HELPING WINDSOR LEISURE CENTRE BREATHE EASY AGAIN



PROJECT DETAILS

Client

Windsor Leisure Centre

Completed

September 2016

Oakland Business Line

Trend Controls/HVAC

Objective

Leisure Centre heating, cooling and ventilation

IN SEPTEMBER LAST YEAR, OAKLAND AIR CONTROL SPECULATIVELY MADE CONTACT WITH WINDSOR LEISURE CENTRE'S ANDREW KENNEDY WHO HAD RECENTLY STARTED AT WINDSOR, AND YOU KNOW THEY SAY TIMING IS EVERYTHING, WELL IN THIS CASE IT WAS!

Andrew was having problems with the Trend Controls within the Leisure Centre so Oakland visited to investigate the problem.

As it turned out there were several HVAC related problems that needed rectification within the leisure centre all of which Oakland were happy to help solve.

Firstly, Andrew showed us to the West Zone Plant Room where one of the main AHU's serving the West Zone Pool Hall had failed after emitting some unusual sounds.

The main problem was the failure of the Centrifugal Fan Assembly due to a collapsed bearing and damaged shaft. It was noted that both drive and driven pulleys were very badly worn and needed replacement, along with the appropriate belts.

Eventually, as a result, the rear bearing collapsed completely and unfortunately caused catastrophic damage to the fan assembly housing, which necessitated a complete new unit.

Had the damage been less severe it may have been possible to refurbish the fan but unfortunately this was not possible.

Secondly the panel controlling this AHU was dilapidated and the main Satchwell controller had failed, this needed renewal along with the other repairs.



CASE STUDY



PROJECT DETAILS

Key to photos...

- 1. The old fan prior to removal
- 2. Dilapidated panel
- **3.** Faulty Automatic Control Valve
- 4. Repaired main AHU with new fan belt and pulleys

Thirdly to the rear of the main (failed) AHU, a smaller AHU supplying the Gym had a failed Inverter Drive and Automatic Control Valve, the Actuator having been removed some time previously. Similarly to the main AHU, both Drive and Driven V Belt pulleys were very badly worn, and the fan had become slightly noisy indicating wear to the bearings.

Finally Andrew showed us the Boiler House where the 2 main Heating Pumps were both powered by 3 phase Inverter Drives, one of which had failed.

Oakland were asked to deal with all of the problems listed above and due to the quality of the work carried out by Oakland at Windsor LC we are currently helping many other Parkwood Leisure facilities with a variety of project and maintenance tasks.



