system did not compromise the roof integrity and eliminated the risk of voided roof warranties.

Project Stats

Roof Measured: 13,500 M2/145,300 square feet

Roof Pitch: 7 degrees

Project Size

Total Installed Capacity: (1,432) solar panels, 531 Kw DC system (total DC output 531); each module was 370w

Inverters: Solectria PVI 60TL

S-5! Products Supplied

■ S-5-H Mini (3,125) ■

S-5-PVKIT 2.0 (3,125)

MidGrab (2,880)

EdgeGrab (480)



The Project

Based in the beautiful Alajuela Province of Costa Rica, MicroTech's state-of-the-art certified manufacturing facility provides precision manufacturing and supply chain innovation through capability and tooling for small metal and plastic components for the most demanding industries.

As part of the company's desire for new-world technology and a "forward-thinking manufacturing" approach, MicroTech wanted to "go-solar" to supplement the power requirements at its manufacturing facility.

They called on EPC Contractor, Energías Limpias de Centroamerica (ELCA) to install 1,432 solar panels for its 531 Kw DC system on the facility's standing seam metal roof. ELCA knew they could rely on S-5! solar attachment solutions to secure the solar modules to their metal roof.

The Challenge

Ongoing shutdowns across Costa Rica due to the COVID-19 pandemic presented many challenges for this project. When ELCA started the project, the country's shutdowns delayed product and material delivery from manufacturers all across the globe to the jobsite. However, S-5! was able to meet its delivery deadline.

The Solution

ELCA selected the **S-5-PVKIT 2.0** and the **S-5-H Mini** clamps to secure the solar panels to the standing seam metal roof of MicroTech's manufacturing facility, allowing for a rail-less PV mounting solution.

The PVKIT's pre-assembled components provided a simple, secure and economical method for attaching the solar panels. Because the solution is rail-less, it also cuts costs in freight, logistics, lifting equipment and labor associated with traditional rail.

The H Mini clamp's two-piece design allows it to be installed anywhere along the length of the rib, making installation fast and easy!

With a reliable lead-time from purchase to delivery, as well as a simple installation process, S-5!'s solar attachment solutions helped reduce the project timeline.



Long-Term Outlook

renewable energy sources. The PVKIT provided a rail-less, aesthetically-pleasing, penetrationfree, cost-effective PV mounting solution – saving the customer time and money on installation

and materials.

The PV system allowed MicroTech to continue its forward-thinking manufacturing approach by utilizing



How Did S-5! Attachments Help?

- Best reliability trusted products
- Quick product delivery turn-around trusted delivery
- Cut material costs in half, including freight costs
- Cut installation costs in half
- · Minimized the amount of time workers must spend in harness
- Improved aesthetics
- Eliminated the risk of a voided roof manufacturer warranty no holes/no damage



S-5-H Mini



PVKIT® 2.0

"We understand the value of S-5! products. We have experience with S-5! solar attachment solutions and understand how quickly we can deploy them once all electric is in, enabling our teams to quickly install the solar PV. The main benefits for us are the ease of use and efficiency of the products."

-Michael McCuen, Managing Partner & Founder, Energías Limpias de Centroamerica



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