The Cool Side of Solar Thermal

Solar Thermal
10HP Solar Steam Generator

The **Solar Thermal Steam Generator** operates at 300°F and will produce 300 –pounds of 250°F—15PSI steam per hour.

The 10HP Solar Steam Generator will displace the steam generated by your fossil fueled boiler during the daylight hours.

The Solar Steam generator is installed into the central steam line of the facility parallel to the existing boiler. The **Solar Steam Generator** maintains the pressure in the central steam line allowing the existing boiler to remain idle until the pressure drops in the central steam line and more steam is called for by the process.

The **Solar Steam Generator** boiler will significantly reduce fuel consumption and reduce the operational time of existing boilers. The system is very easy to install in new or existing facilities.

Unlike standard solar systems, the XCPC collects both direct and indirect sunlight, allowing for usage across the globe. No moving parts and the simple system design has minimal O&M costs. Our low-profile roof or ground-mounted systems are robust and light weight.

Using our patented technology, industries as diverse as manufacturing, food processing (e.g., meat, dairy, processed food and beverages), municipal waste water and oil & gas extraction.

The **10HP Solar Steam Generator** is a reliable low cost solution for the Brewery & Distillery industries and has very favorable Return On Investment. (ROI)

Will reduce energy consumption by approximately:

Natural Gas = 5-Therms/hour

LPG = 5.5-gallons/hour

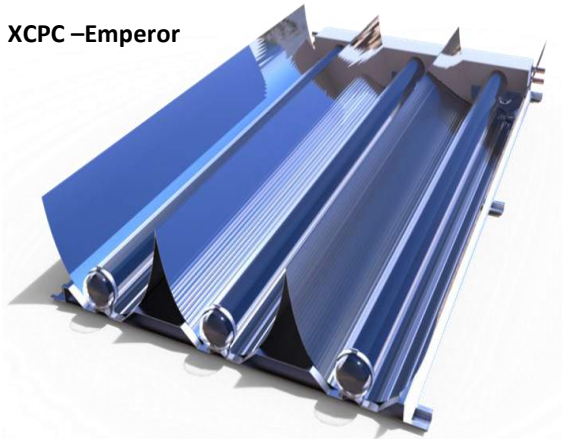
Oil = 3.2 -gallons/hour

Electricity = 115 kWh/hour

U.S. Patent # 9,383,120 B1

Solar Thermal Concentrator Apparatus, System and Method

XCPC –Emperor



Benefits

- 10HP for 300 pounds of steam per hour
- 250°F—15PSI Steam - 360,000 BTU/hour
- 69– XCPC High Temperature Collectors
- 184 m^2 or 2006 ft^2 of collector area
- 30% federal tax credit including all components materials and installation labor (USA)*
- Non-tracking lowers O&M costs
- Non-imaging optics allows for use of both direct and indirect sunlight

Savings & Green House Gas Reductions
Example: 105KW System (69 XCPC's)

Natural Gas = 14,126 therms saved /yr
174,000 lbs. of CO_2 and 220 lbs. No_x

Electric = 322,000 kWh saved per year
410,000 of CO_2 and 1,498 lbs. No_x

HIGHEST REDUCTIONS PER m^2 or ft^2 OF ANY SOLAR TEHCNOLOGY ON THE MARKET!

Manufactured by: artic solar **Jacksonville, FL, USA** **www.articsolar.com** **904-513-4638** **bill@articsolar.com**

VOSB