

Triphahn Center Ice Arena – Best Practices

I. Ice Operations

The Best Practice information was gathered from the following;

- Star Rinks
- Rolling Meadows Park District (ice arena)
- Northwest Chargers Hockey Club
- Leaf's Center (ice arena)
- Leafs Hockey Club
- Renegades Hockey Club
- Niles Park District (ice arena)
- Rangers Hockey Club
- Glenview Park District (ice arena)
- Franklin Park Park District (ice arena)
- Basic Skills District 8

Topic #1 - Ice Operation – Energy Saving

Staff conducted a phone questionnaire as well as on site visits. The list below contain information gather on what area rinks have implemented in an effort to reduce energy costs.

No-cost ways to reduce rink's utility costs

1. If there is no scheduled activity for half an hour or more, turn off the lights above the ice pad.
2. Turn off the breaker that controls the parking lot plug-ins when the temperature is warmer than -15°C.
3. Post the rink's monthly utility bill totals on a bulletin board for all to see! Understanding what it costs to operate the rink can encourage everyone to take steps to conserve resources.
4. Avoid demand charges for one month in the fall by not starting the refrigeration plant until after the meter has been read. Similarly, avoid one month's demand charges by not running the refrigeration plant once the meter has been read in the month of shutdown for the season.
5. Ensure that any programmable thermostats installed at your facility are set to the correct date and time, and that they are programmed to the desired schedule.
6. Dump ice shavings outdoors if possible.
7. Ensure that the surface of the concrete slab is clean before making ice.

8. Mark a one-inch ice thickness line on the rink boards to help maintain ideal ice thickness.
9. Reduce the flood water temperature from 160°F to 130°C (71°C to 54°C) when you have a dedicated hot water heater for flood water.

Low-cost ways to reduce rink's utility costs

1. Install programmable thermostats capable of temperature setback in places like the lobby, dressing rooms, and other common spaces. If programmable thermostats are already installed at your facility, ensure that they are set to the correct time and desired setback schedule. Add a note to avoid forgetting Zamboni rooms and other smaller spaces.
2. Replace incandescent bulbs with equivalent compact fluorescent bulbs. For example, a 60W incandescent bulb can be replaced with a 13W CFL.
3. Install Low-e ceiling
4. Replace incandescent exit signs with LED equivalents.
5. Install low flow shower heads in locker and change rooms.
6. Install occupancy sensors to control lights in low traffic areas, washrooms and change rooms.
7. Caulk and weather-strip your facility's walls, floors, windows, roof and doors to seal air leaks. Seal doors and windows between the rink lobby and arena space.
8. Insulate hot water tanks and pipes in unheated areas.
9. Change the air filters on ventilation and heating equipment regularly.
10. Your brine or slab temperatures are usually set based on what works at the warmest part of the season, usually at the very start and very end. For most of the season, you can turn your compressor set point up a degree or two without impacting the ice quality
11. Make best use of your existing controls by shutting the brine pump off when the compressors are off. If you need additional controls to accomplish method of operation, the cost should be built into your planning processes.

Summary / Recommendation

A number of items listed above have been implemented at TC Ice Arena and some of the items listed could not be implemented due to the make-up of the facility but alternative methods may be explored in a continued effort to reduce energy costs

Topic #2 – Hockey – Off Ice Training

Staff compared what ice arenas offer to clubs for off-ice training space and a comparison was also done by what area hockey clubs offer for off-ice training as part of their program.

Staff conducted a phone questionnaire as well as on site visits. It was discovered that all venues were similar operationally in the ice arena category but there is no similarity in the overall function of the facility as it relates to being a community center.

Off ice training space is a constant struggle that each arena faces. Rinks that have availability to multipurpose rooms, dance rooms, fitness centers, parking lot space, hallways, etc. all make an effort to supply off-ice training area to their respective in-house teams. Because off-ice has become such a big part of hockey training ice arenas are under pressure to try and supply areas. Since the ice rinks surveyed are ice arena specific and not a community center like TC is less of a challenge for them to reserve their space for an off-ice program as there are no other programs that conflict with space.

Hockey clubs have all implemented some sort of off-ice training part of the normal practice regiment. Clubs are not only offering off-ice but because of the specialization of this training program many are hiring specific coaches or companies to conduct this program.

Summary/Recommendation

The Wolf Pack hockey program as a whole has gained over 300 players in the past few years. The fast growth of the program has created challenges not only from an ice stand point but also in additional training areas. Due to the programming at the TC there are challenges when it comes to securing off-ice space. When the weather permits teams are using the south parking lot but that is usually only available for 2 months. The season is 6 months long from Sept – Feb. so gym space at TC is the only space on site that is adequate for off- ice training as the dance room is being used on a nightly basis. Last season the Wolf Pack used the gym after 7:30pm on Wed. nights and Thursdays from 6-9pm. The challenge is that not every team practices on those nights and it is not guaranteed space season to season as other programs also use the space. Staff is exploring using a school as a possible off site area for this program or potentially having teams train at a facility dedicated to dry-land training which would be at an additional cost to players.

