O3 Chemicals

The GOING GREEN Maintenance Programme

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“Property Owners and Facilities Managers can spend significant resources in establishing a commercial relationship for the delivery of services that will last for three to five years.

There is usually an expectation that this relationship will continue as it starts - throughout the period of the contract. But, all too often, things change and, before anyone realises it, the service delivery contract has diverged from that originally agreed and no longer reflects requirements.”

The O3 “GOING GREEN” Maintenance programme has changed this.

In addition, it is designed to support the O3 programme to eliminate tap water in aircon cleaning systems. The realization that mould and bacteria are ever-present in air-conditioning systems has gained traction throughout the world.

The O3 “GOING GREEN” Maintenance programme incorporates the latest chemical technology and has built-in checks and balances to measure the effectives of every facet of the coil cleaning programme.

The O3 cleaning Maintenance, which incorporates applying chemicals with the latest compressor technology, eliminates the use of tap water to rinse down.

We Care

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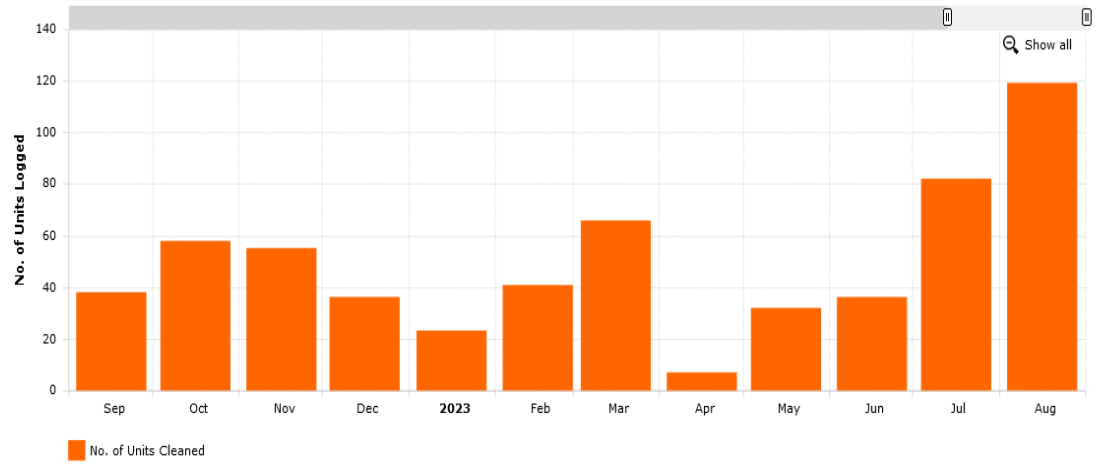
GATEWAY SHOPPING MALL

MONTHLY UNIT MAINTENANCE :: AIRFLOW (AHU'S ONLY) + BEFORE AND AFTER PHOTO'S (AHU AND SPLITS)



MONTHLY UNIT MAINTENANCE :: AIRFLOW (AHU'S ONLY)

To allow the Facilitates Manager and the contractor to monitor work-in-progress, we include real-time graphs. A feature is they ensure all forecast cleaning projects are completed on time.

- O3 chemicals are classified as hygienic and safe to use in medical an pharmaceutical situations
- Non-corrosive – will never harm coils or fins or Bluechem coatings
- Safe on Aluminium and Copper
- Choice of O3 GREEN or O3 Alkaline D coil cleaners
- Extends the life of aircon units
- Can be diluted up to 15 times and still be effective
- Leaves a clean fresh fragrance – can be used during normal office hours

Most Facilities Management companies in South Africa include a clause in their aircon maintenance programme, that AHUs are to be chemically cleaned once per year and rinsed with water three times per year thereafter.

Scientists the world over, now accept it just takes 48 hours for mould and bacteria to commence growing in aircons. Water is a vital component in the diet. Without water they will die. In any case water does not clean, If water cleaned, then we wouldn't need soap in our shower or bath. Would we?

The O3 Going Green Maintenance measures the effectiveness of every clean.

