green rhino®

DrainEezy

TRANSFORMER BUND FILTRATION & CONTAINMENT SOLUTIONS

INNOVATING FOR A GREENER FUTURE



THE KING'S AWARDS FOR ENTERPRISE 2025 INNOVATION

MADE IN BRITAIN®

INNOVATING
FOR A GREENER FUTURE

Green Rhino develops pioneering pollution prevention technologies designed for the real world. Based in the United Kingdom, we take the complexity out of environmental compliance, providing innovative and effective solutions for the construction, utilities, energy, and rail sectors. Every solution is driven by a commitment to protecting ecosystems through engineering excellence.

Green Rhino recognises that the planet is in a perilous state, with pollution contributing to ecosystem degradation and human health impacts. The company believes it is imperative to reverse this decline by providing industry with the tools to prevent contamination at source, ensuring progress does not come at the cost of the environment.

By collaborating directly with industry leaders, Green Rhino ensures its innovations are practical, durable, and easy to use on-site. Rather than merely supplying products, we focus on solving complex pollution challenges, leading the transition toward a nature-positive future.

INNOVATORS

We develop proprietary technologies, including our patented Neutroilize™ Smart Fabric Technology and patent-pending DrainEezy Bund Filter, that solve on-site contamination challenges that conventional products cannot.

MANUFACTURERS

We design and manufacture in-house in Suffolk, UK, giving us full control over quality, performance and safety standards.

ENVIRONMENTALISTS

Environmental stewardship isn't a marketing position. It's our founding purpose. Every product is rigorously tested to ensure it performs as promised, in the field, under real conditions.

MADE IN BRITAIN®



PERFORMANCE
YOU CAN TRUST

NO SHORTCUTS. NO COMPROMISES. RIGOROUSLY TESTED.

At Green Rhino, we are committed to manufacturing products with integrity. That is why we invest heavily in product development. Every product is subjected to rigorous testing, including the most demanding scenarios that on-site installations will face.

THE BREACH TEST: WORST-CASE SCENARIO

Our DrainEezy Bund Filter is subjected to the Breach Test, a protocol engineered to simulate the single worst-case scenario a bund filter will ever face:

When a bund fills with oil, the bund filter is under the greatest strain. The filter faces constant head pressure forcing the oil through it, and any weakness will quickly be exposed. A filter that seals under these extreme conditions will perform reliably under the lesser pressures of normal operation.

THE KING'S AWARDS FOR ENTERPRISE 2025 INNOVATION

INDEPENDENTLY TESTED & VERIFIED

DrainEezy products are independently tested to industry-leading test procedures to meet environmental standards. Independent verification means our performance claims are substantiated by evidence, not just engineering confidence.

SMART FILTRATION TECHNOLOGY

DrainEezy's smart filtration technology draws directly from the science behind Neutroilize™, Green Rhino's patented Smart Fabric Technology. The technology is proven and the performance verified. Serious science, built in.

AWARD-WINNING INNOVATION

Recognised with the King's Award for Enterprise in Innovation and the Construction News Award for Best Product Innovation.

TRUSTED GLOBALLY

Trusted on five continents from HS2 and Hinkley Point C in the UK, to the Australian Outback and Scott Base in Antarctica.

HYDROCARBONS
SOLIDIFIED IN SECONDS

Green Rhino's pioneering Smart Filtration Technology does what conventional bund filters cannot. Rather than simply absorbing hydrocarbons and risking re-release under pressure, our Smart Filtration Technology permanently converts hydrocarbon molecules into a stable, non-leaching solid state. This locks the contamination inside the filtration media permanently and irreversibly.

Green Rhino has spent over a decade perfecting its technology specifically engineered for the hydrocarbons found across renewable energy and critical infrastructure sites. Our expertise and technology deliver performance that is unmatched in the industry.

If it needs to be clean, it needs to be Green Rhino.

01

RAINWATER ENTERS

Rainwater accumulates in the bund, potentially contaminated with transformer oil or other hydrocarbons.

02

SMART FILTRATION MEDIA CONTACT

As water passes through the Bund Filter, hydrocarbons contact the smart filtration media.

03

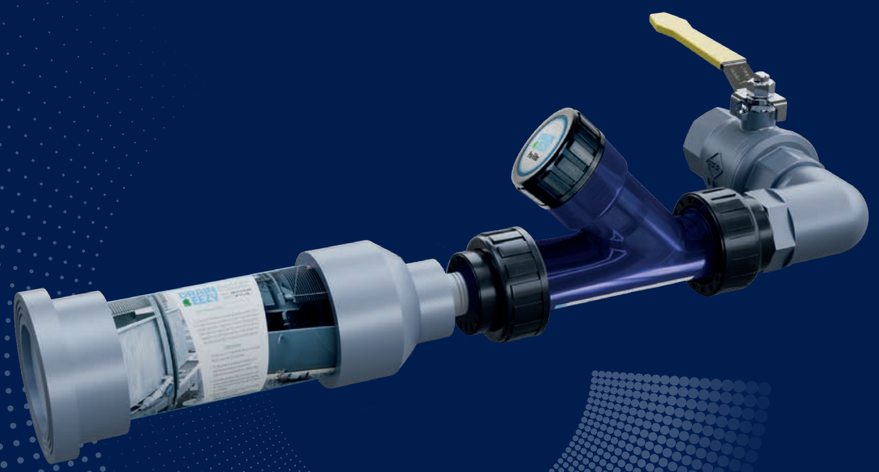
MOLECULAR CONVERSION

The technology permanently transforms liquid hydrocarbons into a stable, non-leaching solid.

