

COMPLETE SOLAR PACKAGES NOW AVAILABLE FROM LUCZAK SALES !

A NEW GENERATION OF VACUUM TECHNOLOGY!

Call Eric Luczak or Ed Lichner at 847-781-5100 for more information on our solar package offerings!

NTS-Solar vacuum tube collectors are an excellent choice to:

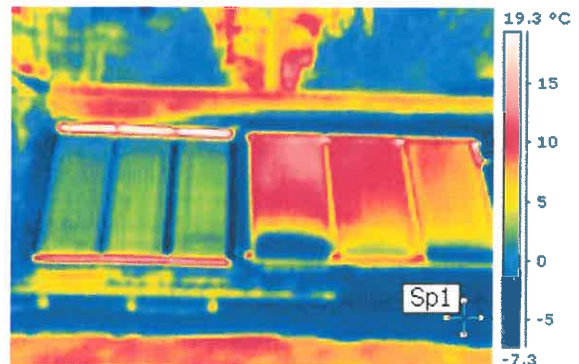
- ✓ Heat Domestic Hot Water for . . .
 - Showers
 - Bathing
 - Dishwashing
 - Laundry
- ✓ Heat Your Home . . .
 - Reduce Winter Heating Bills by 40% - 60%
 - Increase Energy Independence
- ✓ Heat Swimming Pool Water to . . .
 - Extend the Swimming Season
 - Cool Solar Collector During Summer Months
- ✓ Radiant Floor Heating. . .
 - Even, Comfortable Heat, Day and Night
- ✓ Space Cooling for . . .
 - Absorption Air Conditioners
 - Adsorption Air Conditioners
- ✓ Industrial Hot Water . . .
 - Temperatures up to 296 °C (565 °F)



NOTE: Vacuum guaranteed for 10 years.

Hail Resistance Test:

All test samples had to survive 10 drops of a 5 ounce steel ball from a distance of 16 inches (European Standard DIN EN 12975-2:2006).



Thermal losses are less with the vacuum tube as shown in the infrared (IR) image on the right.

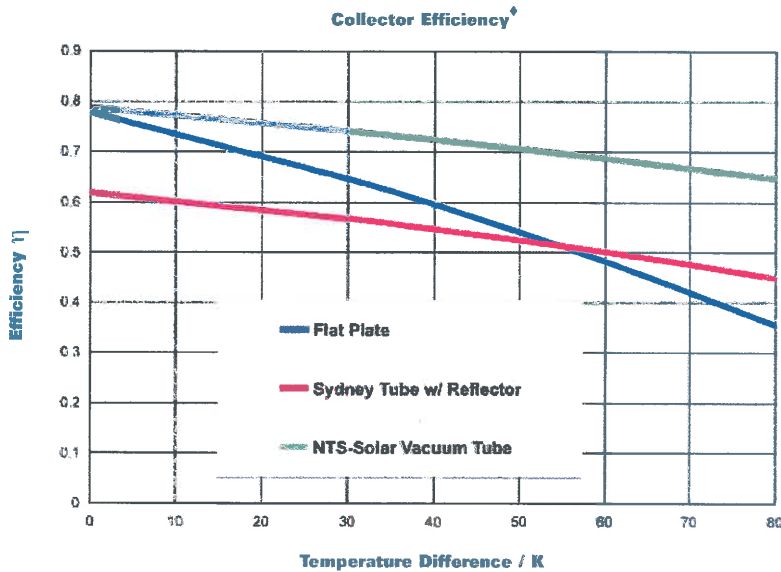


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A Division of Cosmedico Light, Inc.

Phone: 339-499-6354
www.nts-solar.com



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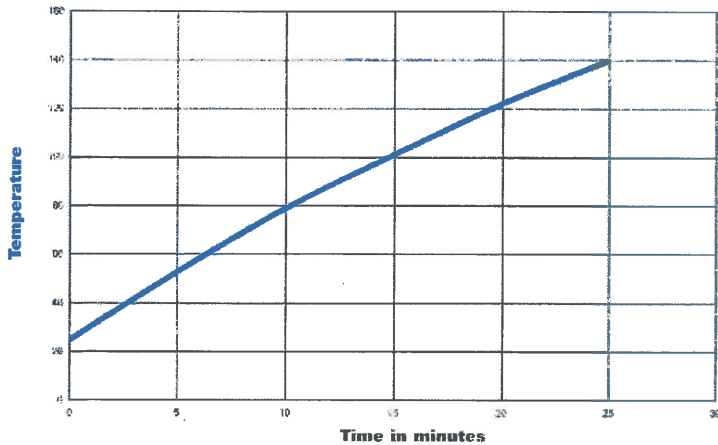


The NTS Solar vacuum tube is highly efficient in minimizing heat loss due to the excellent insulating qualities of the vacuum.

Although the flat plate collectors start out as efficient as the vacuum tube, the efficiency decreases as the temperature difference between the ambient and the heating fluid increases.

The Sydney tube is less efficient from the beginning and maintains that difference throughout the temperature range.

Heating Characteristic NTS Vacuum Tube



This graph shows the time it takes to raise the temperature of the heating liquid based on a solar insolation of 880W/m².

Technical Data*

		Metric	English
Dimensions	mm	2120 x 775 x 100	83.5 x 30.5 x 4 in
Performance	η_0	0.781	0.781
	k1	1.117	1.117
	k2	0.004	0.004
Aperture surface (Ac)	m ²	1.012	10.9 ft ²
Gross surface		1.643	17.7 ft ²
Max. operating pressure	bar	6	87 psi
Max idle temp.	C°	296	565 °F
Fluid vol.	l	1.49	50 oz.
Weight (empty)	kg	24.0	53 lbs.

*Data from Tüv report # 21208197

V.4 90908



SOLAR HOT WATER (SHW):

- Is three to six times more efficient than photovoltaic (PV).
- Has been in use in the southern US since the late 1800s.
- Will save 50% - 85% of electricity used by electric water heaters.
- Sizing for hot water ~ 1 collector per person.

KEY FACTS (EESI MAY 2006)

- 1.5 million homes and businesses in the USA currently use SHW.
- SHW currently contributes more than 1000 MegaWatts of thermal energy generation per year.
- Another 400 MegaWatts capacity is likely to be installed in the next 3 to 5 years.
- 29 million SHW systems could be installed in the U.S.
- Typical payback is 4 to 8 years.
- A SWH system can reduce CO₂ emissions by more than 50 tons over its 20 year life.