



AWARD-WINNING HYGIENIC RETAIL SOLUTIONS

THE BIOPIPE DRAINAGE SYSTEM

RAC COOLING INDUSTRY AWARDS 2021 - PRODUCT OF
THE YEAR.



ABOUT US

THE BIO PRODUCTS GROUP

is a family-owned SME located in Warrington, United Kingdom. Established in 2015, our mission is to become a leading product disrupter, by creating sustainable, recyclable, hygiene products for use in the Refrigeration Industry.

Our Motto is make - sustain - recycle. This means we carefully design and manufacture products that can stand the test of time and where possible be 100% recycled.

ROBERT STEWART - FOUNDER AND MANAGING DIRECTOR

A time served C&G NVQ Level 3 Modern Apprentice, RAC National Student of the Year 2007 Bronze Winner and Skill Fridge 2008 UK Finalist .

Experienced Service engineer, end-user with WM Morrison Supermarkets PLC and a consultant with Abbey Design Associates.

In 2015 Robert set to work creating the idea of a 'self cleaning' drainage system to reduce water leaks and maintenance issues associated with blocked drainage.

Completely self-funded, 3 years of extensive research, development, testing and countless nights installing trial sites of the BioPipe System, in 2018 we made our first sale and now we are the tried and trusted Drainage Product for some of the largest Supermarkets and Companies within the Industry.



WHAT IS BIOPIPE[®]

**ULTIMATELY ITS A DRAIN PIPE... BUT ITS
NO ORDINARY DRAIN PIPE**

BioPipe is a drainage system for refrigeration and A/C applications. Proven To Reduce Water Leaks by 97% or Higher

Payback Less Than 1 Year, With Total Cost Of Ownership Significantly Less Than A Standard Drainage System.

Green Sustainable Procurement Supporting the Commitments of Corporate Social Responsibility and Environmental Policies.

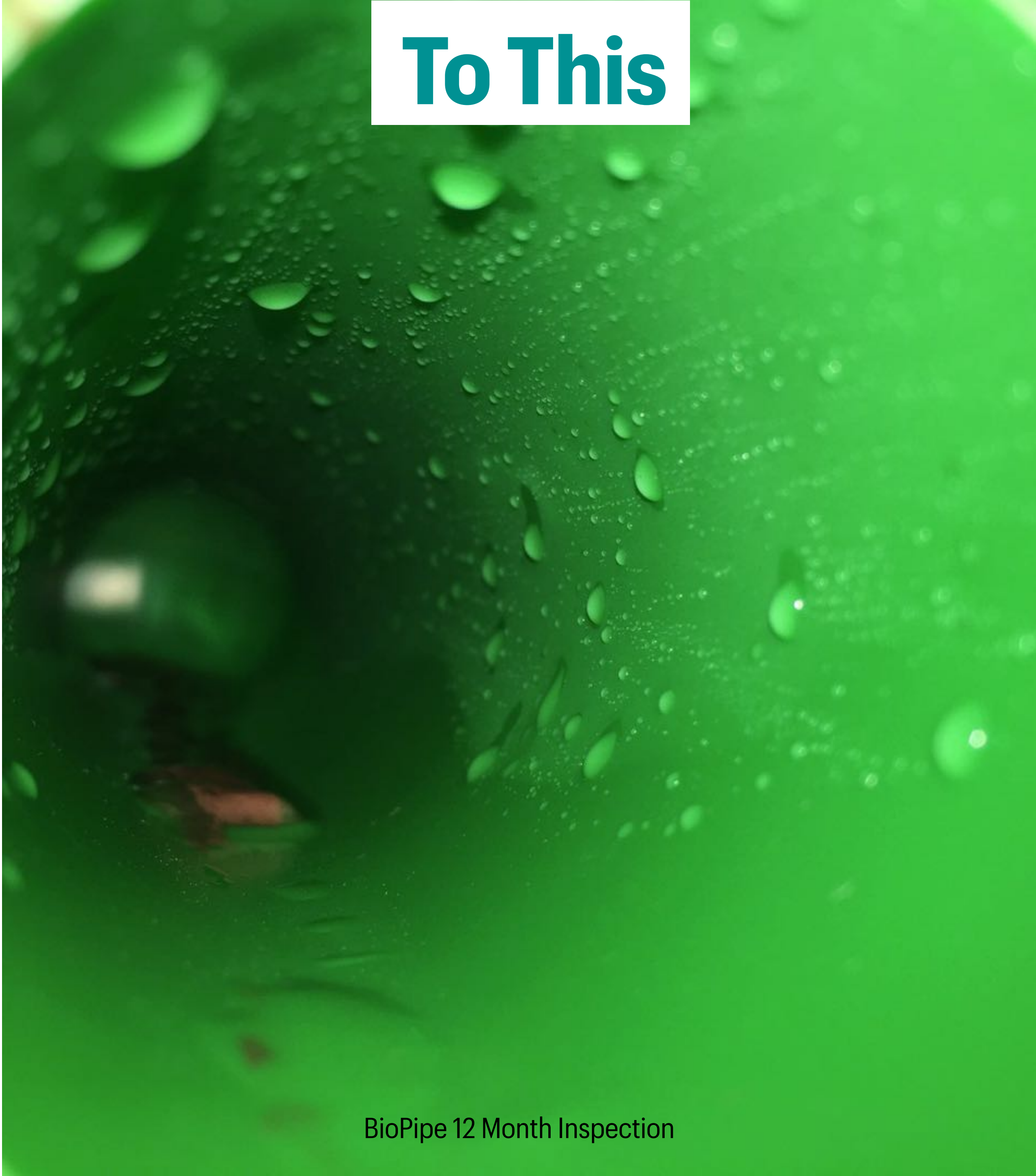
Operational/Maintenance Cost Savings Of 88% Can Be Sensibly Realised and Achieved.

