عنوان مقاله:
Optimization of the Number of Wind Breakers' Walls

محل انتشار:
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خلاصه مقاله:
Cooling towers are evaporative heat transfer devices in which atmospheric air cools warm water,with direct contact between the water and the air, by evaporating part of the water, mostly used inair conditioning and industrial processes. Cooling efficiency of a natural draft, dry cooling tower (NDDCT) is significantly affected under cross-wind condition This paper investigates a solution that may improve cooling performance of cooling towers, with particular interest in radial windbreakers methods around towers. The study explores a realistic scenario with four cooling towersin-square arrangement. A power plant cooling towers performance has been modeled numericallyfor different numbers of wind breakers walls to find the best condition. Efficiency improvement isaccomplished for different .numbers, the results are compared and the optimized number isintroduced

کلمات کلیدی:
wind breaker, cooling tower, efficiency, optimization