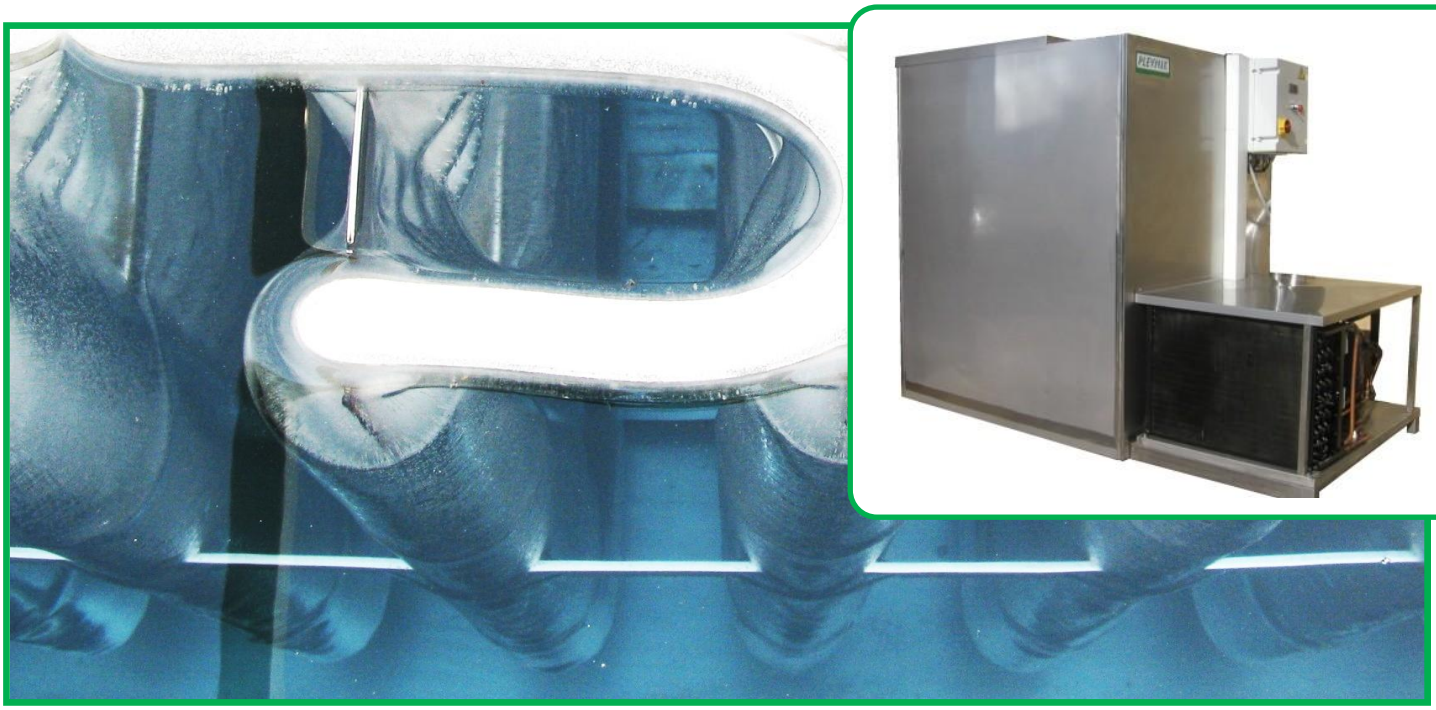
ICE BANK
with cooling unit

SHL 5 - 81

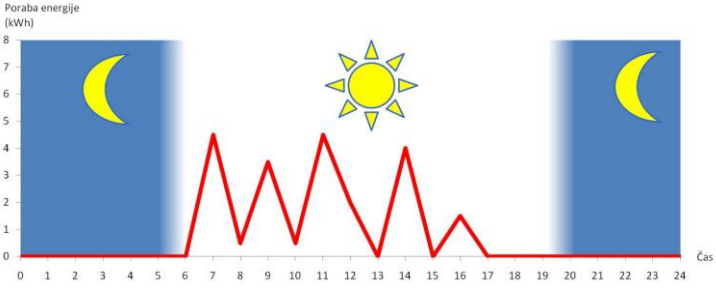


Ice banks with cooling unit SHL 5 - 81 are used in cooling and air-conditioning systems where we need a quick cooling process (cooling in dairy, food and other industries, air-conditioning of conference rooms, cinemas, theaters...)