94% Cheaper Than Other Drain Blocking Solutions Over A Ten Year Life Cycle.





From This



To This

WHY?

DRAINAGE IS STILL THE SAME NOW AS IT WAS 25 YEARS AGO

In a world of hydrocarbons, CO2, LED's and shelf edge energy saving gizmos. The refrigeration industry has changed a lot in the last year, never mind the last 25 years. We are the leaders of innovation, carbon reduction and energy saving, YET our fridges still leak water.

Whilst there are some great long standing chemical solutions on the market, these solutions require reliance on reapplication, maintaining and completing case cleaning schedules correctly. And a lot of the time, implementation occurs after the problem rather than before.

Another issue is Space. Retail want more selling space, this means our fridges are getting lower and it reduces the available space between the display fridge and the floor meaning, little to no or sometimes negative fall on the condensate drain. Most modern display fridges only allow 50-80mm (2-3 Inches) space for drainage

In 2015, we set about to change the focus on drainage and create a solution that is still the same but very different.

The same.

- From an installation point of view no different. The same now as it was 25 years ago. No specialist equipment or training required.

But Very Different

- A drain pipe that prevents the growth of bio-films and slimes permanently, it is sustainable with no reapplication, no chemicals, no coating. It is a pipe with performance that would last for the life of the system and beyond. It can be installed to any system in any environment and work.

WHO IS IT FOR?

A UNIQUE SYSTEM DRAINAGE SYSTEM

End Users - Reducing direct impact of water leaks to the consumer, Health & Safety and downtime of vital equipment.

- Food Retail - Supermarkets
- Convenience / Local Stores
- Domestic and Commercial Air Conditioning
- Manufacturing and Distribution

Contractors - Reduce call out volumes, vital resources can be focus on important tasks, save costs.

- Service and Maintenance
- Design and Installation
- Fully Comprehensive Contracts

Innovation Challenges - Customers seeking new innovate products, Green Building Challenges

- Green Building Specification
- End of life Challenges
- Reusability



HOW IT WORKS

INNOVATION NEVER SEEN BEFORE IN THIS TYPE OF APPLICATION

Innovation

Passive Action Polymer Technology functionalizes the polymer surface by modifying the physical property of the material. Relying on a combination of electrostatic repulsion, low surface energy and hydrophobic repulsion. A surface that is protecting the material from the growth of bacteria, viruses, moulds, biofilm and fouling

Biocompatible Technology

We use the natural trace element ZINC, an essential mineral identified as an element of utmost biological importance. You will find it in your food, and you need it in your daily diet as it is vital for the human immune system.

100% Safe.

The technology does not contain toxic substances. There are no biocides, no silver, no triclosan, no nano-materials or any other harmful chemicals.

