

Case Study

Woodland Pre-Schools

Fulfilling every child's potential.

"COOLNOMIX™ from Agile8 has delivered proven energy and cost savings at The Peak Pre-School and we look forward to achieving similar savings at our other schools"

Our mission is to ensure that every child has the opportunity to fulfil their potential and to ensure that the parents of these children are satisfied with the school. Woodland sets the standard for quality international pre-school education in Hong Kong. Our ten schools are located in ten convenient locations across the territory and provide either Traditional or Montessori teaching approaches. All Woodland teachers are qualified early childhood educators and come from a range of overseas backgrounds - giving the schools a genuine international flavour.

Highlights

- reduces electricity costs of the school during the air-conditioner season by 29%
- reduces energy consumption of the inverter-type air-conditioners by more than 40%
- easily installed without any disruption to classes

About Woodland Pre-Schools



WoodlandPre-Schools

Woodland Pre-Schools is a leading provider of pre-school education in Hong Kong. Boasting ten schools in convenient locations across the territory, Woodland offers a unique choice between Traditional and Montessori education approaches. With all its teachers qualified in early education and coming from a range of overseas backgrounds, Woodland offers a genuine international flavour.

The challenge

Alongside responsibility for nurturing young minds, Woodland must also provide physically safe and caring environments in their schools. A costly part of this is ensuring the schools are maintained at comfortable ambient temperatures for the children. Woodland had already begun to address the operating costs of this at The Peak Pre-School by deploying inverter-type air-conditioners in all its classrooms. Nevertheless, Woodland were keen to explore if additional electricity cost savings could be achieved through COOLNOMIX™. Accordingly, a full production deployment of COOLNOMIX™ on all inverter, split-type air-conditioners was organised at The Peak Pre-School as a proof-of-concept before roll-out to all other schools.

about COOLNOMIX™

COOLNOMIX

The Art of Cool

The solution

Agile8 deployed five of COOLNOMIX™ AC-01's on five air-conditioners (inverter, split-type) at The Peak Pre-School, one of Woodland's premier, long-standing schools. The AC-01 is an air-conditioner model within the COOLNOMIX™ range capable of delivering significant energy savings for cooling systems that operate at temperatures from 16°C to 31°C. The installation took place in mid-September 2013 and the proof-of-concept performance was checked across the next few weeks into October 2013.



To measure the performance of the AC-01's, electricity consumption across the full school operation, without COOLNOMIX™ in operation, was recorded for one week by the school supervisor: this formed the base-line against which savings would be measured.

Once COOLNOMIX™ was installed, the school supervisor again recorded the electricity consumption across the whole school for a further two weeks to determine what energy savings were being achieved. The results obtained are laid out in the following table:

<u>Date</u>	<u>Meter Reading</u>	<u>Weekly Consumption</u> ^(Note 1)	<u>% Saving</u>	<u>COOLNOMIX™ Status</u>
5-Sep-13	189207			
12-Sep-13	189809	602		Without COOLNOMIX™
19-Sep-13	190400			
3-Oct-13	191215	408	32.31%	With COOLNOMIX™
10-Oct-13	191662	447	25.75%	With COOLNOMIX™
		<u>Average Saving</u>	<u>29.03%</u>	

Note1: The period Sep 19 to Oct 3 is divided by 2 to derive the weekly consumption.

Based on the range of devices contributing to total electricity consumption (air-conditioners, lighting, kitchen facilities, office automation) it was estimated that the five air-conditioners on which COOLNOMIX™ had been installed contributed about 70% of total consumption. With this estimation, the energy savings achieved on the five air-conditioners were **greater than 40%**.

Benefits

- COOLNOMIX™ reduces total school electricity consumption by >29%, demonstrating that COOLNOMIX™ provides a genuine basis for energy savings with speedy payback on investment.
- COOLNOMIX™ achieves energy savings on inverter-type air-conditioners.
- COOLNOMIX™ reduces air-conditioner energy consumption by >40%.
- COOLNOMIX™ proved to be an easy deployment without any disruption to school operations.

about COOLNOMIX™