04

CLEAN DISCHARGE

Only clean, uncontaminated water exits the filter and discharges safely, protecting groundwater and watercourses.



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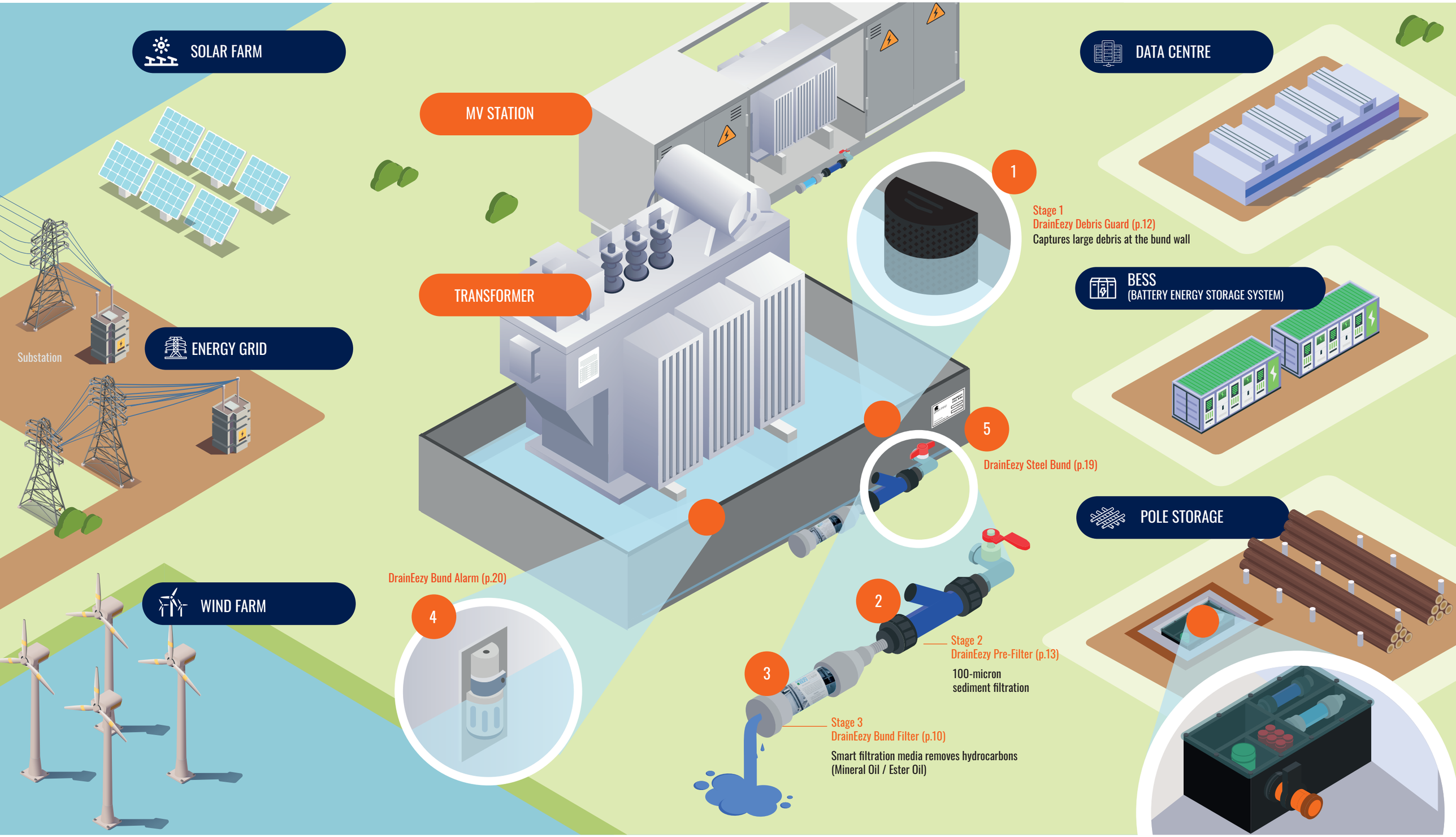
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SOLAR FARM
MV STATION
TRANSFORMER
DATA CENTRE
1
Stage 1
DrainEezy Debris Guard (p.12)
Captures large debris at the bund wall
BESS
(BATTERY ENERGY STORAGE SYSTEM)
Substation
ENERGY GRID
5
DrainEezy Steel Bund (p.19)
POLE STORAGE
DrainEezy Bund Alarm (p.20)
4
2
Stage 2
DrainEezy Pre-Filter (p.13)
100-micron
sediment filtration
3
Stage 3
DrainEezy Bund Filter (p.10)
Smart filtration media removes hydrocarbons
(Mineral Oil / Ester Oil)
WIND FARM

