

TES ICE BUILDERS

The TES "ice bank" technology provides instant, versatile, low energy cost cooling for a wide range of applications



TYPICAL APPLICATIONS

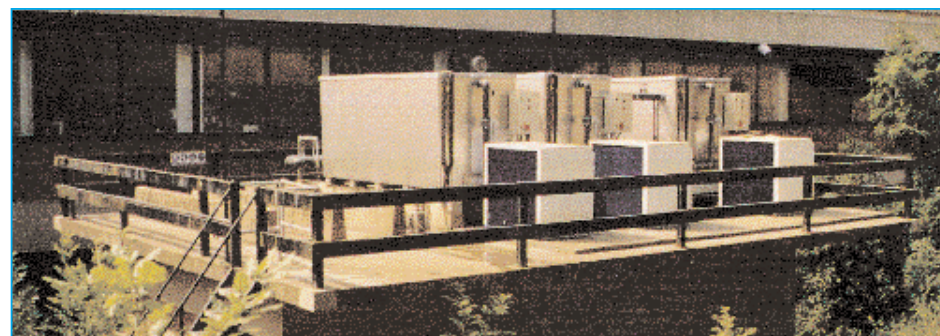
- Food processing
- Bread making
- Milk cooling
- Vegetable storage
- Wet-air coolers
- Industrial processing
- Brewing
- Thermal storage

SPECIAL FEATURES

- Advanced air turbulence system
- Food-quality stainless steel tank construction
- Copper or stainless steel tube evaporation circuits
- High structural stability/light weight
- Superior storage tank insulation
- Standard design, packaged or spilt systems
- Small compressors/large peak cooling capability

BENEFITS

- High instantaneous cooling duty
- Low water usage
- Clean water at constant 1°C
- Simple direct refrigeration system
- Uses off-peak electricity
- Flexible siting and installation



A typical installation showing 3 remote condenser Ice Builders



proven low cost cooling performance

TES ICE BUILDERS TECHNICAL DATA

General

Cooling derived from ice storage technology has been proven over many years in a variety of industries. TES have developed accelerated ice-building units that take full advantage of the remarkable cost savings available from off-peak electricity and the convenience of times of low demand.

In overall performance the TES Ice Builder is unequalled for versatility and flexibility. Fully packaged units are available for up to 200 kW/2 tonnes capacity and remote condenser (spilt) systems for up to 1,200 kW/12 tonnes (with up to 6,000 kW/60 tonnes available via multi-module systems).

• Pumps:

WATER
High performance stainless steel with variable flow/pressure.

AIR
Low pressure air distribution system with specification to suit application.

• Evaporator

Stainless steel and copper tube: "serpentine" wound to provide large Ice Bank within compact insulated tank. Rapid burn-off with air agitation. Direct expansion system with positive oil return.

• Refrigeration System

Best quality compact compressors. Air-cooled condensers of generous design. FANS: High quality, low power consumption. Low noise level fans are used where feasible.

• Water Tank

Food-grade stainless steel, incorporating manual or auto-fill, plus overflow.

• Electrical/Control System

Single or 3-phase, with 110V control circuit transformer. Diagnostic warning lights to identify any failure of major system parts.

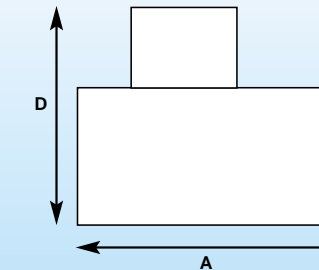
• Remote Condensing System

Larger systems can incorporate separate above-ground or underground insulated tanks, depending on the application, using twin or single expansion valves. Maximum capacity in 1 module 12.0 tonnes. Multi-module systems can be supplied.

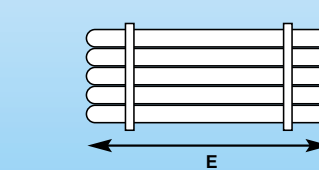
• Enclosure

Welded main framework with steel skinned outer casing and polyurethane insulation providing a rigid and well supported structure.

DIMENSIONS: PACKAGED UNITS



DIMENSIONS: ICE BANK COIL ONLY



*NB DIMENSION D RELATES TO SELECTED CONDENSING UNIT

Model No	Type		External Dimensions (M)							Nominal Storage Capacity (kW)	Tonnes
	Packaged	Spilt	A	B	C	D*	E	F	G		
IB5	•	•	1.3	1.3	1.3	1.9	1.0	1.0	1.2	50	0.5
IB10	•	•	1.9	1.4	1.4	2.1	1.7	1.0	1.2	100	1.0
IB15	•	•	2.4	1.4	1.4	2.3	2.1	1.2	1.2	150	1.5
IB20	•	•	3.1	1.4	1.6	2.5	2.8	1.2	1.2	200	2.0
IB30		•					2.3	1.1	2.0	300	3.0
IB40		•					2.7	1.1	2.3	400	4.0
IB50		•					3.3	1.1	2.3	500	5.0
IB60		•					4.0	1.1	2.3	600	6.0
IB75		•					5.0	1.1	2.3	750	7.5
IB90		•					6.0	1.1	2.3	900	9.0
IB120		•					8.0	1.1	2.3	1200	12.0



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the cooling specialists

