TSU-M

Ice thermal storage




Key benefits

- Lowest first cost
- Energy saving
- Reliable

TSU-M characteristics

- Internal ice-melt
- Glycol feed

Capacity range

647 - 2676 kWh

Typical applications

- Air conditioning

Other benefits are:

- Constant supply temperature regardless cooling demand
- Minimum maintenance

- Environmentally friendly
  - Proven technology

Read more about the TSU benefits.

Interested in TSU-M ice thermal storage tanks for your cooling project? Contact your local BAC representative for more information.

Downloads

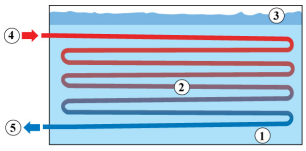
- TSU-M ice thermal storage tanks
- Operating and Maintenance TSU-M
- Rigging and Installation TSU-M

Principle of operation

Ice thermal storage

Principle of operation

TSU-M is an internal melt system that produces and builds **ice (1)** around a **coil (2)** submerged in **water (3)**, most of which freezes within the tank. The **warm glycol (4)** from the load circulates through the coil and melts the ice from the inside. The newly **cooled glycol (5)** is then pumped through the building cooling system or used to cool a secondary refrigerant that does the same.
Internal melt is ideal for air-conditioning involving cooling at higher temperatures than external melt.



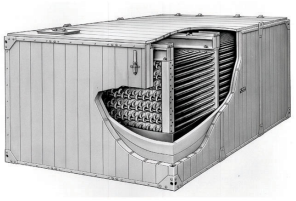
Want to use the TSU-M ice storage system? Contact your local BAC representative for more information.

Construction details

Ice thermal storage

Construction details

1. Material options and construction



- **Tank** is constructed of heavy-gauge hot-dip **galvanized steel** for unit steel panels and structural elements, all with welded seams. Tank includes high quality **insulation** and **2 single piece low temperature liners**.
- **Insulated watertight tank covers** of heavy-gauge hot-dip galvanized steel.
- **External sight tube** for water level indication.

2. Coil

- The coil is constructed of continuous length of **prime surface steel**, hot-dip galvanized after fabrication, encased in a **steel framework**. Designed for maximum 10 bar operating pressure according to PED.
- Coils are delivered with **BAC's Internal Coil Corrosion Protection,** to ensure an optimal internal corrosion protection and guaranteed quality.

Like to know more about the TSU-M construction details? Contact your local BAC representative.

TSU-M - TSU-LM

Ice thermal storage

Engineering data

REMARK: Do not use for construction. Refer to factory certified dimensions & weights. This page includes data current at time of publication, which should be reconfirmed at the time of purchase. In the interest of product improvement, specifications, weights and dimensions are subject to change without notice.

General notes

1. All dimensions are in mm. Weights are in kg.
2. Unit should be continuously supported on a flat level surface.
3. H_1,H_2= installed height. Coil connections are closed and filled with inert gas for shipping and storage. Add 355 mm for shipping height.

Last update: 01/07/2024

TSU-M - TSU-LM

1. Outlet; 2. Inlet; 3. Sight tube; 4. Access hatch.

Model	Latent Capacity (kWh)	Approx. Ship. Weight (kg)	Approx. Oper. Weight (kg)	Tank Water Volume (l)	Coil Glycol Volume (l)	Connection Size ND (mm)	Unit Width (mm)	Unit Length (mm)	Unit Height (mm) H1	Tank Height (mm) H2)
TSU-237M	834	4420	17730	11320	985	50	2400	3240	2440	2390
TSU-476M	1674	7590	33530	22110	1875	80	2400	6050	2440	2390
TSU-594M	2087	9150	42200	28250	2320	80	2980	6050	2440	2390
TSU-761M	2676	10990	51610	34640	2990	80	3600	6050	2440	2390
TSU-L184M	647	3760	14360	8820	770	50	2400	3240	2000	1950
TSU-L370M	1301	6400	27060	17250	1460	80	2400	6050	2000	1950
TSU-L462M	1625	7710	34030	22030	1810	80	2980	6050	2000	1950
TSU-L592M	2082	9200	41560	27020	2280	80	3600	6050	2000	1950