THE DRAINEEZY SYSTEM

The complete bund filtration and containment ecosystem

THE CHALLENGE

Transformer bunds are designed to contain oil in the event of a leak or catastrophic failure. Containment alone isn't enough. Rainwater continuously accumulates in bunds which reduces its required capacity. The rainwater must be safely discharged, without releasing hydrocarbon contamination into the environment. Failing to manage this discharge correctly risks pollution incidents, regulatory enforcement and significant remediation costs.

THE DRAINEEZY SOLUTION

DrainEezy is Green Rhino's answer to transformer bund management. It combines a market-leading Smart Filtration Technology bund filter with a carefully engineered system of accessories, ancillaries, and bespoke containment bunds, all designed to work seamlessly together.

The range protects the environment, delivers regulatory compliance, and reduces the operational burden on site teams through low-maintenance, long-life design.

COMPLETE DRAINEEZY RANGE AT A GLANCE

STAGE 1

Debris Guard

Carbon-fibre reinforced guard capturing large debris at the bund wall. Magnetic or bolt-fix. Extends Bund Filter life.

STAGE 2

Pre-Filter

100-micron sediment filtration. Transparent body, removable cassette, reusable and no consumables. Extends Bund Filter life.

STAGE 3: PRIMARY

Bund Filter

The core oil filtration of the DrainEezy system. 6 variants for Mineral Oil (1L/2L/14L), Ester Oil (1.5L) and Creosote (1L/2L). Smart Filtration Technology seals filter when capacity reached.

INSTALL

Fitting Kit

Complete installation hardware: elbow joint and valve for connecting filter to bund outlet. Stainless steel or ABS versions.

EXPAND

Bund Filter Manifold

Connects two or more Bund Filters in parallel from a single outlet point. For larger bunds or higher flow requirements.

BUND

Steel Bund

Bespoke engineered steel bunding, designed around your site, asset and compliance requirements. 20+ year service life.

MONITOR

Bund Alarm

Bund water level sensor and alert system. Monitors bund water accumulation. Alerts site teams before the bund reaches unsafe levels.

CHAMBER

Filtration Chamber

High flow rate filtration chambers for very large bunds or site drainage applications. Designed to be installed below ground and gravity fed. Available in Mini, Midi and Maxi sizes.

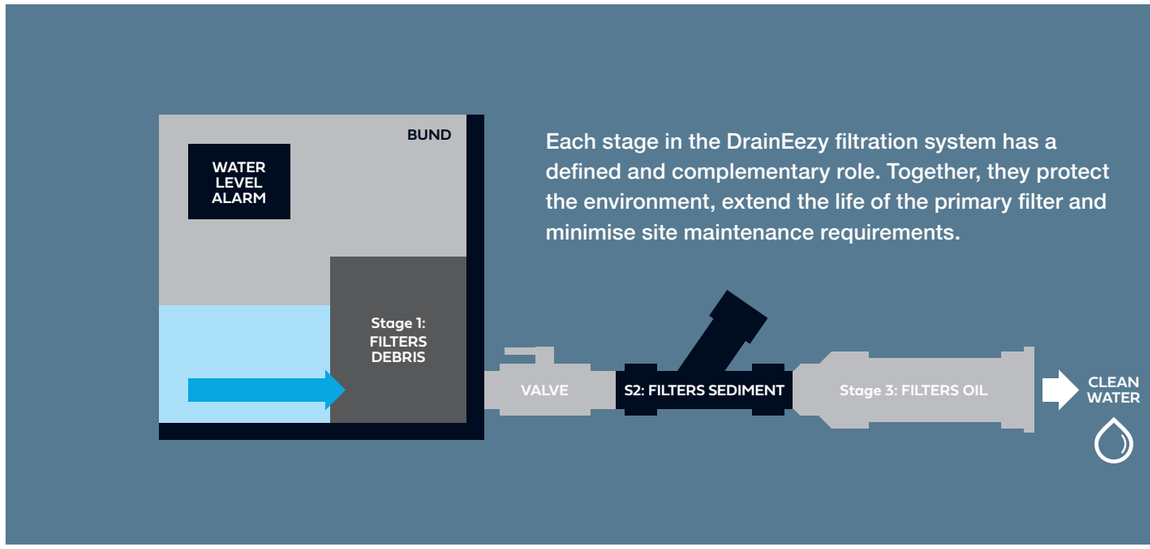
CONTAIN

Connect Matting

Interlocking hydrocarbon-absorbent matting designed for placing around leaking assets. Neutroilize™ Smart Fabric Technology solidifies oil. 500×500mm (6L) or 1000×1000mm (25L).

