Keeping contamination under control.
Why do the world’s leading companies, distributors, and OEMs look to Des-Case? Because we understand the importance of fluid cleanliness and the role it plays in increased production, cost savings, and reliability. We’ve spent more than 25 years pioneering solutions specific to customer needs, helping improve lubricant quality, and maximizing equipment dependability.

Our comprehensive water and particulate contamination control products are used by hundreds of the world’s top companies for a wide range of applications including gearboxes, reservoirs, and storage/process tanks.

From the time oil enters your facility to the end of its life, protecting it with Des-Case solutions will extend the life of your machinery, decrease your downtime, and could save you hundreds of thousands of dollars. Our innovative contamination control technology consists of rugged, high quality materials that are cost effective for nearly every application.

An imperative link in the reliability chain, Des-Case helps you effectively control contamination before it controls you.
Table of Contents

The Importance of Contamination Control

Breathers
  Overview
  Standard Disposable Breathers
  Hybrid Breathers
    • Hydroguard
    • Ventguard
  Extreme Duty Breathers
  Rebuildable Steel Breathers
    • Rebuild Kits
  Non-Desiccant Breathers
    • DC-ND-35
    • DC-ND-2
  Customized Desiccant Breathers
  Breather Accessories & Adapters

Fluid Handling Products
  Overview
  Portable Filtration
    • Filter Cart
    • Top-Off Tank Kits
    • Drum Filter Cart
    • TC Series Filter Cart
    • Drum Topper
  Dedicated Filtration
    • TC Series T-Stand
    • Panel Unit
    • Mobile Equipment Engine Kits
    • Mobile Equipment Hydraulic Kits
  Lubricant Storage & Filtration
    • Lubricant Management System
    • LT Series Lubricant Management System
  Adapter Kits
  Filter Elements

Oil Sampling Hardware

Lubrication Transformation℠ Services

Des-Case offers a full line of adaptable contamination control products.

Make us your definitive solution.
Count on the performance of your industrial equipment.

With increases in the cost of oil, greater desire to minimize usage and waste, and a compelling business case for prolonging equipment life, the economic and environmental reason for controlling contamination of lubricants – from the time oil enters a facility until it leaves – is stronger than ever. Maintaining clean oil is one of the best investments a company can make to keep equipment up and running, yet contamination often remains an overlooked factor behind premature machinery failure and diminished lubricant life.

Reduced downtime, less oil usage, and lower repair and recycling costs all add up to significant savings when solid reliability practices are in place.

Two Major Sources of Lubricant Contamination

**Dirt**
If the atmosphere is contaminated, oil will become dirtier and lubricant quality becomes compromised. Particulate contamination, once inside an operating system, will accelerate the generation of new contaminants. These contaminants damage critical components and act as a catalyst for oxidation, further degrading the condition of lubricants.

**Water**
If the atmosphere is particularly humid or has frequent temperature fluctuations, the oil is probably moisture-laden and lubricant quality is compromised. Often times, plant wash down activities are responsible for inducing conditions that lead to moisture ingestion and corrosion.
Des-Case products & services are the solution.

Des-Case products and services are designed to help companies achieve a new level of performance in maintenance and reliability. Combining unique services, a wide array of products, and solid support, Des-Case can help increase uptime, reduce costs, and gain greater efficiencies for your equipment.

Detection
Most people recognize that precision is an important part of a reliability driven maintenance program, but often struggle with how and where to start implementing changes. Des-Case's Lubrication Transformation℠ Services are designed to help companies develop and deploy an executable plan to help them get to the next level. The Lubrication Transformation℠ process can help you quickly identify the steps you need to take, help your team learn practical machinery lubrication, and perform cost-benefit analysis to assist you in your implementation.

Prevention
Getting clean, dry oil into machines (and keeping it that way) is one of the most fundamental elements of precision lubrication. Des-Case's lines of desiccant breathers, lubricant storage systems and oil transfer and filtration systems help plants meet or exceed the stringent contamination control targets necessary to achieve improved machine reliability and production uptime.

Removal
Filtration devices should be used to remove particles and water, further extending and preserving the working life of the oil. They are not just a tool for emergency remedial measures when dealing with contaminated lubricants and hydraulic fluids, but are an integral component of proactive maintenance. Des-Case provides a wide array of customizable, quality filtration units, from small, portable devices to full-featured storage and vacuum dehydration systems.

The Bottom Line
Now, implementing lubrication best practices – including maintaining clean, dry lubricants—and gaining the profitability that goes with it, is easier than ever. Des-Case's technical team can help you evaluate where you are, give you guidance on where to go, and provide the tools to get you there.
Breathers: the first line of defense against contamination

Desiccant breathers are a vital step in contamination control. Studies have shown 50 to 70 percent of lubricant contamination can come from outside the equipment. As most machines are designed to “breathe”, protecting the source of air-flow from moisture and particulate contamination is extremely valuable for front-end protection and reliability optimization.

Des-Case desiccant breathers incorporate a high capture-efficiency filter to help sustain desired cleanliness levels by removing even minute particulate matter. They also create low relative humidity levels in the headspace, making condensation and absorption by the lubricant unlikely. When a system is properly fitted with a breather containing drying and filtration media, contaminant ingress is greatly reduced.

Installation of Des-Case® breathers at critical ingress points is a cost-effective means to prevent contaminants from entering the fluid reservoirs as differential pressures occur.

