

Low-energy cooling process

In Israel, Crytec Ltd. has developed a unique technique for large-scale separation and ultrapurification of different compounds with high effectiveness. The Volumetric Crystallization Cooling Technology (VCCT) is a low-energy process that offers high selectivity of crystallization, relatively low latent heat of fusion and excellent heat transfer coefficient. Furthermore, it preserves all the natural qualities of liquid foods like juice, beer, wine, etc. Key benefits offered by the Wiped Surface Crystallization (WSC) systems include:

- 100 per cent of cooling surface is used;
- Lowest refrigerant consumption;
- Very fine crystals of 5 microns diameter and air bubbles of same dimensions;
- High sanitation and hygiene standards;
- Compact; and
- Automatic continuous crystallization process.

Potential applications for the WSC units include ice cream and frozen soft drinks production, juice concentration, richwine (Icewine) manufacture, fruit/vegetable/fish cooling, supermarket refrigeration, thermal energy storage and air-conditioning, treatment of sediments present in wastewater, desalination of sea water, etc. *Contact: Crytec Ltd., Bitan 151, Ofir Park, 3 Totzeret Haharetz Street, Beer-Sheva 84799, Israel. Tel: +972 (86) 209 490; Fax: +972 (86) 209 489; E-mail: crytec@jerusalem-hi.com. (Website: www.crytec.jerusalem-hi.com)*