

Food drying equipment

MCD Technologies Inc., the United States, is offering Refractance Window™ drying equipment that employs proprietary heat transfer technology to cost-effectively remove moisture from delicate products. The self-limiting process preserves excellent levels of colour, flavour, aroma, nutrients and, in some cases, texture.

This process is based on the principle that when infrared radiation passes through transparent mediums in intimate contact with each other, the majority of that infrared is bent back or refracted at the outer surface of the last, most dense transparent medium. Refractance Window driers use this principle to provide heat energy to moist product when it first begins to dry. As the product loses its moisture through evaporation, the “window” to refractance closes, leaving mainly conducted heat to finish the drying process. This lower level of heat at the end of the drying process helps prevent product degradation.

In this process, moist product is placed on the upper surface of a drier’s conveyor belt, a thin sheet of transparent plastic floating on the surface of almost boiling water. Heat from this circulating hot water is conducted to the belt and then into the product. In addition, owing to the Refractance Window patented principle of operation, infrared rays in the water are transmitted directly through the plastic and into the moist product to be dried, speeding the rapid but gentle drying process. *Contact: MCD Technologies Inc., 2515, South Tacoma Way, Tacoma, WA 98409, the United States. Tel: +1 (253) 4760 968; Fax: +1 (253) 4760 974; E-mail: mcdtech@earthlink.net; Website: <http://www.mcdtechnologiesinc.com/MCDTechnologiesFrame.html>.*