

# Capabilities Statement For Industry

**Artic Solar, Inc.** is a certified Veteran Owned Small Business capable of providing Solar Energy solutions to Commercial and Industrial customers with a full range of solar services including industrial process heat and high efficiency solar cooling, as well as on-site electrical generation. Artic Solar manufactures the game-changing KING high-temperature collector, the simplest and most cost-effective source for industrial-scale / commercial solar thermal energy.

The Artic Solar Heating & Cooling Team's experience includes more than 250 systems operating throughout the United States and the world. Our service offerings include project development, design & engineering, customer proposals, project management, installation & commissioning. We are ready to provide the solar solutions and development partnerships anywhere in the country or globally. Artic Solar maintains strategic partnerships with qualified companies to assist in the EPC and ongoing O&M contracts for speed of development and efficiency.



### KING:

- ◆ Solar Ratings & Certification Corporation (SRCC) Certified
- ♦ Advanced Solar Thermal Collector
- ♦ High Temperature—Non-tracking KING Concentrating Parabolic Collectors for up to 400°F
- Works Efficiently in Both Direct and Indirect Sunlight Allowing for Installations Worldwide
- ♦ Displaces Natural Gas and Electricity
- Reduces Emissions and Demand Charges

## COMMERCIAL APPLICATIONS

### **Process Heat & Hot Water**

- Pasteurization/Sterilization
- Incineration
- Space Heating
- Waste Treatment
- Water Treatment/Desalination & Evaporation
- Dehumidification/Drying
- Metals Pre-Heating
- Thermochemical Processes
- Cooking
- Oil & Gas: Steam Injection for Extraction

### **Electric Generation**

On-Site Electricity Generation (using ORC Generators or Steam Engines)

### A/C and Refrigeration

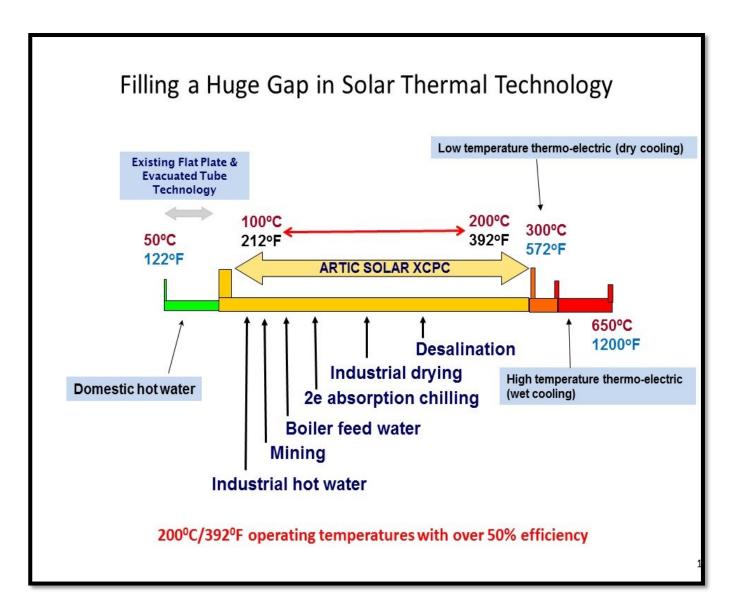
 Absorption Chillers using Single or Double-Effect Absorption Chillers

### INDUSTRIES SERVED

- Food & Beverage Processing
- Meat & Poultry Processing
- Distilled Beverage Processing
- Dairies & Milk Product Processing
- Water/Waste Processing
- Hotels/Resorts
- Multifamily Housing
- Manufacturing Plants (Steam)
- K-12 Schools
- Universities: Dining Halls & Dormitories
- Retirement Homes
- Hospitals
- Corrections (Federal, State & County)
- Commercial Laundries
- Agriculture

# **High Temperature KING Solar Thermal Collector**

The KING is a Concentrating Collector (NICC) that pairs a custom evacuated tube solar collector with an external non-imaging reflector in a non-tracking, roof or ground mountable system. This combination enables the KING East/West design to cost effectively achieve temperatures in excess of 200°C (392°F) at more than 50% efficiency - which current market incumbents cannot attain without costly tracking. The concentration ratio is 1.4 meaning the absorber receives an additional 40% of the suns energy allowing the collector to achieve high temperatures. The KING collector power rating is 1.235 KW. Perhaps the greatest advantage over competing high temperature solar thermal technologies (trough and linear Fresnel) that can achieve 120° Celsius and higher temperatures is the simple to deploy collector design. Other technologies are high profile (up to 50ft), needing large land areas to be effective and have tracking mechanisms requiring costly maintenance. Aesthetics are also a concern – the KING is the only high temperature collector to be configured in an extremely low profile.



NAICS Codes: 238220, 423720, 333414 DUNS: 050932366 CAGE CODE: 7JWT9 SIC Codes: 1711, 5074, 3433 Accepts Credit Cards

**Veteran Owned Small Business** 





