

ECLA EUROPEAN CLASSIFICATION

- F28C** **HEAT-EXCHANGE APPARATUS, NOT PROVIDED FOR IN ANOTHER SUBCLASS, IN WHICH THE HEAT-EXCHANGE MEDIA COME INTO DIRECT CONTACT WITHOUT CHEMICAL INTERACTION** ([safety devices in general F16P](#); [fluid heaters having heat generating means F24H](#); with an intermediate heat-transfer medium coming into direct contact with heat-exchange media [F28D15/00](#) to [F28D19/00](#); details of heat-exchange apparatus of general application [F28F](#))
- F28C1/00** **Direct-contact trickle coolers, e.g. cooling towers (building construction [E04H5/12](#); enclosed spaces cooled by trickle [F25](#); components parts of trickle coolers [F28F25/00](#); [N: indirect-contact cooling towers [F28B1/06](#)])** [\[N1204\]](#)
- [F28C1/00B](#) . [\[N: comprising outlet ducts for exhaust gases\]](#)
- [F28C1/02](#) . with counter-current only
- [F28C1/04](#) . with cross-current only
- [F28C1/06](#) . with both counter-current and cross-current
- [F28C1/08](#) . Arrangements for recovering heat from exhaust steam
- [F28C1/10](#) . Arrangements for suppressing noise
- [F28C1/12](#) . Arrangements for preventing clogging by frost
- [F28C1/14](#) . comprising also a non-direct contact heat exchange
- [F28C1/16](#) . Arrangements for preventing condensation, precipitation or mist formation, outside the cooler ([F28C1/14](#) takes precedence)
- F28C3/00** **Other direct-contact heat-exchange apparatus**
- [F28C3/00B](#) . [\[N: one heat-exchange medium being a solid \(\[F28C3/10\]\(#\) takes precedence\)\]](#)
- [F28C3/02](#) . the heat-exchange media both being gases or vapours
- [F28C3/04](#) . the heat-exchange media both being liquids
- [F28C3/06](#) . the heat-exchange media being a liquid and a gas or vapour ([temperators for cooling steam F22](#))
- [F28C3/08](#) . . with change of state, e.g. absorption, evaporation, condensation ([generating steam under pressure F22](#))
- [F28C3/10](#) . one heat-exchange medium at least being a fluent solid, e.g. a particulate material
- [F28C3/12](#) . . the heat-exchange medium being a particulate material and a gas, vapour, or liquid
- [F28C3/14](#) . . . the particulate material moving by gravity, e.g. down a tube

- F28C3/16 . . . the particulate material forming a bed, e.g. fluidised, on vibratory sieves
- F28C3/18 . . . the particulate material being contained in rotating drums