ICE RINK AND ARENA FACILITY SOLUTIONS

TRAK International® specializes in solving your facility's unique problems. We design dependable, custom systems in new or retrofit ice rinks using safe, ammonia-free ice plants. With over 25 years of design and construction experience, we provide a comprehensive approach to ice making, dehumidification, waste heat utilization and automation.

Optional on-site combined heat and power (CHP) cogeneration reduces electrical costs and provides high temperature hot water for process, HVAC and community amenities like swimming pools. The CHP can enable off-grid operation, keep ice during power outages, and the building can be used as an emergency shelter.

Our cleantech measures can reduce your facilities operating costs and your carbon foot print. We assist customers with ongoing monitoring to ensure optimal performance.

TRAK INTERNATIONAL
Green Energy Resources

DESIGN-BUILD ENGINEERING & CONSTRUCTION MANAGEMENT
Makes it Easy for You to Build or Upgrade Your Facility

CUSTOM HEAT PUMPS
Move Your Heat Efficiently

REDUCED RISK
Use Low Volumes of Safer Refrigerants and Eliminate the Use of Toxic Ammonia

COMBINED HEAT & POWER
Provides On-Site Power, Backup Power, Lowers Electricity Cost, and Supplies High Grade Heat

GEOEXCHANGE & "FREE" ICE MAKING
Provides Natural Efficient Heat Exchange Lowering Operating Costs

CUSTOM CONTROLS
Energy Management Control System Automates Your Facility

ONGOING MONITORING & PREVENTATIVE MAINTENANCE
Watch Your Facility 24/7 to Ensure Systems are Operating Correctly, Safely and Efficiently

CENTRAL ICE PLANT HEAT PUMPS

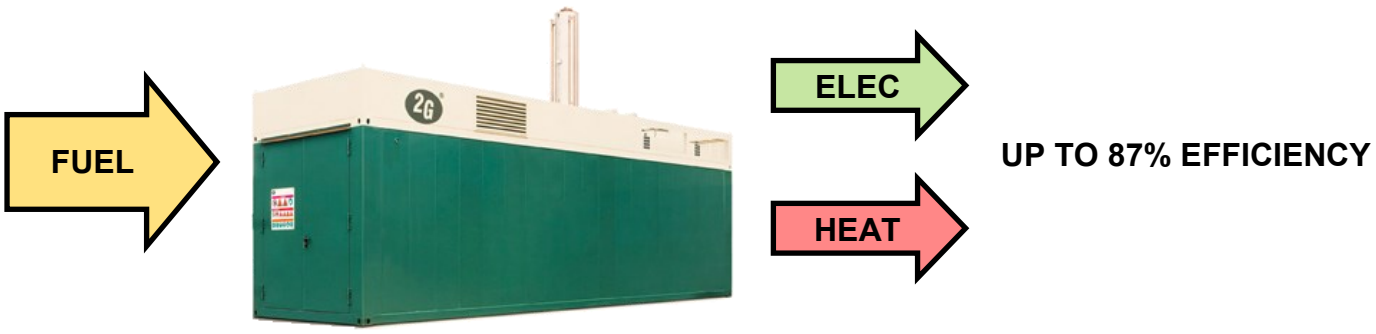
Heat is drawn out of the rink floors and other processes by modular TRAK Heat Pumps. The heat by-product from making ice is efficiently used or stored, minimizing rejected heat waste.

TRAK's Heat Pumps use friendlier refrigerants eliminating safety risks and operator costs associated with ammonia chillers.

TRAK Heat Pumps are designed for easy access and can be serviced by standard refrigeration technicians.

COMBINED HEAT AND POWER INTEGRATION

If best suiting the Owner's overall needs, most or all of the facility's electricity load remaining after efficiency upgrades can be produced on-site by a natural gas Combined Heat and Power (CHP) cogeneration plant. The CHP plant generates electricity in parallel with the grid, and provides all or part of the heat and power needs during grid power failures.



