

Slurry and Solution Cooling Towers

IWC has developed a field erected cooling tower specifically designed to handle slurries as well as highly abrasive and/or corrosive solutions.

IWC's slurry cooling towers are ideal cooling solutions for the copper mining industry. The robust design, easy assembly, low maintenance costs and guaranteed operational efficiency ensure extended service time of operational machinery.

These cooling towers are designed with ease of maintenance in mind, and have forced draught fans, removable spray lances (accessible from an external walkway) and are fill-less, making them ideally suited for applications where fouling of the internals would normally be a major operational concern.

Drift eliminators are assembled into easily removable pads and can be provided with an automatic CIP (Cleaning In Place) system. Drift losses have been minimized and drift losses can be reduced to as low as 0,002% of the re- circulating solution flow rate.

The cooling tower is typically octagonal in shape and consists of a number of field-assembled, dual composite GRP panels, complete with an integral basin which is designed to be non-clogging. The structural panels have integral polypropylene liners with the structural laminate produced from a high-quality vinyl ester resin. A conductive carbon tissue is included as a corrosion barrier, as well as to allow for spark testing of the internal polypropylene panel seal welds.

IWC designed five slurry cooling towers for the Kansanshi Copper Mine in Solwezi, northern Zambia, now the eighth largest copper mine in the world, with two open mining pits.



Increasing Performance, Eliminating Health Risks

Advantages



Non-corrosive, long life and hygenic



Drift eliminators are assembled into easy removable pads



Low maintenance intervals and service life



Modular design results in simple, economical installation