3-STAGE FILTRATION

Engineered to work as one



Each stage in the DrainEezy filtration system has a defined and complementary role. Together, they protect the environment, extend the life of the primary filter and minimise site maintenance requirements.

01

DRAINEEZY DEBRIS GUARD

Captures large debris at the bund wall

02

DRAINEEZY PRE-FILTER

100-micron sediment filtration

03

DRAINEEZY BUND FILTER

Smart Filtration Technology removes Hydrocarbons (Mineral Oil / Ester Oil)

CLEAN WATER DISCHARGE

DRAINEEZY BUND FILTER

The primary filtration product at the heart of the DrainEezy system.

Powered by Green Rhino's Smart Filtration Technology, the DrainEezy Bund Filter permanently converts hydrocarbon contamination into a non-leaching solid, ensuring only clean water discharges from your bund.

Available in six variants to address the specific chemical composition of transformer oil types and contamination profiles found across electrical infrastructure.

THE 6 VARIANTS

M1.5 M2 M4

Mineral Oil 1L, 2L, 14L capacity

For mineral oil-filled transformers.

- M1.5: For smaller bund installations. 1.5" BSP fitting; 1L oil capacity.
- M2: For medium-scale bund installations and higher rainfall areas. 2" BSP fitting; 2L oil capacity.
- M4: For larger transformers, high risk installations or areas with significant rainfall accumulation. 4" BSP or camlock fitting; 14L oil capacity.

E1.5

Ester Oil 1.5L capacity

Specifically formulated for ester oil-filled transformers. Critical for modern installations. 1.5" BSP fitting; 1.5L oil capacity.

C1.5 C2

Creosote 1L, 2L capacity

Designed for pole storage where creosote-impregnated materials are present.

- C1.5: 1.5" BSP fitting; 1L oil capacity.
- C2: 2" BSP fitting; 2L oil capacity.



M2



M4



E1.5



KEY FEATURES, PERFORMANCE, APPLICATIONS

Smart Filtration Technology Hydrocarbon Removal
The Smart Filtration Technology absorbs oil and permanently converts it to a non-leaching solid. Oil cannot escape under pressure, rain dilution or physical disturbance. Removes hydrocarbons to below 5 ppm.

Automatic Seal
In the event of a catastrophic oil leak, or if the filter reaches its capacity, it will automatically seal, preventing the escape of mineral / ester oil into the environment.

Low Maintenance Design
Passive operation. The filter performs without mechanical components, power supply or frequent intervention. Periodic inspection recommended.

6 Variants for Different Oil Types
Formulated specifically for mineral oil, ester oil and creosote.

Fully Compatible with DrainEezy System
Works seamlessly with the Debris Guard, Pre-Filter, Fitting Kit, Manifold, Bund Alarm and Filtration Chamber to create a complete bund management system.

Breach Tested Under Head Pressure
Independently verified and tested under worst-case conditions: full oil inundation with constant head pressure. A filter that holds under this load holds under all field conditions.

APPLICATIONS

Solar Farm • Wind Farm • Data Centre • Battery Energy Storage Systems (BESS)
Electricity Distribution Substations • Trackside Infrastructure

DRAINEEZY DEBRIS GUARD

FIRST LINE OF DEFENCE

How it works:

Open bunds collect debris such as leaves, sticks, seeds and dead birds which can block the bund outlet and/or the bund filter. Debris Guard is mounted directly on the bund wall to capture large debris and coarse sediment, keeping the outlet clear.

Installation is fast and tool-free for steel bunds using high-strength, rustproof epoxy-coated neodymium magnets or secured with M8 screws for non-steel surfaces.

Benefit:

Prevents premature blockage of the Pre-Filter and Bund Filter, dramatically extending the life of the primary bund filter. Reduce maintenance overheads and maintain the capacity requirements of the bund.



KEY FEATURES

- **Engineered for harsh industrial environments**
- **Carbon-fibre reinforced thermoplastic: UV stable, creep resistant, -5°C to +60°C**
- **Dual-fixing: rustproof epoxy-coated neodymium magnets (supplied) for steel bunds or M8 screws (not supplied) non-steel bunds**
- **316 stainless steel hardware throughout for maximum corrosion resistance**
- **Replaceable filter mesh: high flow rate, weather resistant, easy cleaning**
- **Lid bypass openings manage extreme rainfall safely, preventing overflow**
- **Guard designed for minimal and efficient maintenance through dry brush cleaning**

DRAINEEZY PRE-FILTER

SEDIMENT INTERCEPTION

How it works:

Positioned between the valve and the Bund Filter, the Pre-Filter captures fine sediment particles down to 100 microns.

