



COOLING SYSTEMS



DCN cooling systems offer process innovation and excellence with minimum batch times. Cooking and Cooling is often part of the same package; a tumble chiller is part of the cook-chill system, and for processes requiring large batch cooling in stand alone vessels DCN offer an extensive range of static D A coolers with unique scraped surface agitators.

A DCN vacuum cooling system is amongst the fastest and most efficient methods of sauce/product cooling available today. Cooling options include vacuum, chilled water, glycol and pumped/scraped heat exchangers. Manual, semi-automatic or fully automated control is offered.

TUMBLE CHILLER

As part of the DCN Cook-Chill system, after cooking filled casings are conveyed into a purpose built rotary tumble chiller which reduces the temperature of cooked food to below 4° Celsius in under an hour (products with a thin viscosity) to 90 minutes (thick viscosity), with cooling times and temperatures fully logged. The bagged product is immersed in chilled water in the drum which rotates, gently tumbling the bags and massaging the product to ensure complete cooling. The water around the product is chilled by circulating a chilled coolant through a dimpled jacket in the outer casing of the unit.

Features:

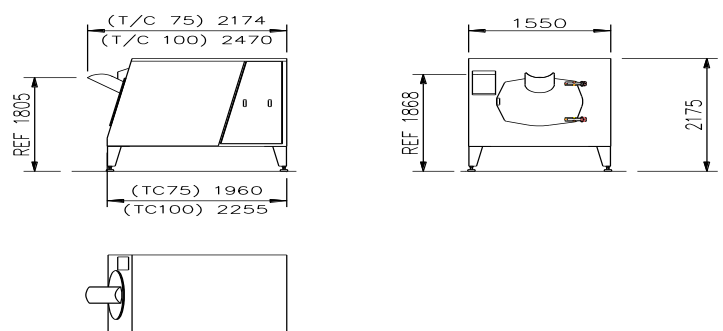
- DCN Cook-Chill process
- All stainless steel design
- Microprocessor control
- Large or small batch sizes
- Easy to use HMI
- E-terminal data logging (*optional*)
- Cleaning cycle
- Surge tank for water recovery (*optional*)
- Approximate capacities:

Model TC-75 – 750 litres of product
Model TC-100 – 1000 litres of product



Technical Specifications:

	Requirement – TC-75	Requirement – TC-100	Connection
Water	100 l/min @ 3 Bar	100 l/min @ 3 Bar	1" BSP
Steam (for cleaning)	100 kg/hr @ 4 Bar	100 kg/hr @ 4 Bar	3/4" BSP
Glycol	300 l/min @ 0-1° C	350 l/min @ 0-1° C	1 1/2" BSP
Air	0.1 cu/mtr/hr @ 5 Bar	0.1 cu/mtr/hr @ 5 Bar	1/2" BSP
Voltage	415/3/50-10A	415/3/50-10A	20mm





MINI TUMBLE CHILLER

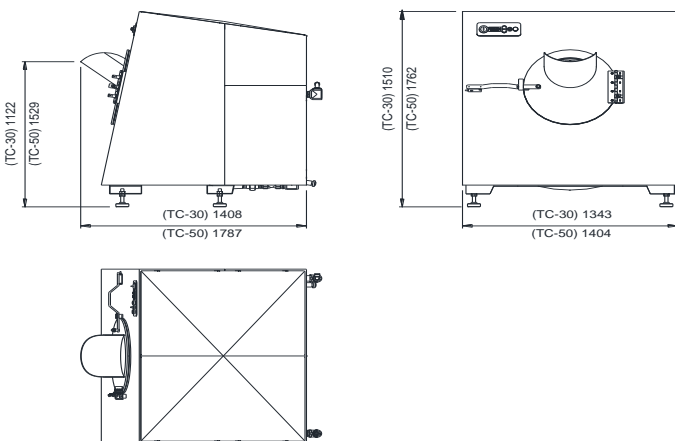
Based on our best-selling larger sized Tumble Chillers, the new model TC-30 and 50 has been designed for the smaller user with typical batch sizes of between 250-450kg and has patented special features. The bagged product is immersed in chilled water in the drum which rotates, gently tumbling the bags and massaging the product to ensure complete cooling. The water around the product is chilled by circulating a chilled coolant through a dimpled jacket in the outer casing of the unit.