The **O3 GOING GREEN** Maintenance programme is designed to:

1. Reduce energy consumption in AHUs, chillers, mid-walls, evaporators, condensers, cassettes, consols and hideaways by keeping them in pristine condition throughout the maintenance programme
2. Provide Aircon Maintenance Contractors with accurate feedback on the results of their O3 coil cleaning programmes
3. Assist Aircon Maintenance Contractors to achieve those results efficiently and cost-effectively
4. Through our branches in Cape Town, JHB and Duban provide a back up service to the aircon and refrigeration industry.

TO START THE O3 GOING GREEN MAINTENANCE PROGRAMME

- The Contractor must identify the building in which the aircon units are situated:
- Where the building is situated? (Town and street address)
- From this information O3 will link GPS co-ordinates to the site
- We need the site's Facilities Management name
- And the site's Owner / Landlord names
- We need the Site-Technicians' names

Using the site's asset register, the Contractor will identify:

- All the site's AHUs, chillers, HVACs, mid-walls, cassettes, consols, evaporators and condensers by serial number or any other acceptable form of identification.
- Those units servicing restaurants, fast food outlets, bakeries, or any form of cooking.
- From this information O3 will prepare QR tags for each unit in the aircon system.

The O3 GOING GREEN Maintenance Programme
Attaching the QR tags

QR Tag:
The tag identifies the coil should be cleaned with O3 GREEN Coil Cleaner

The O3 GOING GREEN Maintenance Programme

QR Tag:
The tag identifies the coil should be cleaned with O3 Alkaline D Coil Cleaner

The O3 GOING GREEN Maintenance Programme

QR Tag:
The tag identifies the coil should be cleaned with O3 SmartAir and SmartFinish

Gathering the Information

- After the QR tags have been attached, the Technician measures the Length x Height of every AHU unit on the site

- This information, which is linked to the QR tag, is captured and is forwarded to O3 Control, by smartphone.

Establishing a Dataset

- O3 Maintenance Control will use the information to establish a dataset.
- Thereafter, every time the Technician services the unit, he will use his Smartphone to scan the QR tag to establish contact with maintenance control
- To commence the clean, the technician takes a photo of the unit. The photo is timed and dated and therefore records the commencement of the clean.
- Next he will take the “Before” airflow readings. Dependent of coil size, up to 9 readings are required.

- The Technician takes the “Before” airflow readings with his anemometer and records them on his Smartphone by punching them into the keyboard

- The readings are automatically sent to O3 Control, and everyone involved in the programme.

Where a Coil exceeds 1.5 meters in width, perform 9 readings as per the O Symbol

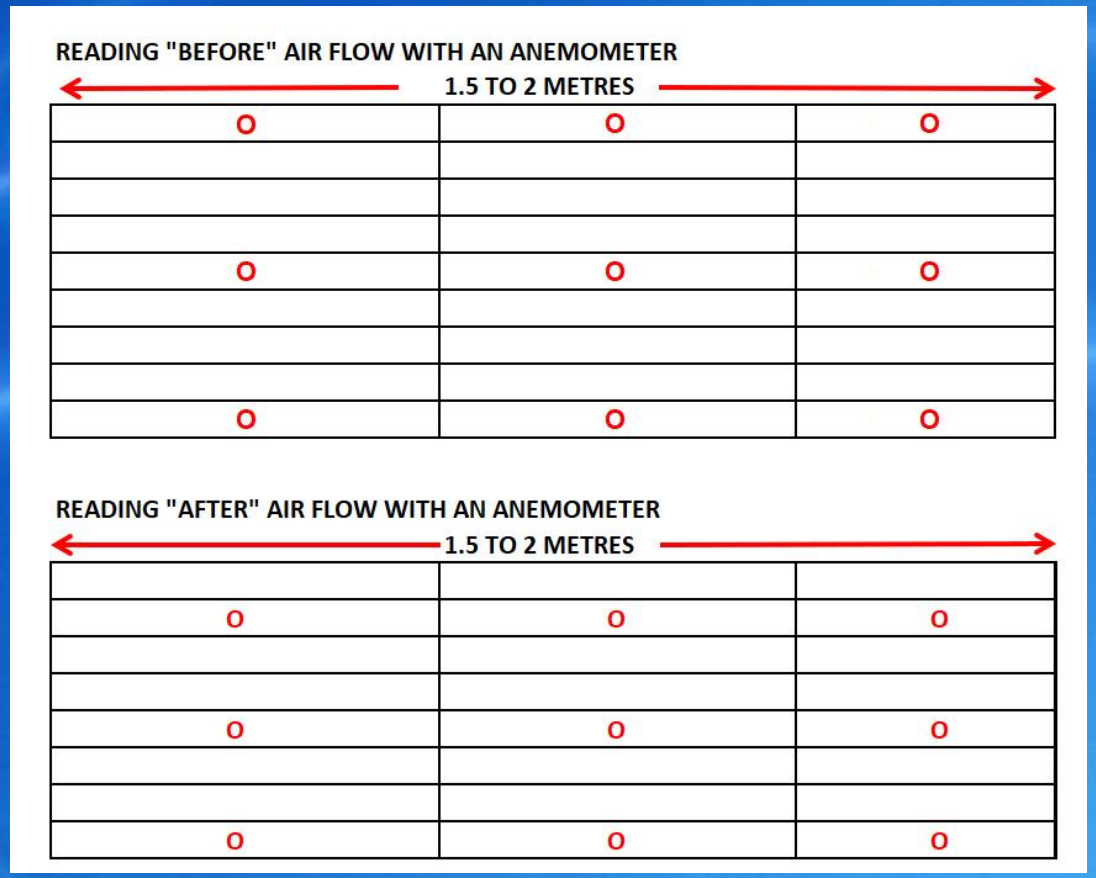
Defusers should be open
Absolutely Essential:
- **Switch off chill water coil and**
- **Over-ride Pressure Centre**
- **Ensure air flow is set at 100%**

