

Title (en)
DEVICE FOR INCREASING THE SERVICE LIFE OF A TUBE-BUNDLE HEAT EXCHANGER IN INDIRECTLY-HEATED UHT UNITS FOR FOODSTUFFS

Title (de)
VORRICHTUNG ZUR VERLÄNGERUNG DER STANDZEIT EINES ROHRBÜNDEL-WÄRMEAUSTAUSCHERS IN INDIREKT BEHEIZTEN UHT-ANLAGEN FÜR NAHRUNGSMITTEL

Title (fr)
DISPOSITIF POUR PROLONGER LA DUREE D'UTILISATION D'UN ECHANGEUR THERMIQUE A FAISCEAU TUBULAIRE DANS DES INSTALLATIONS A ULTRA-HAUTE TEMPERATURE (UHT) POUR PRODUITS ALIMENTAIRES, A CHAUFFAGE INDIRECT

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Application
EP 03780029 A 20031122

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• EP 0313131 W 20031122

Abstract (en)
[origin: WO2004051174A1] The invention relates to a device for increasing the service life of a tube-bundle heat exchanger in indirectly-heated UHT units for foodstuffs, in particular for milk or milk products, according to the generic part of claim 1. According to the invention, the service life of UHT plants of the inventive type is significantly increased and, as a desired side-effect, the cleaning process optimised and the sterilisation frequency reduced. The above is achieved, whereby the structure surface of the tube inner wall (3a), achieved by means of macro-rough structures (MR) is surface treated by means of an electrochemical polishing method, which generates a micro-surface property (mR), structurally and energetically characterised in a reduced tendency for the adherence of foreign substances, that the incident angle (<) is in the range 35 = ? = 25 degrees and that said inner tubes (3; 3*) are provided in a UHT heater and a subsequent UHT heat retainer.

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