

providing world-class leak test and assembly verification solutions

# **SOLAR POWER TUBE TESTING**

#### Market Driver:

There is a growing demand for green or clean energy sources. Solar panels are gaining market in commercial and residential use.

# Product be Tested:

The products being tested are solar photovoltaic systems comprised of panels and mounting hardware for low-slope commercial rooftops. The PV system performs on commercial rooftops by converting more of the sunlight that strikes the total rooftop area into electricity.



The panels employ cylindrical modules which capture sunlight across the photovoltaic surface and convert direct, diffused and reflected sunlight into electricity. The panels achieve effective energy generation when mounted horizontally and spaced significantly closer together than conventional panels on a typical rooftop, thereby enabling greater rooftop coverage and enhanced energy production.

# Test Requirement:

During the manufacturing of the tubes for solar panels, the assembly needs to be tested and this check is done by pressure decay and mass spec leak testing.

# CTS Solution:

Cincinnati Test Systems developed custom stainless steel OD connectors to seal on the tube ends that allow the product to be tested by pressure decay and helium tracer gas leak test methods.



The CTS Connect™
shown here is
similar to the
modified seal used
on the solar tubes.