To get best results place anemometer wind vane flat on the AHU surface
There should be two people present when doing air flow measurements.
The Reader and The Recorder of the readings

The RECORDER should stand well away from the coil to allow for maximum air flow at the coil face.
Smaller coils will require fewer readings

Take readings in same spots as before
Defusers should be open
Absolutely Essential:
- **Switch off chill water coil and**
- **Over-ride Pressure Centre**
- **Ensure air flow is set at 100%**

To get best results place anemometer wind vane flat on the AHU surface



Establishing a Budget

- For the first time in South Africa, the maintenance programme can provide the Facilities and Contractor managers with a chemical budget for all the on-site aircon units.
- To do so, the Technician merely points his smartphone at the QR tag on the unit, then punches in the (height and width) measurements of the unit. From these, the O3 Programme calculates the area of the units in m^2 to determine the quantity of O3 chemicals needed for cleaning.
- In the case of HVACs, splits, cassettes, consols and condensors we need the BTU rating to identify the size.

O3 uses specially developed chemicals to remove mould and bacteria from HVACs, splits, condensers, cassettes, consols, and hideaways.

O3 SmartAir and **O3 SmartFinish** will do the job quickly, efficiently, and cost-effectively – and they don't need any water.

O3 SmartAir

O3 SmartFinish

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Introducing

A NEW WAY OF APPLYING
Our O3 chemicals

A 50 Litre Twin-head Compressor

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O3 Chemicals

The 50 litre Twin-head, Oil-free, Silent compressor is ideal for cleaning AHUs, chillers and other large aircon units.

- Works at a constant 5 Bars pressure
- Powerful enough to clean a coil from one side only
- Halves cleaning times
- Applies chemicals evenly, and cost-effectively
- Eliminates the use of hosepipes to rinse off after a clean.
- Eliminates the use of tap water.
- Won’t damage fins
- Easily portable
- Requires almost no maintenance
- And is competitively priced
- Ideal for any Contractor – big or small

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- O3 uses a specially developed method to clean HVACs, mid-wall splits, cassettes, consols, hideaways, condensers, and refrigeration units.
- **O3 SmartAir and O3 SmartFinish** will do the job quickly, efficiently and cost-effectively – and they don't need water.
- The application is new too. It uses a 24 litre oil-free silent compressor, which helps to considerably reduce the quantities of chemicals needed to do a clean. Set at 1 bar pressure - it cleans a unit in minutes!