High temperature heat from the CHP adds to the heat collected by the Heat Pumps. This energy is used to heat flood water, shower water, snow melt, dehumidification reheat, and can be used for other facility features such as swimming pools and various activity areas. The CHP + Heat Pumps work hand in hand to cost efficiently assure power and ideal facility conditions.

GEOEXCHANGE

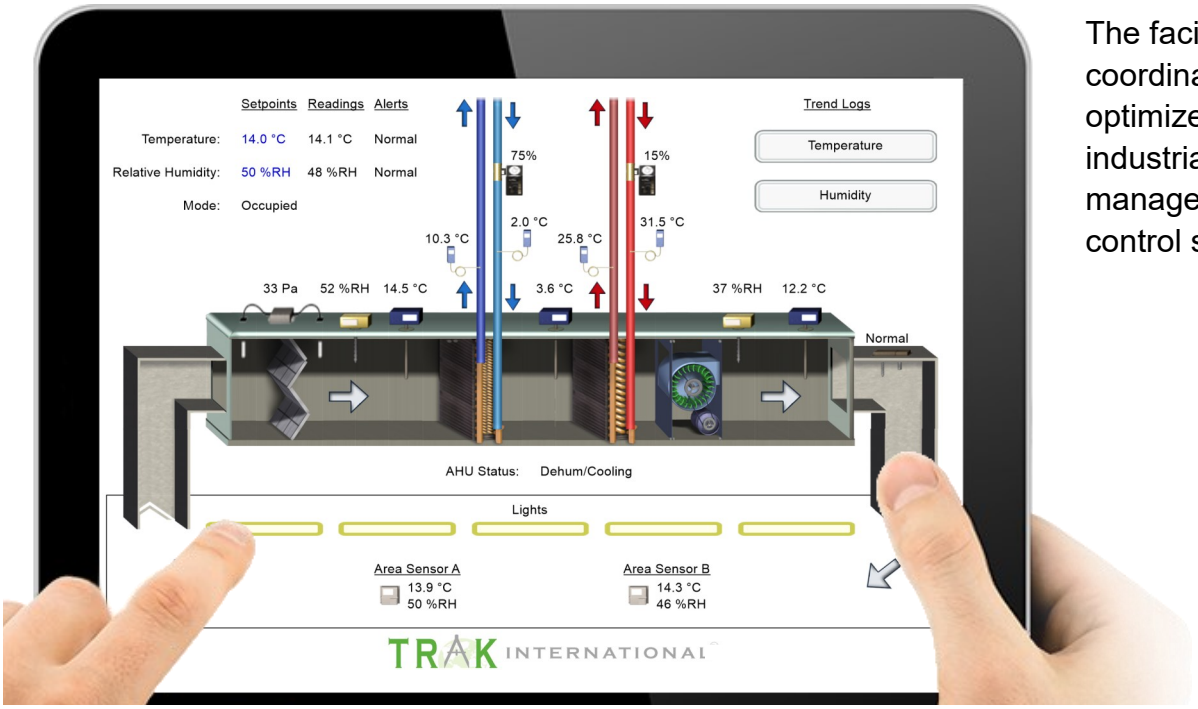
Vertical boreholes of the GeoExchange field go down to depths of 500 ft (~150 m).

In warm weather the cool ground temperature enhances the efficiency of the Heat Pumps and helps level the energy load. Surplus heat is rejected to the ground.

HEAT REJECTION AND FREE ICE MAKING

Surplus heat can also be rejected at a water conserving dual purpose Dry Cooler. In peak winter, the Dry Cooler(s) are also used for “free” ice making, displacing Heat Pump compressor work.

TRAK ENERGY MANAGEMENT CONTROL SYSTEM



The facility operation is coordinated and optimized by an industrial quality energy management and control system.

CONTACT INFORMATION

If you think we may be of assistance, our Professional Engineers and specialists would be pleased to meet with you.

MAIN OFFICE

5-1050 Leathead Road

Kelowna, BC V1X 2K1

Telephone: (250) 491-8460

Email: info@trakge.com

Website: www.trakge.com

ONTARIO OFFICES

Thunder Bay

Burlington

Kitchener

Toronto