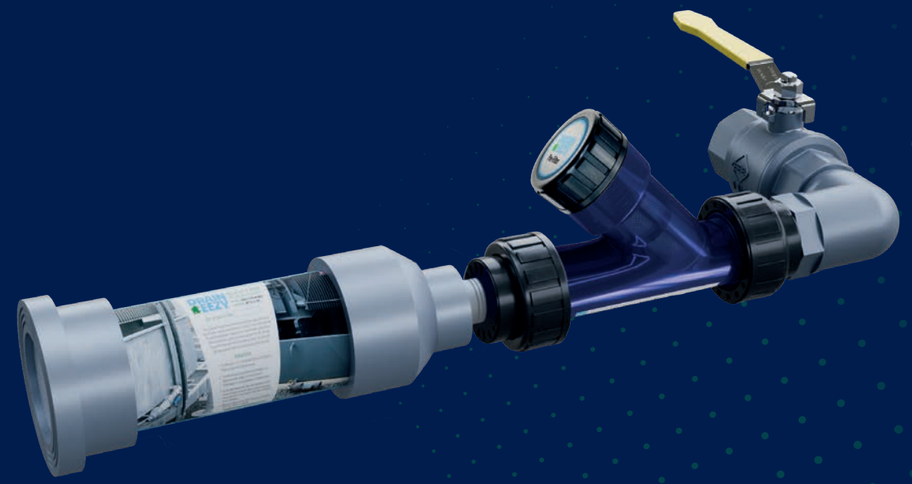
The transparent body enables easy visual inspection without disassembly. The filtration cassette simply unscrews from the main body and can be cleaned in seconds. Tap or flush out trapped sediment and reinsert. No tools and no consumable replacement parts.

Benefit:

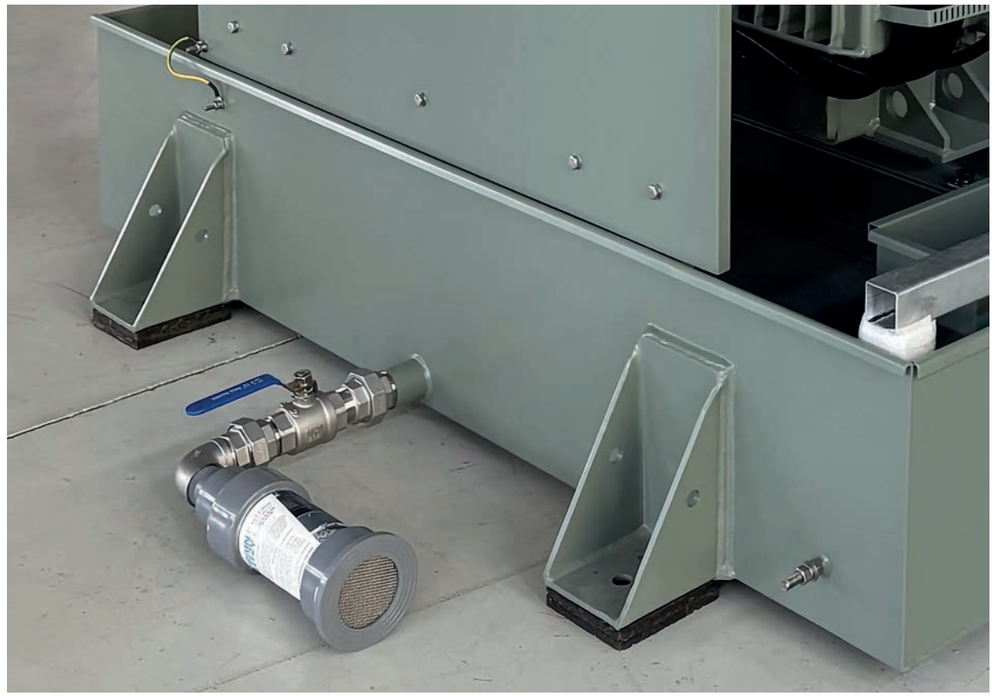
By intercepting sediment before it reaches the primary filter, the Pre-Filter significantly extends the operational life of the primary Bund Filter, reducing maintenance frequency and total running costs.

KEY FEATURES

- **100-micron sediment filtration: captures fine particles**
- **Transparent body for easy visual inspection without removal**
- **Removable filter cassette unscrews independently**
- **Reusable and built to last: clean by tapping or flushing out, then reinsert**
- **Extends primary filter life by reducing sediment load on the Bund Filter**
- **No consumable parts, zero ongoing cost**









DRAINEEZY FITTING KIT

The DrainEezy Fitting Kit is the essential connection hardware for connecting the Bund Filter and/or Pre-Filter with the bund outlet. Designed to position the filtration assembly in the ideal position alongside the bund, it provides a secure connection from bund to filter.

Each kit includes an elbow joint and a ball valve. The valve is essential to shut off flow during servicing of the Pre-Filter or replacement of the Bund Filter. Available in stainless steel or ABS.