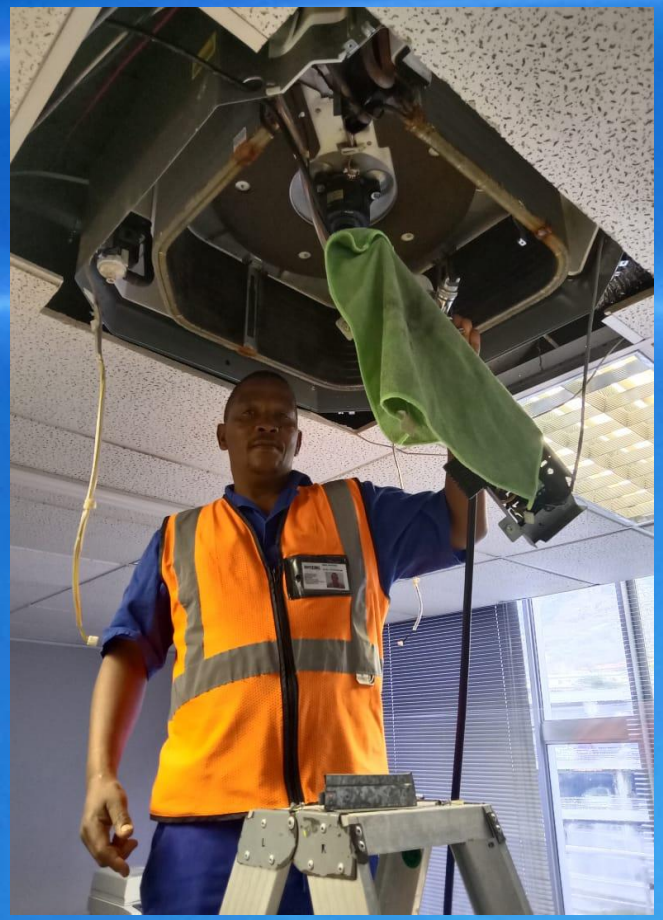
The 24 litre Oil-free, silent compressor can be used during working hours to clean
split units, consols, cassettes, hideaways, and refrigeration units in:

- Offices
- Banks
- Conference centres
- Shops
- Hospitals
- Restaurants
- Supermarkets
- It can work at a constant 1 Bar pressure
- Reduces cleaning time dramatically.
- Cleans barrel fans without removing them from the unit. Imagine no broken clips.
- Very cost-efficient
- Easily portable
- Requires almost no maintenance
- Is competitively priced
- Ideal for any Contractor – big or small

Meet Jan Faro – Senior Maintenance Supervisor

Jan Faro is the Senior Maintenance Supervisor at Airtek Air Conditioning.
He is credited with more than 5000 cleans using O3 Chemicals.

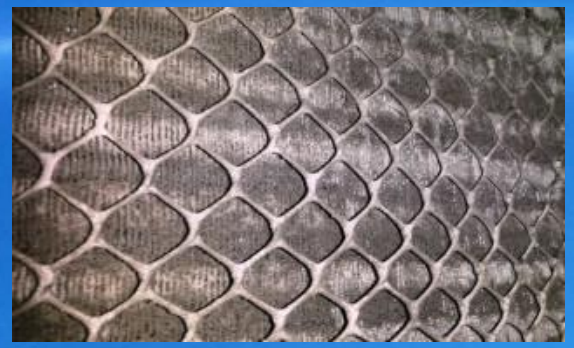
He has led the trials with the new O3 Maintenance and has registered more than 4000 successful cleans on HVACs, splits, consols, cassettes and condensors.



No matter how often a condenser is cleaned with water, it will never be as clean as when **O3 SmartAir** and **O3 SmartFinish** Cleaner is applied.

Using the 24-litre Compressor:

- Set at 2 bars
- Spray **O3 SmartAir** onto the unit
- Leave on for 5 minutes
- Then rinse down with **O3 SmartFinish**



NO TAP WATER REQUIRED

The O3 SmartFinish leaves a pleasant fragrance which lasts 5 to 10 minutes.

The O3 “GOING GREEN” programme deals in facts:

- How clean?
- How effective?
- How much?

All measured, recorded and evaluated. No thumb-sucking!

How Clean?

AHUs, chillers, and condensors.

O3 CONCENTRATE

O3 advocates 1 deep clean every year using O3 Green Concentrate

or O3 Alkaline D Concentrate in a 1:1 dilution and three cleans using

O3 Green or O3 Alkaline D in a 1:15 dilution.

Water doesn't clean. Chemicals clean!

The use of tap water is eliminated.

