





FORCED CONVECTION COOLING TUNNELS

The Baynflax Cambridge range of forced convection cooling tunnels have been developed over a period of thirty years and have, at all times, reflected the most up to date process and manufacturing technology. The current range maintains this principle by embodying innovative design features which keep them in the fore front of their field.



CONFIGURATIONS

There are a range of coolers tailor made to suit a variety of individual applications. Simple Co-Current and Counterflow coolers satisfy the requirements of the most straight forward duties on products such as sugar confectionery, cream sandwich biscuits and cakes whilst the requirements of chocolate cooling calls for the Thermal Zone approach with highly accurate temperature profiling along the cooler length, with conductive bottom cooling when required. High duty applications benefit from the use of our Jet Zone approach with the use of high velocity jet nozzles causing impingement on the product surface. Cooling air conditions can vary from sub zero to conditioned ambient.

CONSTRUCTION

Our standard range of coolers are manufactured with all stainless steel insulated outer covers having a 'Gull Wing' configuration supported in their open position by gas struts. All insulation paneling is provided with thermal breaks and is fully sealed against air leakage thus ensuring the integrity of the temperature distribution and the minimum of heat losses.

CONVEYOR TYPES

Coolers can be provided with a range of different conveying surfaces.
Conventional woven fabric belts with polyurethane coated surfaces can be provided in a range of thickness selected to suit the cooler length and application. Special conveyors utilising moulded conveyor sections together with carbon steel or stainless steel and woven wire bands can also be provided.

REFRIGERATION

Standard refrigeration packages of either 5 or 6 US TR are provided to suit the heat removal profile required by the process. Alternative, for larger total heat duties, a central refrigerant source with a distributive refrigerant network would be more appropriate.







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Most cooling tunnels are available with a range of options specially designed to provide the ideal solution to all processing requirements in the food industry. Among the options available for the coolers manufactured in the Baynflax Cambridge Range are the following:

- A) Optional air or water cooled condenser sets
- B) Stainless steel or mild steel framework
- C) Zonal or central refrigerant source
- D) Profiled gradients or constant temperature along cooler
- E) Belt tracking at infeed, outfeed or both to suit cooler length
- F) Co-Current, Counter Current or Jet impingement air systems

- G) Cooling coils for Freon, Brine Glycol or Ammonia
- H) Optional dead plate cooling for pre bottoming applications
- Insulation to suit temperatures in the sub zero to ambient range
- J) Dehydration or air humidification to suit process requirements
- K) Wide range of belt types selected to suit cooler length and process
- Special infeed or delivery end to suit adjacent equipment





	BELT WIDTH	OVERALL WIDTH DOORS OPEN DOORS CLOSED			
COOLING SECTIONS	550 TO 850 850 TO 1150 1150 TO 1450	2314 2700 2940	1164 1550 1790		
SERVICE SECTIONS	550 TO 850 850 TO 1150 1150 TO 1450	2752 3138 3378	1602 1988 2228		

COOLER	BELT	COOLING SECTION	INSTALLED KW		SERVICE
SIZE	WIDTH FANS		COMPRESSOR CONDENSOR	COOLED CAPACITY	MODULE
850T	550mm to 850mm	2 x 2.2kw	7.5kw	0.75kw	5 US.TR 60,000BTU/Hr 16.2 KCAL/Hr
	22" to 34"	Z X Z.ZKW			
1150T	850mm to 1150mm	2 x 2.2kw	7.5kw	0.75kw	6 US.TR 72,000BTU/Hr 19.5 KCAL/Hr
	34" to 45"	2 X 2.2KW			
1450T	1150mm to 1450mm	2 x 2.2kw	7.5kw	0.75kw	6 US.TR 72,000BTU/Hr 19.5 KCAL/Hr
	45" to 57"	2 X 2.2KW			