

ABSTRACT

IMMERSION FREEZER WITH BOTTOM CHAMBER SERIES OF CASCADING CONVEYOR BELTS

The present invention is an immersion freezer which employs a postcooling chamber. The immersion section of the freezer initially immerses all or part of the items to be frozen (typically food items) in a bath of a liquid refrigerant to impart a crust freeze on the items, which locks in moisture and prevents clumping. The postcooling chamber, located underneath the immersion section, then uses the vaporized refrigerant from the immersion section to complete the freezing process while also maximizing efficiency. The postcooling chamber also imparts agitation to the items (which further prevents clumping) through the use of a series of cascading conveyor belts.

(Figure 1)