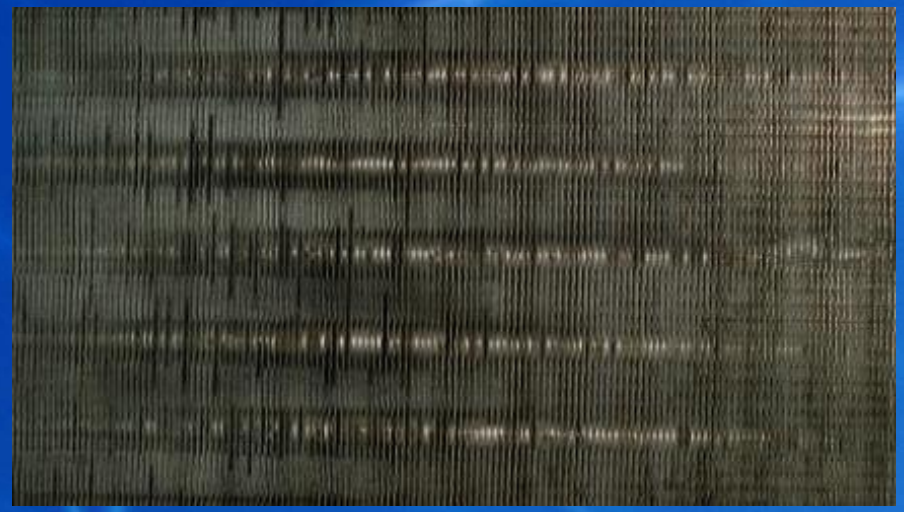
How Clean? -The Benefits

The O3 programme keeps the coils and fins in pristine condition for 12 months of the year

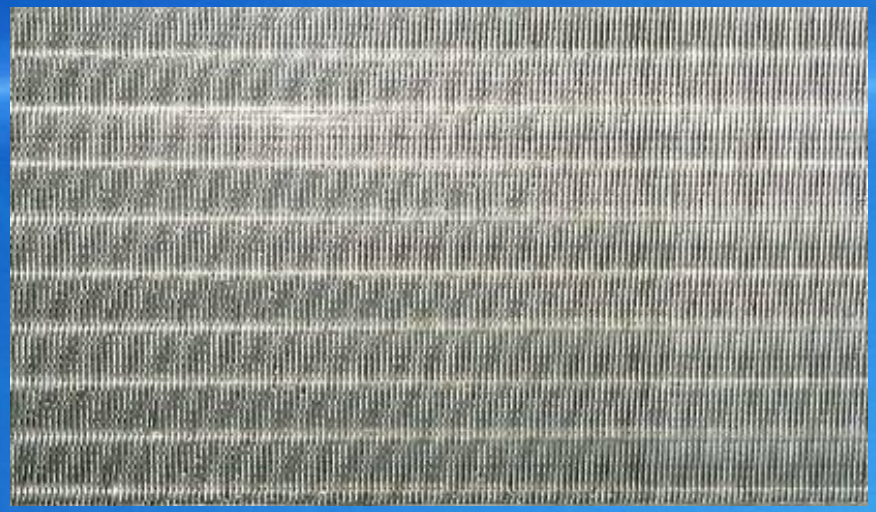
- The O3 Maintenance saves energy
- It eliminates the use of tap water
- The O3 programme records every detail of the various cleans
- Is completely safe on Bluechem coatings.
- Its is non-toxic and non-corrosive
- It is bio degradable

After the rinse-down, the technician takes pics of the coil with his Smartphone.

Before



After



There is no better way for a Contractor to show the Facilities Manager and the Owner how well the clean was done.

They will be recorded on the programme.