KEY FEATURES

- **Complete connection solution: elbow joint and valve included**
- **Connects the DrainEezy Bund Filter or Pre-Filter to the bund outlet**
- **Elbow joint positions the filtration assembly in an unobtrusive position parallel to the bund wall**
- **Valve allows flow isolation for safe inspection and filter maintenance**
- **Stainless steel option: maximum corrosion resistance for demanding outdoor environments**
- **ABS option: lightweight, chemical-resistant and cost-effective for standard installations**

THE 7 VARIANTS

1.5” ABS | 1.5-2” ABS | 1.5” ABS XL | 1.5” SS | 2” ABS | 2” SS | 4” SS





DRAINEEZY BUND FILTER 4” MANIFOLD

MULTI-FILTER SYSTEM

How it works:

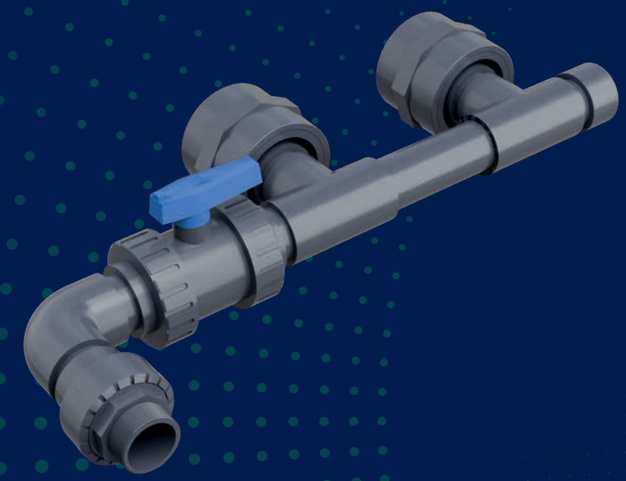
The DrainEezy Bund Filter Manifold allows two or more Bund Filters to be connected and operated in parallel from a single bund outlet point. Designed for large transformers, high-capacity bunds or installations in high-rainfall areas where a single filter would not provide sufficient flow capacity or contamination handling. The 2-Gang Manifold doubles effective flow rate or filtration capacity without requiring additional outlet points.

Benefit:

The Manifold enables you to deliver high volume drainage and filtration through a single outlet. By distributing flow across two primary filters, the Manifold also reduces the load on each individual filter, extending service intervals.

KEY FEATURES

- **Connects two M4 DrainEezy Bund Filters with 4” fittings in parallel from one outlet point, doubling flow and filtration capacity**
- **Distributes flow load across both filters, extending individual filter service life**
- **Integrated ball valve allows isolation of filters for maintenance**
- **Removable end cap enables access for routine maintenance and sediment removal, keeping downtime to a minimum**
- **Supports scalable system design by upgrading existing single-filter installations**
- **Engineered for compatibility with the complete DrainEezy accessory range**
- **Available in 2-gang as standard. Customisable to more gangs if required**





DRAINEEZY STEEL BUND

BESPOKE OIL CONTAINMENT BUNDING

A fully bespoke engineered steel bunding solution for distribution transformers and other oil-filled plant. Every DrainEezy Steel Bund is manufactured to your specification and applicable standards (EA, BS, EN, DNO-specific specifications).

Each design is sized to meet industry-standard containment requirements, typically providing at least 110% of the largest oil volume or 25% of the total oil volume (whichever is greater), ensuring safer retention of transformer oil in line with Distribution Network Operator (DNO) specifications and oil storage regulations.

Designed for 20+ year service life, with seamless integration into the DrainEezy drainage and filtration range.

Features can include a choice of finishes for different environments, cable entry cutouts, drainage outlets and ground fixing plates.

Contact us to discuss your requirements.

WHY STEEL OVER CONCRETE?

No Curing Time

Steel bunds are the go-to bunding solution for non-DNO transformer applications. On-site works complete in a fraction of the time required by concrete.

Smaller Footprint

High strength-to-weight ratio enables thinner wall sections, critical on cable-congested substations with limited space.

Modular Off-Site Fabrication

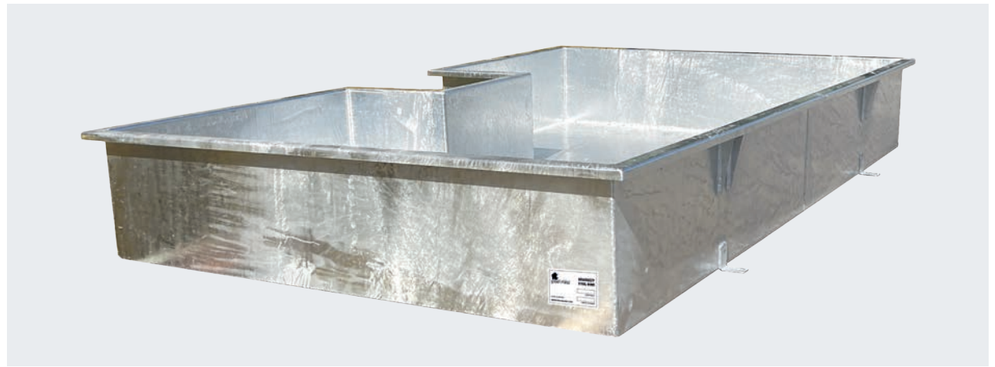
Fabricated to tight tolerances off-site, then delivered for quick installations. Consistent quality. Reduced on-site complexity.