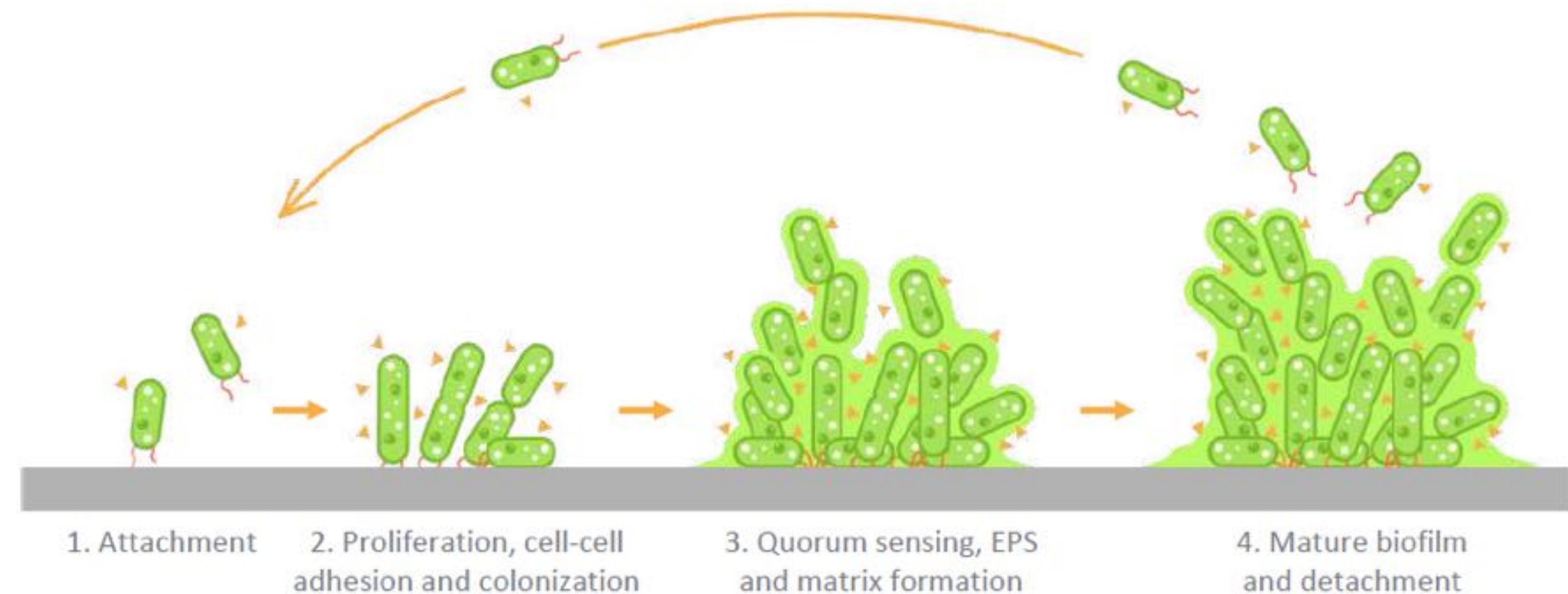
No Leaching & Forever Lasting

An intrinsic/inert change in and on the surface of the material. There is no substance migrating or leaching to act against bio-films. The functionality is purely due to the improved mechanical/physical property of the material surface. That means it will never run out; it is simply always there. So it will never fade away or wear off.

Sustainable

Reusable and 100% Recyclable at the end of life.