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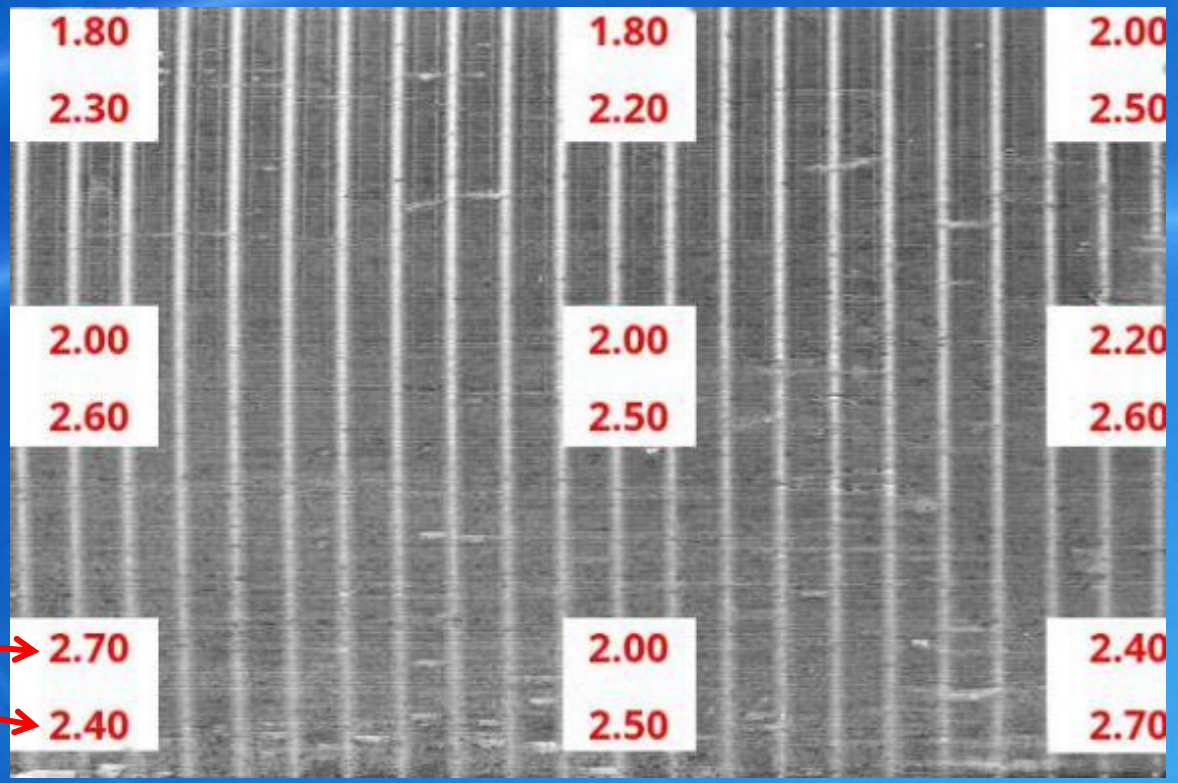
- The programme records all the data
- The data is also transposed onto a coil image.
- This enables the contractor (wherever he may be in the world) to “see” the results of the clean on the coil.

The top figure is the “Before” reading and the lower is the “After” reading

In this case, where there has been no improvement, we would ask the technician to re-clean that area.



A check O3 built into the programme to ensure maximum benefit from the coil clean

1. The next slide shows the record of all the “Before” and “After” readings taken during the cleaning process
2. We use colour-coding to differentiate the results achieved
3. **Red** is for improvements in airflow of more than 50%. The higher the improvement, the dirtier the coil to begin with
4. **Yellow** is for improvements between 20%-40%
5. **Green** is for less than 10%. It indicates that the coil was in a reasonably good, clean condition at the start of the clean
6. The target improvement is less than 10%. It shows the coil is in pristine condition