Features:

- Perfect for smaller kitchens or food service suppliers
- DCN Cook-Chill process – pumpable products such as soups, sauces, ready meals, casseroles, salad dressings & pie-fillings
- Latest ‘Cooling Technology’
- All stainless steel design
- Simple to operate
- Jacketed design – able to accept coolant at lower temperatures without freezing
- Low maintenance – unit has no pumps, heat exchangers or filters to clean or clog
- Approximate capacity 300 / 500 litres of product
(Larger models are available)



Technical Specifications:



	Requirement – TC-30	Requirement – TC-50	Connection
Water	100 l/min @ 3 Bar	100 l/min @ 3 Bar	1" RJT
Steam (for cleaning)	100 kg/hr @ 2 Bar	100 kg/hr @ 2 Bar	3/4" BSP
Glycol (Primary Cooling Medium – Antifreeze/ water mix)	300 l/min @ -5° C	300 l/min @ -5° C	1 1/4" BSP
Air	5 Bar	5 Bar	1/2" BSP
Voltage	230V 50Hz -16A	415/3/50 – 6A	



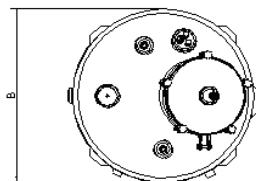
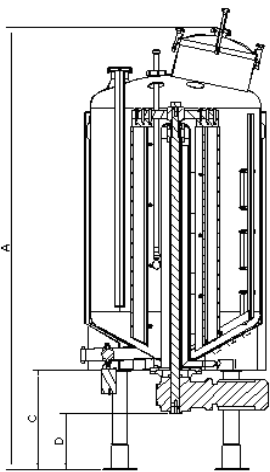
DA COOLER

For processes that require large batch cooling in stand-alone vessels, DCN offers an extensive range of static DA Coolers with unique scraped surface agitators. Their large surface area to product ratio allows rapid cooling times without damage to particulates or adverse effect on quality or taste. Product is gently transferred to the coolers using our vacuum transfer system and the cooling cycle is closely monitored to eliminate the risk of thermal shock or separation. Once cooled, product can then be over-pressured with sterile air into transfer vessels before being taken to the filling line for depositing, avoiding product damage and keeping losses to a minimum. Can be integrated with a range of other equipment including DCN kettles, vacuum trolleys and brat pans.

Features:

- Glycol jacket with 3 bar working pressure and special dimpled pattern to give ultimate cooling performance
- Standard batch sizes range from 300 to 750 litres (custom sizes made to order)
- Vessel is capable of taking a vacuum to allow filling of product without the need for transfer pumps
- Insulated, with a conical bottom and stainless steel cladding
- Standard internal sanitary finish. External surfaces have a semi-deluxe buff finish (or to customers specification)
- Vertical product zone with scraping surface type, variable speed agitator fitted with replaceable food approved plastic blades
- Fixed lid design with manway for incorporating into CIP cleaning systems. Full diameter, counter balanced, domed tilting lid for complete access to product zone, available as an option
- Designed and tested to PD5500 standards

Technical Specifications:



Cooler Size	Overall Height	Diameter	Leg Length	Motor to Floor Clearance
	DIM 'A' (mm)	DIM 'B' (mm)	DIM 'C' (mm)	DIM 'D' (mm)
300	2127	1058	603	341
400	2248	1058	603	341
500	2364	1058	603	341
750	2686	1058	603	341



**food
processing
innovation**



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