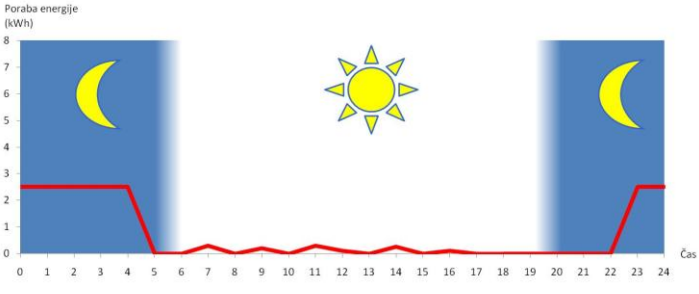
ADVANTAGES of the **ice bank** with cooling unit:

- It works during the night **when the energy costs are low** and uses the accumulated cooling energy during the day
- It uses a **smaller cooling aggregate** than conventional cooling systems because it operates with constant power over a predefined time range. The **cooling aggregate** has a **much smaller cooling power** than the peaks of cooling energy used during the process
- By cooling by night we achieve a **smaller load of the electric network** in the daytime (cheaper energy)
- Possibility of storing cooling energy from 20% to 100% of the capacity of the tank
- The water cools down to 0,5°C (optional -10°C)
- Thanks to the uniform ice surface the temperature of the water remains the same until the end of the melting

Energy consumption with conventional cooling systems (simulation)



Energy consumption with the ICE BANK (simulation)



Cooling energy - **with an ear for environment**

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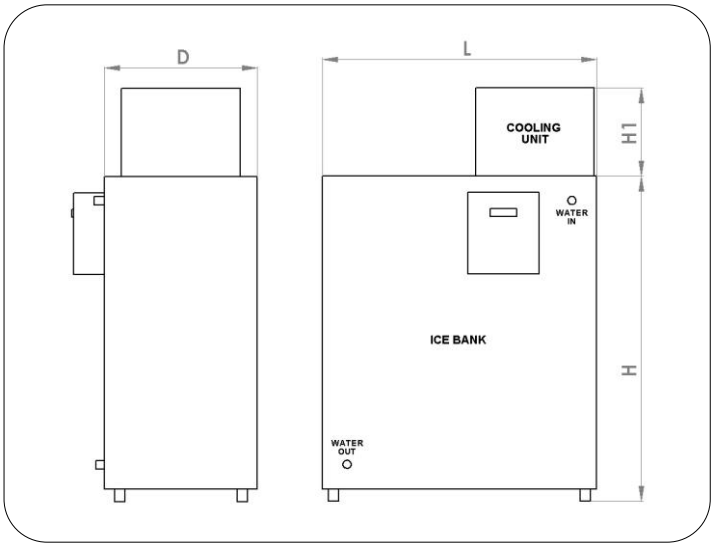
This kind of devices are units for energy storage with maximum capacity. They utilize the energy produced by the change of state of matter from water to ice and the melting heat of water of 335kJ/kg.

Technical data of the ice bank

Type SHL (kWh)	Volume (l)	Capacity (kWh)
5	125	5
10	250	10
15	350	15
20	500	20
30	750	30
40	1000	40
31	700	30
41	1000	40
51	1200	50
61	1500	60
81	2000	80



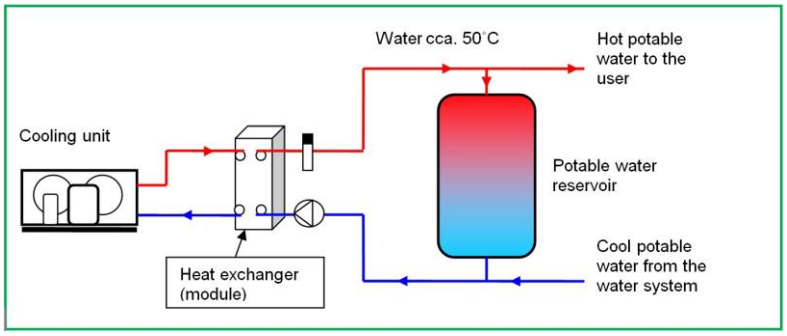
Assembly of the ice bank (basic):

- Inside of the tank made from stainless steel W.Nr.1.4301
- Outside and cover of the tank made from stainless steel W.Nr.1.4301 (optional - outside of the tank made from zinced steel or lacquered)
- Thickness of insulation 50/75mm
- Framework end evaporator plates made from stainless steel W.Nr.1.4301
- Cooling aggregate with air condensing unit working with an ecological coolant (R404A)
- Control panel with an electronic thermostat for setting and monitoring the working parameters of the device.
- Power supply: MF 230V 50Hz or TF 400V 3N 50Hz

Additional equipment - optional:

- Pump for the circulation of cooling water
- Conversion of the waste energy of cooling for heating sanitary water; heat pump - recuperation
- Cooling unit separated from the ice bank (recommended for SHL 31, 41, 51, 61, 81)

OPTION: Conversion of the waste energy of cooling for heating potable water; heat pump - recovery



The system for heating potable water using the "waste" energy of the cooling unit.

Advantages:

- **We relieve the cooling unit** - better condensation in the warmer part of the year - **shortens the time of cooling**
- Warming the potable water without additional electrical energy consumption.

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