THE PROBLEM

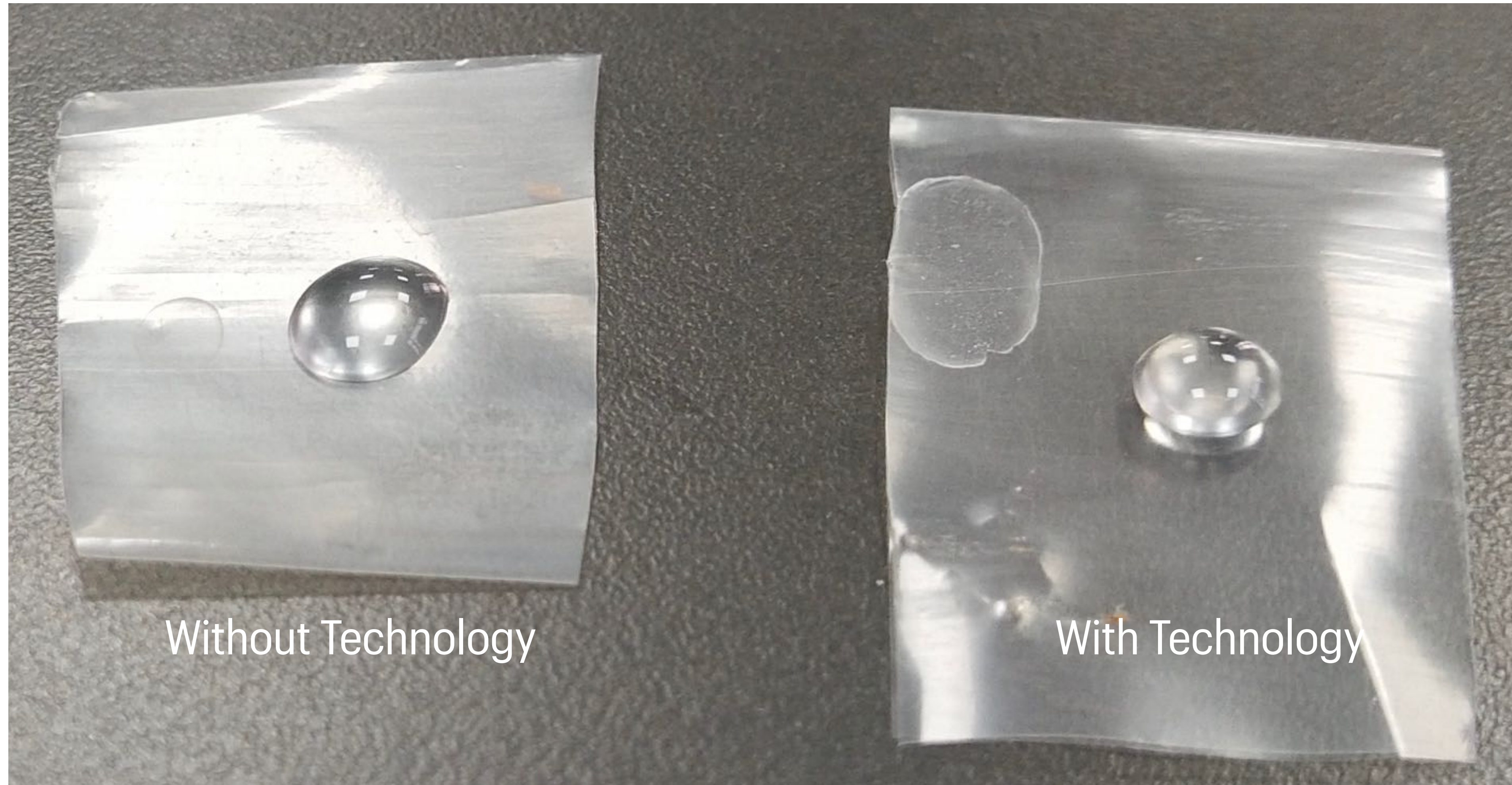


THE SOLUTION



HYDROPHOBIC REPULSION

THE HYDROPHOBIC/LOW SURFACE ENERGY CHARACTERISTICS IS VISIBLE
BY TAP WATER WITH <0.05% SURFACTANT.



Without Technology

With Technology

INNOVATION THAT IS REAL

NEXT LEVEL DRAINAGE



INNOVATION THAT IS REAL

MARINE BIO-FOULING STUDY



INNOVATION THROUGH PERFORMANCE

93% REDUCTION IN ALL WATER LEAKS OVER A 16 MONTH PERIOD

Store	Store Name	Asset Manufacturer	No. Leaks Over 6 Month Period Prior to BioPipe	TOTAL Call-Outs Since Bio Pipe Installation	16 Month Reduction
1	Grantham-Watergate	Hauser	6	1	-5
2	Leyland	Hauser	8	1	-7
3	Perth	Hauser	18	0	-18
4	SWI-Bright Street	Hauser	16	3	-13
5	LON-New Malden	Hauser	24	1	-23
6	SUN-Durham Road	Hauser	7	0	-7
7	LON-Stratford	Hauser	15	11	-4
8	SWA-Parc Tawe	Hauser	12	0	-12
9	Laindon	Hauser	8	0	-8
10	REA-Basingstoke Road	Hauser	15	7	-8
11	Alfreton	Hauser	10	2	-8
12	Yeovil	Hauser	10	2	-8
			149	28	-121

• 28 Call Outs in Total over a 16 month period. (BioPipe Data Recorded September 2018 to End of January 2020)

• 10 Reported Blockages - Caused by Dirt & Debris generally at two reoccurring stores Reading and London Stratford.

