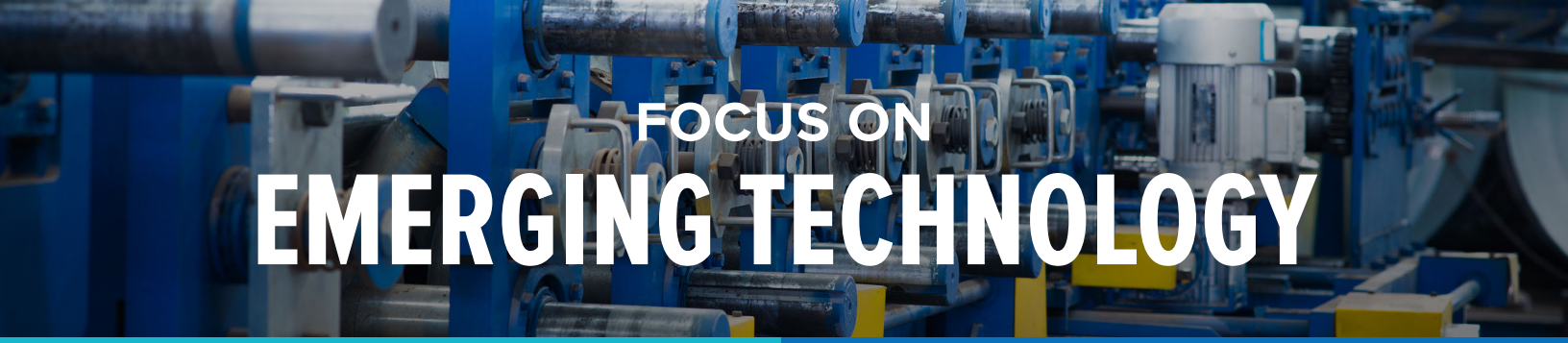

FOCUS ON

EMERGING TECHNOLOGY

ICE RINK OPTIMIZATION

Technology Description

The measure involves increasing brine temperatures in the refrigeration circuit of indoor ice arenas. Ice rink optimization involves increasing brine temperatures that are lower than would be needed if ice conditions and resurfacing were optimized. For each degree the brine temperature is increased, a 2% energy savings will be realized in the refrigeration plant.

Many factors affect brine temperature set points including ice thickness, resurfacing procedures, ice temperature, and water quality. Various technologies and operational approaches can be used to increase the brine temperature maintained in an ice rink.

Some example technologies include FastICE®, REALice®, Level Ice®, Pro-Ice, and various refrigeration system controls.

Benefits

1. Energy savings.
2. Improved ice integrity and consistency.

Customer Type

Indoor ice arenas.

Applications

Ice rink refrigeration systems.

Market Sectors

Commercial, Schools & Government.

Potential Energy Savings

2% energy savings in the refrigeration circuit per 1°F that the brine temperature is increased. Brine temperatures can likely increase 2 – 4°F.

Potential Payback Range

1-3 years pre-incentive depending upon the specific technology installed and the rink's size and operational schedule.

Incentives Available

Download and complete the Custom Project Incentive Guide [PDF] or Find an Energy Advisor to get started.