

EXPERIENCE THE EXTREME ArcticBlast



**HIRE
AND
SALE**

BLAST FREEZING AND RAPID CHILLING



Creating Solutions. Making Possibilities

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a TITAN brand

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EXPERIENCE THE EFFECT OF THE ARCTICBLAST™

ArcticBlast™

When you need to freeze or chill your products as fast as possible to maintain their quality the ArcticBlast™ supplies a constant air flow and chilling effect.

Rapidly chills for maximum effect at approximately 76.000 Kcal/hr. or in excess of 300.000 btu/hr. When required can freeze the produce to as low as -40°C.

ArcticBlast supplies a constant air flow and chilling effect that rapidly chills and where required carries on to freeze the produce to -40°C or where you need it. ArcticBlast 5, maximum effect approx. 76.000 Kcal/hr. or in excess of 300.000 btu/hr.

The combination of airflow and effect determine the speed at which produce transfers heat to the passing air. Realisable air flow is determined by the static pressure and power supply. 60 Hz power increases the air flow by more than 10% compared with 50 Hz. On the basis of averages the air flow with high fan speed is more than 20.000 m³ per hour. At low fan speed (from minus 5°C) the air flow will reduce to approx. 10.000 m³ per hour.

Flexible sizes from 10m²

The temperature reduction zone of a ArcticBlast 5 is more than 20 m² – with pallet footprints of 1.2 m² (UK) and 0.96 m² (EU) the realistic pallet capacity for fastest results, including free space for air circulation, is 10 pallets.

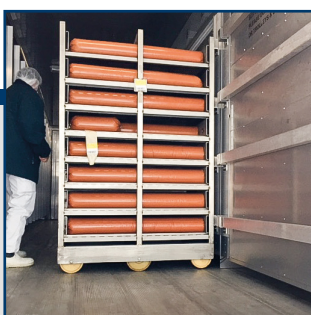
Smaller ArcticBlast sizes/ lower effect models are available. For 3 pallets a standard ArcticStore 10' will work quite well with rapid chilling and even blast freezing small volumes.

Rapid chilling fruit and vegetables

calculated on average values 20.000 KG of fruit or vegetables will reduce by 1°C each 20 minutes or be cooled to +5°C core temperature from 30°C in approx. 8 hours.

Blast freezing meats

Different meats also have different thermal loss values; the greater the fat % then the faster the heat loss. Again using averages 20.000 KG at (+5°C) of high % fat beef will be frozen to -18°C core temperature in approx. 22 hours whereas lean beef requires almost 30 hours. Typically meats take between 1 hour and 1½ hours per 1.000 KG from +5°C to core temperature of -18°C.





MAINTAIN PRODUCT QUALITY DOWN TO -65°C

Packing density

As with all blast freezers and rapid chillers actual performance is also determined by packing density. For the fastest results there needs to be airflow over the greatest possible surface area of the produce.

ArcticBlast 'n Store

We also offer the combination of blast freezing (rapid chilling) and storage under 1 roof with single or multiple access doors direct from the storage area to the "blast" zone. This combination is available with the ArcticBlast 5 with from 25 m² connected storage.

Tempering

With ArcticBlast you can also perform tempering. With standard heaters an ArcticBlast 5.1 will deliver 26,25KW effect. 20.000 KG of ham would be tempered from -18°C to +2°C in approx. 49 hours. Heating effect can be increased through extended heaters and this would reduce the required time to approx. 34 hours.

UltraFreezer™

Designed to transport and safely maintain products which are at their best when sustained at ultra-low temperatures, the UltraFreezer™'s versatility suits a variety of products including sea food, pharmaceuticals, cultures, vaccines, and medicines.

When you need go lower than the standard -40°C you need the extra refrigeration power of our UltraFreezer™

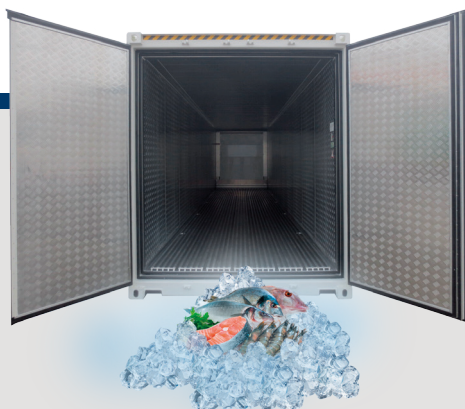
Minus 60°C is extremely cold and there are naturally only limited products that need temperatures lower than -40°C. Tuna and some other fish species are best stored at these ultra low temperatures in order to preserve that 'just caught' freshness. Other products include pharmaceuticals, cultures, vaccines, medicines and of course there are scientific and cold testing applications.

The containers are designed and built for these extreme low temperatures and feature additional insulation for improved K values, strengthened doors and panels to resist the strains of short term vacuum during pull down and the normal T-section floor has been maintained to facilitate maximum air flow under the contents. Internal aluminium chequer plate linings replace standard stainless steel for extra panel strength.

The 380/440V 3 phase refrigeration plant includes a pressure equalising valve to avoid long term vacuum inside the container.

Connect to a building

ArcticBlast, Blast 'n Store and UltraFreezer can be connected to an existing building with a connecting tunnel. We can even install inside an existing building always provided the dimensions permit.



EXPERIENCE THE EXTREME UltraFreezer



ULTRA-LOW TEMPERATURE
REFRIGERATED STORAGE

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