20+ Year Design Life

Advanced corrosion-resistant coating system (anodised or painted) delivers a long service life.

Fully Integrated Drainage

Seamlessly compatible with the DrainEezy filtration range for a complete, compliant end-to-end containment and discharge solution.



DRAINEEZY BUND ALARM

BUND WATER LEVEL MONITORING

How it works:

The DrainEezy Bund Alarm is a bund water level float switch and alerting system designed to protect sites against the risks of bund overflow. By monitoring water accumulation within the bund, the alarm provides early warning before water levels reach a critical point, allowing site teams to take action before an overflow or environmental incident occurs.

Benefit:

Integrating the Bund Alarm with the DrainEezy filtration system creates a complete, actively monitored bund management solution. It combines passive hydrocarbon removal with active level monitoring for comprehensive environmental protection.



KEY FEATURES

- **Bund water level monitoring detects rising water and sends early warning alerts before it becomes critical**
- **Adjustable alert trigger level, allowing operators to set precise water level threshold that suits their site's maintenance response times**
- **Integrates directly with Supervisory Control and Data Acquisition (SCADA) systems, enabling automated monitoring and centralised alerts without the need for additional control hardware.**
- **Dual-fixing: rustproof epoxy-coated neodymium magnets (supplied) for steel bunds or M8 screws (not supplied) for non-steel bunds**
- **Carbon-fibre reinforced thermoplastic body, built to last in harsh environments**
- **Debris and biofouling resistant bracket design**
- **Chemical and corrosion resistant**

DRAINEEZY FILTRATION CHAMBER

PLUG-&-PLAY WATER REMEDIATION CHAMBER

How it works:

The DrainEezy Filtration Chamber offers a lower maintenance alternative to oil water separators. They deliver structured stage filtration, first removing debris and sediment, then removing hydrocarbons, ensuring consistently clean discharge.

Originally designed for pole storage sites, these chambers are suitable for any gravity-fed site drainage solution. Consider them as an alternative to bund pump systems for power transformer bunds.

Benefit:

The Filtration Chamber delivers structured stage filtration, first capturing debris and sediment, then removing hydrocarbons, ensuring consistently clean discharge. Purpose-built for sensitive environments such as sites near waterways, it provides a robust, reliable solution where environmental compliance is critical.

THE 3 VARIANTS

MINI MIDI MAXI

- **Mini:** 1 filter, 14L hydrocarbon capacity
- **Midi:** 2 filters, 14L hydrocarbon capacity
- **Maxi:** 4 filters, 28L hydrocarbon capacity

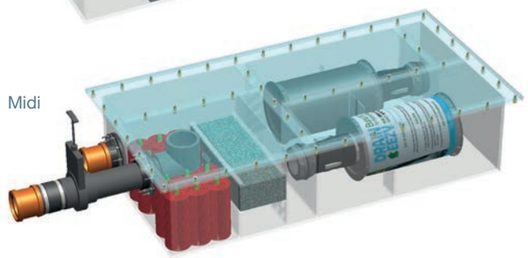
KEY FEATURES

- **Three size options: Mini, Midi and Maxi offering different levels of water remediation**
- **Plug-and-play with site drainage pipework, minimising installation costs**
- **Outstanding filtration capability, removing hydrocarbons to below 5 ppm**
- **Easy access for inspection and servicing**

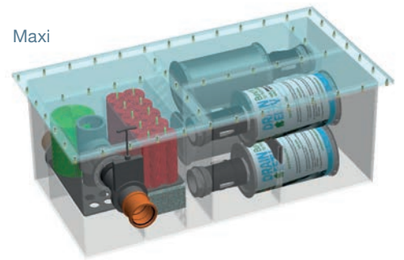
Mini



Midi



Maxi



DRAINEEZY CONNECT MATTING

MODULAR INTERLOCKING OIL-ABSORBING MAT

How it works:

DrainEezy Connect Matting is Green Rhino's interlocking hydrocarbon-absorbing matting solution for transformer substations. Built on the same multi-award-winning platform as the EnviroPad, it incorporates our patented Neutroilize™ Smart Fabric Technology.

Unlike conventional absorbents that simply soak up spills, Neutroilize™ actively converts oils into a stable, non-leaching solid, permanently locking contamination inside the mat, even if exposed to rainfall or physical disturbance.

The hook-and-loop interlocking system allows pads to be joined edge-to-edge, creating seamless, gap-free coverage where leaks are occurring or expected.

Benefit:

Developed with DNOs, Connect Matting is scalable and enables customisation of oil capture areas around leaking assets.



