



Microbial contamination at the heart of HVAC inefficiencies.

Microbial contamination of HVAC infrastructure is a major issue for building management, having the potential to adversely impact HVAC system efficiency and Indoor Air Quality.

This 2006 case study was carried out at numerous sites to demonstrate the effects of system fouling due to microbial contamination.

Pure Coil Cleaner and Coil Treatment HVAC Efficiency Improvements

SITE DETAILS	Unit I.D Type DX CH/W	Air-Flow			Coil Pressure Drop ΔP			Coil Temperature Change ΔT		
		Pre-Aeris M/s	Post Aeris M/s	%	Pre-Aeris Pascal	Post Aeris Pascal	%	Pre-Aeris Celsius	Post Aeris Celsius	%
Major Global Hospitality Group - Site 1	AHU 10 CH/W	3.2	3.5	+9.37%	120	105	-12.50%	8.4	9.8	+14.29%
Major Global Hospitality Group - Site 2	O/A 2 CH/W	2.7	3.2	+18.52%	305	285	-6.56%	8.1	9.6	+15.63%
International Airport Asia	AHU 3 CH/W	2.6	3.4	+30.77%	120	80	-33.33%	9	11	+18.18%
International Airport Middle East	MAH 32 CH/W	2.5	3	+20.00%	71	65	-8.45%	9.2	9.8	+6.12%
International Airport Asia	AHU 4 CH/W	2.35	3.08	+31.06%	140	40	-71.43%	3.7	9.4	+60.64%
Major Hospital Australasia	WC/DX	1.75	3.15	+80.00%	180	95	-47.22%	6.8	9.7	+29.90%
Asian Shopping Mall Group	Shoe Mall PKG WC/DX	1.7	2.1	+23.53%	225	175	-22.22%	8.1	9.4	+13.83%
Asian Shopping Mall Group	AHU C2	2.35	2.75	+17.02%	235	205	-12.77%	N/A	N/A	N/A
Asian Shopping Mall Group	AHU 1 WC/DX	2.58	2.81	+8.91%	650	615	-5.38%	8.8	9.8	+10.20%
	AHU 2 WC/DX	3.28	3.32	+1.22%	450	425	-5.56%	14.2	17.3	+17.92%
Commercial Office Building Australasia	Main AHU CH/W	2.05	2.63	+28.29%	N/A	N/A	N/A	N/A	N/A	N/A

Average improvements

Airflow improvement + 24.42%

Coil Pressure Drop – 22.54%

Coil Temp change + 20.75%