HIGH-PERFORMANCE PROFILED SPRINKLER FOR FILM-TYPE COOLING TOWERS

Areas of Application

The sprinkler can be used for efficient cooling of process circulating liquid in film-type cooling towers in various industries and power engineering

Cooling towers

Specification

The sprinkler heat-transfer surface, along which the cooled liquid flows down, has special dimples with certain dimensions. The cubic density of sprinkling for film flow ranges from 0.44 to 2.83 $m^3/(m \cdot h)$.
The sprinklers in cooling towers are angled to the horizontal plane

Fan cooling tower

Advantages

The use of sprinklers with the proposed surface relief in cooling towers leads to a significant intensification of heat transfer from flowing liquid to air as compared with the flow on smooth surfaces in the typical sprinklers.
Under optimal conditions, the intensity of heat transfer increases almost thrice

IPR Protection

IPR2

Stage of Development. Suggestions for Commercialization

IRL5, TRL3
Upon request, the degree of liquid cooling in film-type cooling tower with a profiled sprinkler is calculated, a new cooling tower is developed or an existing facility is upgraded, and profiled surfaces are manufactured (in cooperation with the customer)

Contact Information

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