



The Cool Side of Solar Thermal

Solar Thermal Desalination

Clean Water/Desalination - this \$18 billion (worldwide) market is growing at a rate of 55% annually, yet much of the industry is still exclusively dependent on natural gas.¹

Artic Solar's ultra-high efficiency XCPC with natural gas back-up provides the lowest cost of energy available today as well as a substantial reduction in green house gas emissions (see chart below).

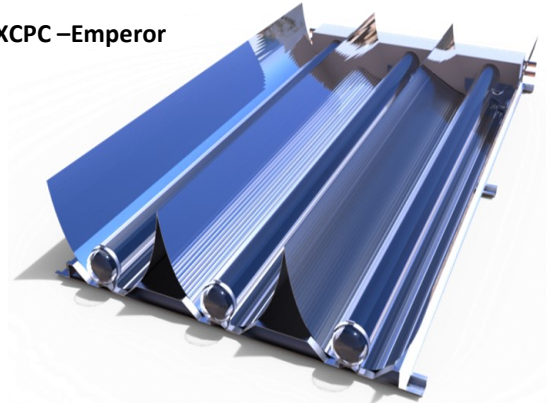
Our advanced optics combined with a heat pump deliver a proven 49% reduction in thermal energy usage in a multi-effect distiller (MED) desalination system.²

Unlike standard solar systems, the XCPC collects both direct and indirect sunlight, allowing for usage across the globe. No moving parts and a dust-repellent coating mean minimal O&M costs. Our low-profile roof-mounted systems blend into any environment.

Complete project design, engineering services & financing available.

¹ International Desalination Association Report: Technical Review and the Economics of Water Desalination 2013
² Pilot Demonstration of Concentrated Solar-powered Desalination, Stuber, et al. in Desalination 2015

XCPC –Emperor



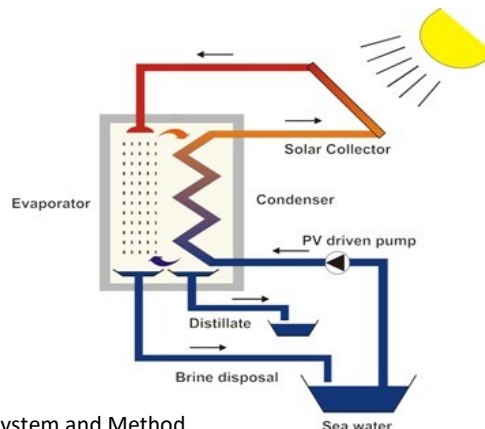
Benefits

- ☞ Extends system life
- ☞ Lowest levelized cost of energy of any solar technology
- ☞ Distillation or Evaporation
- ☞ 30% federal tax credit including all components materials and installation labor (USA)
- ☞ Grants & incentives available in some areas
- ☞ Non-tracking lowers O&M costs



Multi-Effect Distillation

How it Works



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

Solar Thermal Concentrator Apparatus, System and Method

Savings & Green House Gas Reductions

Example: 100Kw System (100 XCPC's)

Natural Gas = 14,800 therms saved /yr
174,000 lbs. of CO₂ and 220 lbs. No_x

Electric = 300,000kWh saved per year
410,000 of CO₂ and 1,498 lbs. No_x

HIGHEST REDUCTIONS OF ANY SOLAR TECHNOLOGY ON THE MARKET!

CALL TODAY FOR A QUOTE

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