

General Tool, Inc.

Irvine, California



As part of their commitment to sustainability and energy efficient design, General Tool engaged Ice Energy to provide thermal storage and high efficiency HVAC units. In June 2019, 143.5 tons of aging, inefficient air conditioning units were replaced with 12 new Ice Bear 40 thermal storage units and 143.5 tons of brand new High Efficiency Carrier air conditioning units. With the addition of the Ice Bears, this property is offsetting an additional **42,000 lbs CO2** per year. The Ice Bear 40 units, combined with new HVAC, delivered **\$7,005 in savings** month-over-month, a 23% reduction in the monthly cost of electricity.

Situation

As summertime temperatures increase, air conditioners work overtime, straining the grid to peak demand levels and making everyone a lot less comfortable. Air conditioning systems running during the hottest part of the day draw the most power. At the same time, they experience degraded comfort cooling performance. In August 2018, General Tool, which had more than 20 year old HVAC equipment, spent \$30,826 on their electricity bill.

Solution

The Ice Bear 40 thermal storage units were offered at drastically reduced pricing as part of the Ice Energy SoCal Thermal Storage Program, while installation efficiency also allowed Ice Energy to offer rock-bottom pricing on the HVAC units.

Ice Bears take over cooling from the power-hungry HVAC equipment everyday from 2 p.m.–6 p.m. During that time, the building is cooled by the Ice Bears. At all other times of the day, the packaged units work as normal.

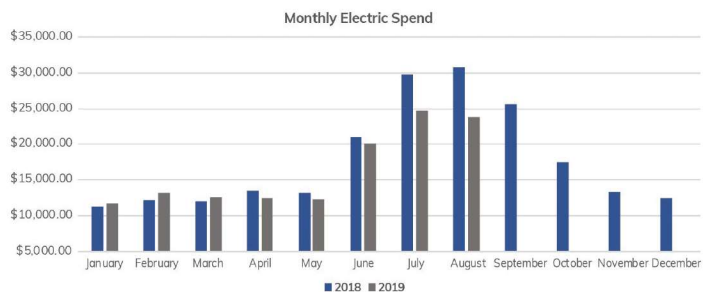
Results

Despite extreme summer heat, which drove temperatures above 100°F, the new Ice Bears worked flawlessly. Demand dropped by up to 115kW during peak hours from June 2018 to June 2019, which translates into a 24% decrease in monthly demand costs. Also as a result of these upgrades, in August 2019, they spent only \$23,820 on electricity, resulting in a \$7,005 month over month savings.

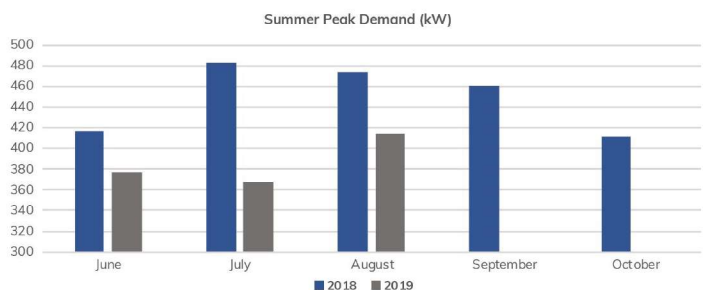
The Ice Bear units are covered by a bumper-to-bumper, zero-cost, 20-year service contract, while the new HVAC equipment lowers General Tool's on-going O&M costs and reduces the net operating costs of the building.

Size	70,000 ft ² Industrial Manufacturing and Office Space
Property Manager	General Tool
Installing Contractor	Gomez Air Conditioning

Comparison of 2017–2019 electric bills from General Tool



Summer peak demand comparison before and after Ice Bear deployment



Ready to learn more? Contact us today to find out how Ice Bear thermal storage can help your business reduce your yearly energy costs.