Air volume recording before and after coil cleaning

SFI Group (Pty) Ltd

Site: Menlyn Park Shopping Centre

Date: August 2025

Test done by: Brandon, George, Tumelo and Tsepo

Colour Coding

- Greater than 50%
- 20% to 49%
- Less than 20%

	Coil Size			BEFORE - Velocity readings (m/s)							Volume	AFTER - Velocity readings (m/s)							Volume	
Unit No	Width (mm)	Height (mm	Area (m²)	1	2	3	4	5	6	Ave	m³/s	1	2	3	4	5	6	Ave	m³/s	% Change
AHU 01	2450	2450	6.0	2.3	2.3	2.3	2.7	2.2	2.2	2.3	14.0	2.8	3.0	3.0	3.1	2.9	3.0	3.0	17.8	27.1%
AHU 03	2480	1820	4.5	4.3	3.7	3.0	3.2	3.0	3.7	3.5	15.7	4.5	4.0	3.4	3.8	3.5	4.0	3.9	17.5	11.0%
AHU 04	2450	2450	6.0	2.2	2.0	3.4	2.7	2.5	2.6	2.6	15.4	2.8	2.4	3.7	3.0	2.9	2.9	3.0	17.7	14.9%
AHU 05	2450	2450	6.0	3.9	3.0	3.6	2.1	2.1	2.8	2.9	17.5	4.1	3.3	3.9	2.3	2.4	3.0	3.2	19.0	8.6%
AHU 06	2420	1820	4.4	2.2	3,1	2.7	2.9	2.5	2.8	2.6	11.5	3.5	3.0	3.5	3.3	3.1	3.4	3.3	14.5	26.0%
AHU 07	2450	2450	6.0	4.4	4.1	3.8	3.7	4.1	4.3	4.1	24.4	5.3	5.0	5.1	4.8	4.7	5.0	5.0	29.9	22.5%
AHU 08	2450	2450	6.0	3,3	3,7	3.9	4.1	4.4	3.8	4.1	24.3	4.3	4.0	4.4	4.8	4.4	4.9	4.5	26.8	10.3%
AHU 09	2450	2450	6.0	4.0	4.1	4.8	4.7	5.5	5.1	4.7	28.2	5.7	5.5	5.0	5.1	5.2	5.5	5.3	32.0	13.5%
AHU 10	2450	1820	4.5	2.8	3.0	2.5	2.7	3.1	2.9	2.8	12.6	3.3	3.9	3.5	3.4	3.0	3.2	3.4	15.1	19.4%
AHU 11	2450	1820	4.5	3.5	3.2	3.0	3.0	3.4	3.4	3.3	14.5	4.5	4.8	4.5	3.8	3.8	4.0	4.2	18.9	30.3%
AHU 12	2450	2450	6.0	3.0	3.5	3.3	2.9	3.1	3.5	3.2	19.3	4.4	4.5	3.9	4.8	4.5	4.1	4.4	26.2	35.8%
AHU 13	2450	2450	6.0	4.4	3.9	4.0	4.1	3.7	3.9	4.0	24.0	4.7	4.0	4.8	4.4	4.9	4.0	4.5	26.8	11.7%
AHU 14	2450	2450	6.0	3.2	3.6	3.3	3.0	3.2	3.5	3.3	19.8	4.0	3.4	3.9	3.8	3.5	3.8	3.7	22.4	13.1%
AHU 15	2450	2450	6.0	3.4	2.5	2.7	2.9	3.3	3.5	3.1	18.3	3.9	3.5	3.3	3.7	4.0	3.5	3.7	21.9	19.7%
AHU 16	2450	2450	6.0	3.2	3.7	3.1	3.3	3.0	3.2	3.3	19.5	4.0	4.2	3.8	4.5	4.5	4.2	4.2	25.2	29.2%
AHU 17	2450	1820	4.5	2.0	2.5	2.8	2.5	2.9	2.0	2.5	10.9	2.6	2.9	2.9	3.0	3.2	3.5	3.0	13.5	23.1%
AHU 18	2450	1820	4.5	3.5	3.0	2.9	3.2	3.5	3.4	3.3	14.5	4.0	3.8	4.2	4.0	3.8	4.0	4.0	17.7	22.1%
AHU 18	2450	2450	6.0	3.0	3.3	2.9	2.8	3.2	3.5	3.1	18.7	3.2	3.0	3.2	3.8	3.4	3.8	3.4	20.4	9.1%
AHU 19	2450	2450	6.0	2.9	3.0	3.2	2.5	3.3	3.1	3.0	18.0	3.7	3.5	4.2	4.8	3.9	3.3	3.9	23.4	30.0%
AHU 20	2420	1820	4.4	2.8	3.0	2.8	3.2	2.5	2.4	2.8	12.3	3.5	3.1	3.2	3.5	3.0	2.8	3.2	14.0	14.4%
AHU 21	2450	2450	6.0	2.2	2.0	2.5	2.3	2.0	2.7	2.3	13.7	3.0	3.5	3.1	3.0	3.2	3.0	3.1	18.8	37.2%
AHU 22	2420	1820	4.4	1.5	1.8	2.0	2.2	2.5	1.5	1.9	8.4	2.7	2.4	2.5	2.5	2.2	2.9	2.5	11.2	32.2%
AHU 23	2450	2450	6.0	3.1	3.5	3.3	3.6	3.3	3.5	3.4	20.3	4.4	4.9	4.2	3.6	4.2	3.8	4.2	25.1	23.6%
AHU 33	2450	2450	6.0	2.8	3.5	3.4	2.5	3.0	3.3	3.1	18.5	3.4	3.9	3.3	3.4	3.1	3.9	3.5	21.0	13.5%
AHU 06	2420	1820	4.4	3.1	2.9	2.6	2.7	2.8	3.0	2.9	12.6	4.1	3.9	3.6	3.7	3.8	4.0	3.9	17.0	35.1%
AHU 07	2450	2450	6.0	2.9	2.7	1.9	1.8	2.0	2.9	2.4	14.2	3.9	3.7	2.9	2.8	3.0	3.9	3.4	20.2	42.3%
AHU 08	2450	2450	6.0	3.2	3.1	3.3	3.4	3.0	3.1	3.2	19.1	3.8	4.2	5.4	4.6	4.2	4.0	4.4	26.2	37.2%
AHU 09	2450	2450	6.0	2.7	2.5	2.0	2.1	2.4	2.0	2.3	13.7	3.2	3.5	2.8	3.1	3.4	3.0	3.2	19.0	38.7%
AHU 10	2450	1820	4.5	1.9	2.1	2.0	2.2	2.4	2.5	2.2	9.7	3.0	3.5	3.4	3.4	3.6	3.5	3.4	15.2	55.7%
AHU 11	2450	1820	4.5	2.0	1.8	1.7	1.8	2.1	2.0	1.9	8.5	3.1	2.8	2.7	2.8	3.1	3.0	2.9	13.0	53.5%
AHU 12	2450	2450	6.0	3.9	4.1	4.0	4.2	4.3	4.2	4.1	24.7	4.9	5.2	5.1	5.6	5.7	5.2	5.3	31.7	28.3%
AHU 13	2450	2450	6.0	5.0	4.5	4.7	4.9	4.7	5.0	4.8	28.8	6.1	5.8	5.9	6.0	5.8	6.0	5.9	35.6	23.6%
AHU 14	2450	2450	6.0	2.2	2.3	2.1	2.4	2.9	2.1	2.3	14.0	3.1	3.4	3.2	3.4	3.3	3.2	3.3	19.6	40.0%
AHU 15	2450	2450	6.0	2.9	3.1	3.0	2.9	3.0	2.9	3.0	17.8	4.1	4.7	4.5	4.3	4.3	4.6	4.4	26.5	48.9%
AHU 16	2450	2450	6.0	4.4	4.1	4.3	4.0	4.1	4.0	4.2	24.9	5.4	5.5	5.2	5.1	5.0	5.5	5.3	31.7	27.3%
																				26.5%