BOTTOM SIDE

KEY FEATURES

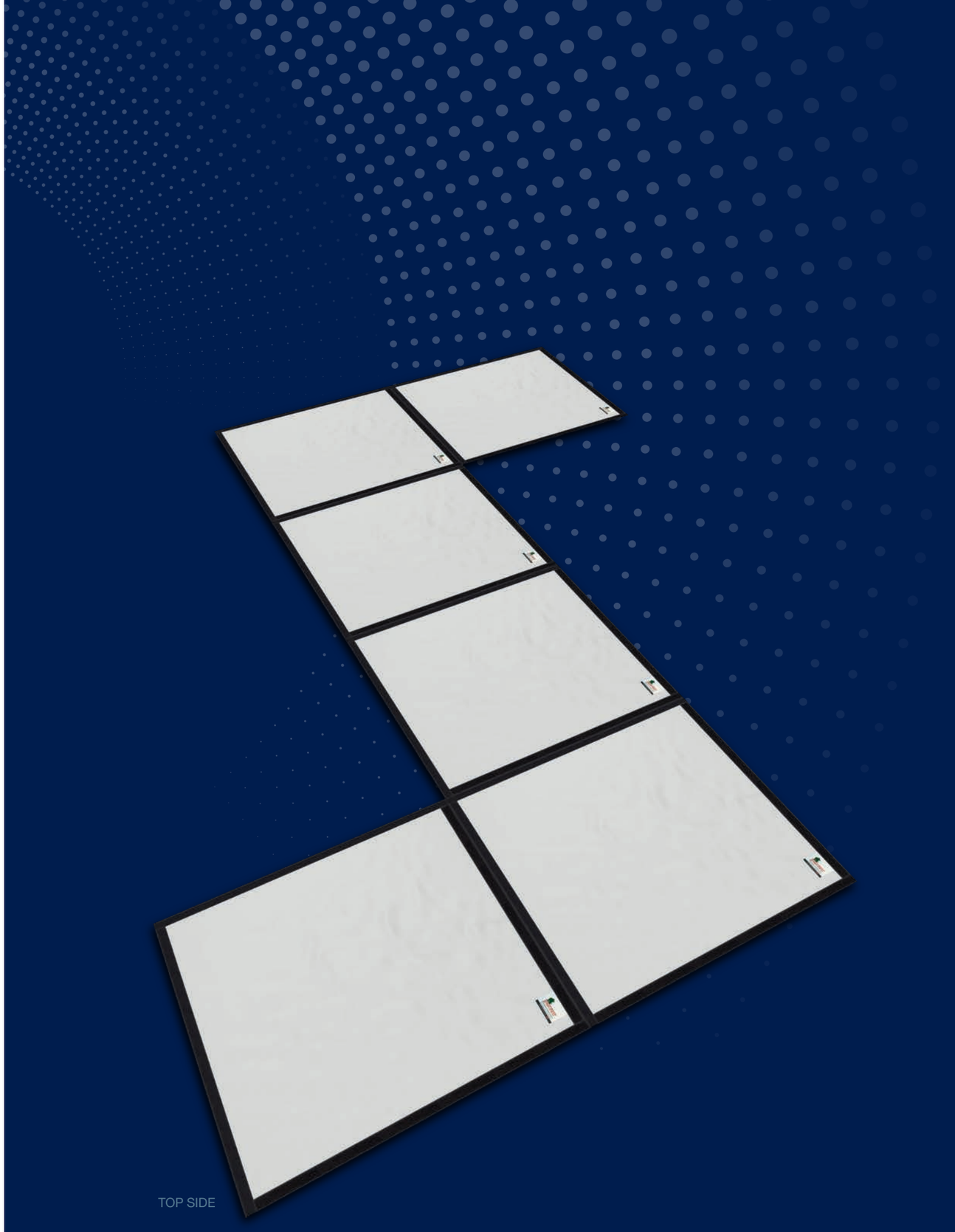
- **Ideal for ageing transformers with chronic low-level seepage between service intervals**
- **Patented Neutroilize™ Smart Fabric Technology permanently converts hydrocarbons to non-leaching solid**
- **Interlocking hook-and-loop system creates modular, continuous, gap-free coverage at any scale**
- **Optimised for transformer oils, enabling faster and more effective absorption of high-viscosity oils**
- **Low-maintenance solution; continuous protection with no active intervention required**
- **Based on award-winning EnviroPad technology (King's Award for Enterprise in Innovation, Construction News Award's Best Product Innovation)**
- **Cleaner handling and safer disposal**
- **Outstanding hydrocarbon capacity of up to 25L per pad**

THE 2 VARIANTS

DS6 DM25

Mix and match to build a tailor-made singular pad coverage area:

- **DS6:** 500 × 500 mm pad, 6L capacity
- **DM25:** 1000 × 1000 mm pad, 25L capacity



TOP SIDE

THE DRAINEEZY RANGE

DrainEezy Bund Filter

DrainEezy Debris Guard

DrainEezy Pre-Filter

DrainEezy Fitting Kit

DrainEezy Bund Filter 4” Manifold

DrainEezy Steel Bund

DrainEezy Bund Alarm

DrainEezy Filtration Chamber

DrainEezy Connect Matting

Ready to protect your bund?

TALK TO THE GREEN RHINO TEAM

Whether you’re specifying a new transformer installation, upgrading an existing bund, managing compliance obligations or responding to an environmental incident, our team of specialists can help you identify the right DrainEezy solution for your site.

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