• 121 Water Leak Reduction in 16 Months vs 6 Month Period Prior to Bio Pipe Installation.

• Like for Like Call Out Reduction over 16 Months would see a 369 Water Leak Call Out Reduction.

• Like for Like Savings Based on £180.00 Per Call Out = £66,420.00 Saving in 16 Months.

The typical Capital uplift to install BioPipe on a 20 Cabinet Store is the cost of 1 water leak per year - £191 Per Store Uplift versus Standard Pipe

SUSTAINABLE INNOVATION



PART OF THE WORLDS MOST SUSTAINABLE SHOPPING CENTRE

In August 2019 the BioPipe was selected by Woolworths Supermarkets and Frasers Properties in Australia to be part of the worlds most sustainable Shopping Centre.

The project achieved a 6 Star Green Star Design and As-Built rating and is on track to achieve Living Building Challenge (LBC) certification, making it the first net-zero carbon and energy positive retail development in Australia.

No other product on the market could achieve the specification for the Project.

INNOVATION WITH FEEDBACK

**RYAN FISHER - STATE INSTALLATION MANAGER FOR WOOLWORTHS FOOD GROUP,
18 MONTHS ON FROM THE STORE OPENING, STATED: (JUNE 24TH 2021)**

“FROM OUR PERSPECTIVE, THE BURWOOD BRICKWORKS STORE IS GOING FANTASTIC. SPEAKING WITH THE STORE TECH RECENTLY, OTHER THAN IMPACT (STORE) DAMAGE TO A COUPLE OF CONDENSATE DRAINS IN THE COOLROOMS, THERE HAVE BEEN NO WATER LEAKS OR ISSUES WITH THE BIO PIPE USED ON THE DISPLAY CASES ON THE TRADING FLOOR”.

RYAN HAS RECOMMENDED THE BIOPIPE SYSTEM TO A CONTRACTOR IN NEW ZEALAND, STATING: “I WAS MORE THAN HAPPY TO RECOMMEND CONSIDERING OUR EXPERIENCE WITH YOURSELF, AND BIO PIPE WITH THE BURWOOD BRICKWORKS PROJECT WAS NOTHING SHORT OF FANTASTIC”.

MELISSA HARRINGTON ALDI UK & IRELAND NATIONAL PROPERTY DEPT

2 YEARS AFTER THE BIOPIPE SYSTEM WAS SPECIFIED BY ALDI UK & IRELAND STATED: (JANUARY 22ND 2021)

“YOUR PRODUCT HAS MADE A HUGE DIFFERENCE TO THE MAINTENANCE CONTRACTORS AND CERTAINLY RESTORED THE REGIONS FAITH IN THE REFRIGERATION TEAM”

INNOVATION THAT IS TRIED & TRUSTED



Epta

EPTA UK



Scotmid
COOP



THE FUTURE OF INNOVATION

Fish Farming / Marine Solutions - Ongoing trials and studies into the prevention of bio-fouling in the Fish Farming and Marine operations.

BioPump - New trials started in March 2022 with a solution to prevent Biofilms forming inside condensate pumps.

BioDoor - We have made a range of hygienic door handles for Asda for their trial of doors on fridges at 6 locations in the UK

BioShelf - Lidl are currently trialing our range of Hygienic shelf liners for meat & poultry which reduce the risk of contamination and improve hygiene within the display cabinet.

Recycling of Water - Testing to start with our BioHose product, looking at the recycling of condensate water from A/C and Refrigeration Applications. Use for gardens, sanitary and other applications for non-Drinking Water areas.





rac
COOLING INDUSTRY
AWARDS 2021

WINNER

BIOPIPE[®]

THANK YOU FOR LISTENING.