We Care

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- We realise of course that the Facilities Manager and the Contractor do not have time to trawl through hundreds of readings.
- They don’t have to! That’s our job.
- O3 Control analyses all the data, and prepares a report, which is submitted to the Facilities Manager and the Contractor.
- The report will highlight any problem areas which need attention.
- It will also compare readings after each clean.
- It will show by easy-to-read graphs the progress of the O3 programme.

World Wide Access to the O3 programme

- The programme allows the Owner, his Facility Manger, and contractor access from anywhere in the world
- All the data, all the day-to-day cleaning results and all the monthly progress reports are available to our clients 24/7

O3 Helps the Contractor to Plan Ahead

The 10-day Alert:

- 10 days before any clean is due to take place:
- O3 will alert the contractor that a clean is imminent
- It will inform him whether it is a 1:1 clean or a 1:15 clean
- From the budgets O3 has prepared for him, he is advised what
- quantities of each of the chemicals will be required to do that
- particular clean
- O3 will follow up to ensure the stock is delivered on time
- It means tighter stock controls – and less stock-holding for the
- Contractor
- Then all the O3 programme procedural checks click in.

O3 leaves nothing to chance.

- From this O3 creates a total budget by chemical for the entire building
- O3 also creates a budget by chemical (O3 GREEN Coil Cleaner or O3 Alkaline D Coil Cleaner) for each clean i.e. a 1:1 dilution once a year, and a 1:15 dilution three times per year.
- the budget automatically works out the number of bottles (concentrate) required to clean by type.

Coil Cleaning Chemicals that are simply:

Most efficient

Most Cost-effective

Most Time-saving

Join the O3 GOING GREEN Maintenance Programme

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Helping You Work for a Better Planet

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