

Case Study //

Corio Shopping Centre, VIC

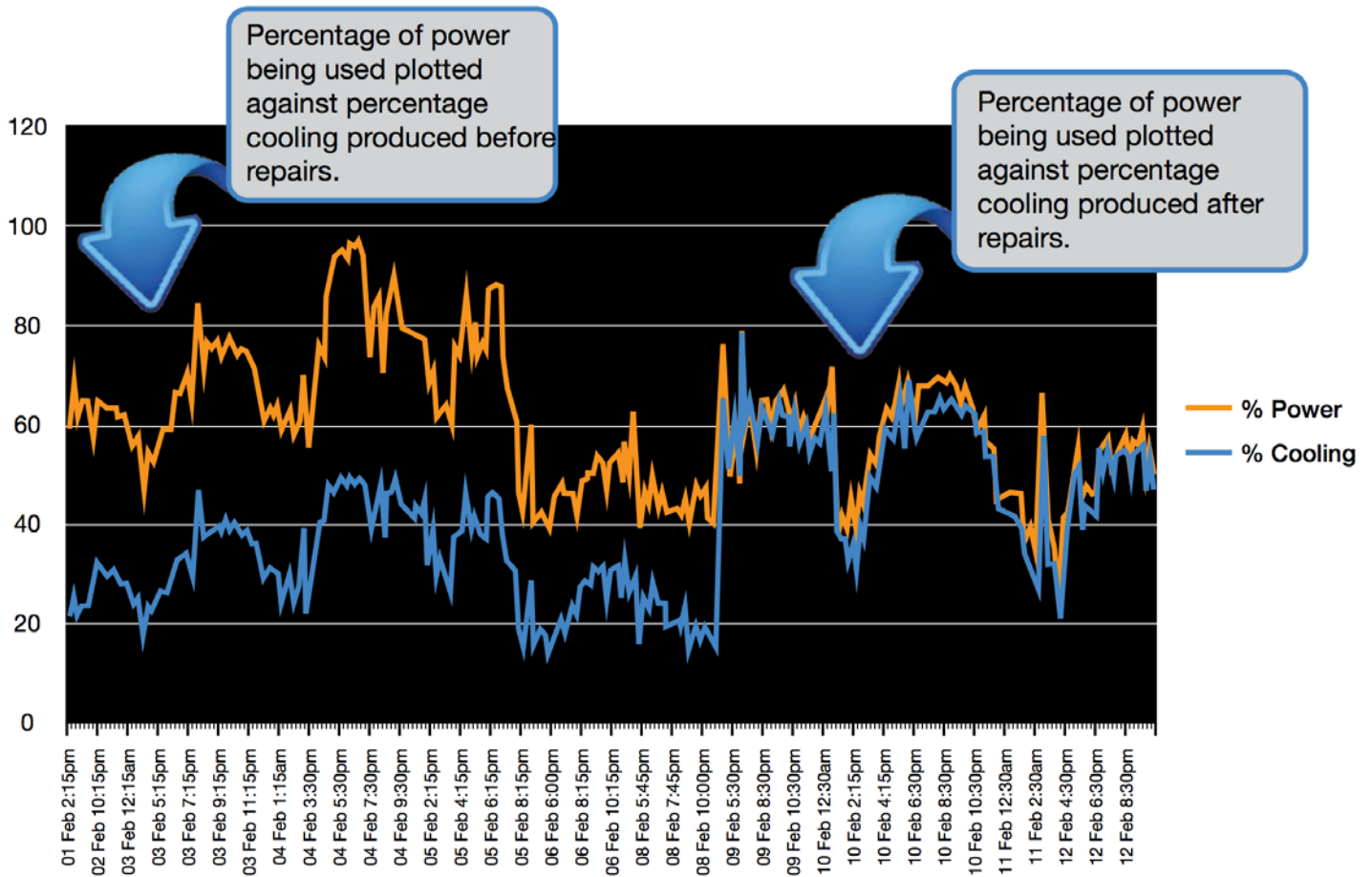
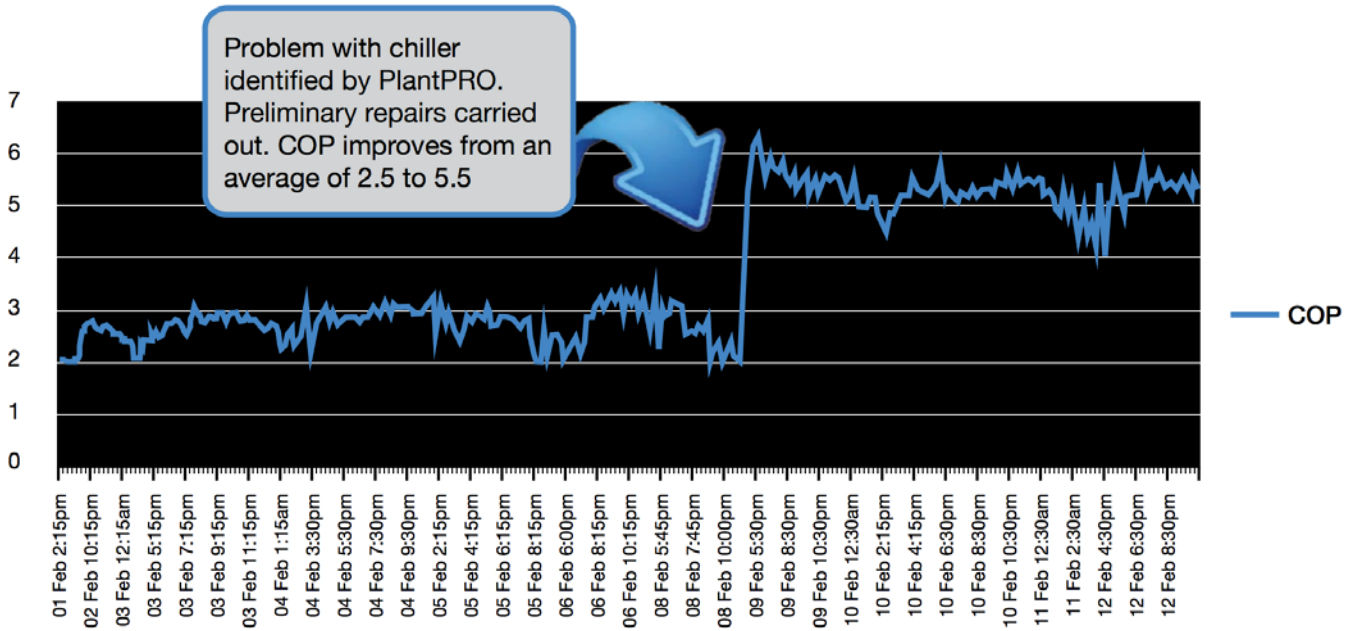
PlantPro Chiller Performance monitoring system continually monitors the performance of chiller plant and provides automatic reports and ongoing analysis of the plants overall efficiency, at Corio Shopping Centre, Victoria.

The Solution //

Through the continuous monitoring process of the chiller plant carried out by Airmaster using the PlantPro Monitoring tool, it was noted that the overall efficiency of chiller No.2 had dropped off significantly. A technician was dispatched to site to investigate the issue and found a fault with the chiller's refrigerant control system. The fault was of an unusual nature with the chiller still left fully operational but unable to use its variable speed drive to optimise its operating power consumption. However, chiller water production was unaffected with the chiller showing no actual fault condition. Following the repairs, chiller COP jumped from an average COP of 2.5 to an average COP of 5.5. The attached graphs clearly shows the high power consumption and low cooling performance before the repairs followed by the marked improvement after the repairs.

Project Outcomes //

The lead chiller averages 10 hours per day, 7 days per week at an average 50% load. When operating efficiently, 300 hours per month @ an average of 130kW equates to a running cost of approximately \$2,700 per month. If this problem had gone unchecked, this cost could have conservatively added another \$5,000 per month to the chiller plant's operational costs.



About Us //

Airmaster is an award-winning technical solutions company, delivering end-to-end management of heating, ventilation, air conditioning, industrial and process cooling and building automation across Australia and South East Asia.

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