



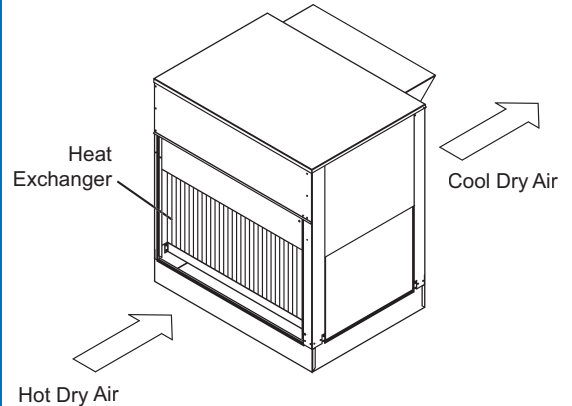
INDIRECT COOLING MODULE IM70

The IM70 indirect cooling module (ICM) is a pre-cooler used in 2-Stage or Indirect/Direct evaporative cooling.

The ICM cools the air without adding any additional moisture. It accomplishes this by circulating water downward through a heat exchanger, while a fan draws air upward through the heat exchanger. This air and water are cooled by evaporation and, in turn, cool the walls of the heat exchanger. The removed heat is exhausted from the unit with the moist air.

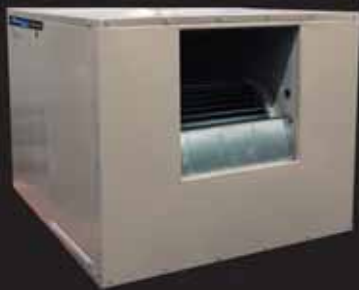
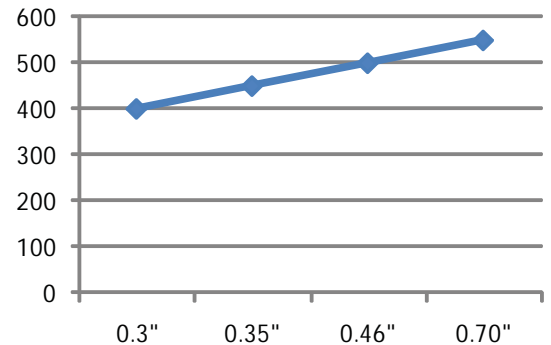
Hot, dry outside air is pulled horizontally through the cooled walls of the heat exchanger by the attached evaporative cooler. This air is cooled and since it does not contact water, there is no moisture added. The dry air cooled by the ICM is then cooled more by the direct evaporative cooler. The dry bulb temperature of the air after going past the ICM drops as does the wet bulb or saturation temperature. This cooled dry air from the ICM is pulled through wet evaporative media in the direct evaporative cooler which cools the air and adds moisture. The temperature leaving the evaporative cooler is lower than what is possible without the ICM, often below the ambient wet bulb temperature.

HOW THE IM70 WORKS



COOLING ADVANTAGES OF THE IM70

IM70	FACE VELOCITY FPM			
	400	450	500	550
PRESSURE DROP	0.3"	0.35"	0.46"	0.70"
EFFICIENCY	62%	60%	56%	53%



The IM70 can be mounted directly to Champion's MasterCool® 51& 71 series evaporative coolers for a complete 2-stage evaporative cooling process.