Reverse flow through the breather allows for regeneration of the desiccant and prevents oil vapors from entering the work environment.
**Breather Products**

*Des-Case invented the desiccant breather and continues to invent new solutions to keep moisture and contaminants out of an increasingly valuable asset – your oil.*

<table>
<thead>
<tr>
<th>Standard Disposable Breathers</th>
<th>Environment</th>
</tr>
</thead>
</table>
| ![Image](image1.png) | • Intermittent operations  
  • Transformers  
  • Storage Tanks  
  • Totes  
  • Hydraulics |

<table>
<thead>
<tr>
<th>Hyrbrid Breathers</th>
<th>Environment</th>
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</table>
| ![Image](image2.png) | • Gearboxes and other low-flow applications  
  • High-humidity applications |

<table>
<thead>
<tr>
<th>Extreme Duty Breathers</th>
<th>Environment</th>
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| ![Image](image3.png) | • Harsh environments  
  • Mobile equipment  
  • Nautical applications |

<table>
<thead>
<tr>
<th>Rebuildable Steel Breathers</th>
<th>Environment</th>
</tr>
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</table>
| ![Image](image4.png) | • Hydraulic reservoir  
  • Bulk oil storage  
  • Diesel tank storage  
  • Chemical/harsh environments  
  • High-flow applications |

<table>
<thead>
<tr>
<th>Non-Desiccant Breathers</th>
<th>Environment</th>
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</table>
| ![Image](image5.png) | • Low humidity applications  
  • Arid, high dust environments  
  • Applications that create “oil misting” |

<table>
<thead>
<tr>
<th>Customizable Desiccant Breathers</th>
<th>Environment</th>
</tr>
</thead>
</table>
| ![Image](image6.png) | • Intermittent operations  
  • Transformers  
  • Storage Tanks  
  • Totes  
  • Fumes |
Every element of Des-Case’s Standard Disposable Breathers have been designed to work in a wide variety of industries and applications. The breather’s resilient, integrated nylon standpipe ensures that it can easily combat high vibration and volatile environments. Each breather is outfitted with a clear, rugged polycarbonate casing that allows easy view of color-indicating desiccant in order to monitor when the breather should be replaced.

With over 25 years of contamination control expertise, Des-Case breathers attack the source of contamination, making the products an affordable and cost effective solution to extend lubricant life and to increase equipment productivity.
**How it Works**

As wet contaminated air is drawn through the unit, multiple 3-micron polyester filter elements remove solid particulate and the color-indicating silica gel extracts moisture.

When air is expelled from the container, the top foam pad prevents oil mist from contacting the silica gel or entering the atmosphere.

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**Product Specifications**

<table>
<thead>
<tr>
<th></th>
<th>DC-BB</th>
<th>DC-1</th>
<th>DC-2</th>
<th>DC-3</th>
<th>DC-4</th>
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<td>5.31’’/134.9 mm</td>
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<td>8.125’’/206.4 mm</td>
<td>10.125’’/257.2 mm</td>
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<tr>
<td>Unit Diameter (width in/mm)</td>
<td>2.52’’/64.01 mm</td>
<td>2.52’’/64.01 mm</td>
<td>4’’/101.6 mm</td>
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<td>3µ absolute (β&lt;sub&gt;3&lt;/sub&gt;200)</td>
<td>3µ absolute (β&lt;sub&gt;3&lt;/sub&gt;200)</td>
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<td>-20°F to 200°F</td>
<td>-20°F to 200°F</td>
<td>-20°F to 200°F</td>
<td>-20°F to 200°F</td>
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<td>Operating Temp. Range (°C)</td>
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<td>-29°C to 93°C</td>
<td>-29°C to 93°C</td>
<td>-29°C to 93°C</td>
<td>-29°C to 93°C</td>
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<tr>
<td>Hydrophilic Agent</td>
<td>Silica gel</td>
<td>Silica gel</td>
<td>Silica gel</td>
<td>Silica gel</td>
<td>Silica gel</td>
</tr>
<tr>
<td>Filter Media</td>
<td>Polyester</td>
<td>Polyester</td>
<td>Polyester</td>
<td>Polyester</td>
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<tr>
<td>Connection Size</td>
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<td>3/8” Multi-Fit (NPT, BSPP, BSPT)</td>
<td>1” Multi-Fit (NPT, BSPT, NPSM)</td>
<td>1” Multi-Fit (NPT, BSPT, NPSM)</td>
<td>1” Multi-Fit (NPT, BSPT, NPSM)</td>
</tr>
</tbody>
</table>
Breathers: Hybrid Breathers

Hydroguard™ Hybrid Breathers

From the expansion chamber system to the check valves, Des-Case Hydroguard™ hybrid breathers are innovatively designed to perform in many different environments.

The breather is outfitted with an expansion chamber to isolate lubricants from all levels of ambient humidity. A clear, rugged polycarbonate casing allows for viewing desiccant as it changes color, indicating that the breather should be replaced. Check valves ensure no excess pressure/vacuum builds.

Des-Case hybrid breathers attack the source of contamination, allowing your equipment and lubricants to run longer and harder.

Environments

- Gearboxes and other low-flow applications
- High-humidity applications
How it Works

As wet, contaminated air is drawn through the unit, multiple 3-micron polyester filter elements remove solid particulate and the color-indicating silica gel extracts moisture.

The diaphragm allows for expansion/contraction of the air within the casing as a result of temperature variations during steady-state operations.

When air is expelled from the container, the top foam pad prevents oil mist from contacting silica gel or entering the atmosphere. The hydrophilic agent is partially reactivated by the dry air passing back through.
**Breathers: Hybrid Breathers**

**Ventguard™ Hybrid Breathers**

VentGuard™ hybrid breathers virtually isolate equipment from surrounding particulate contamination.

The breather is outfitted with check valves to ensure no excess pressure/vacuum builds. A clear, rugged polycarbonate casing allows for viewing desiccant as it changes color, indicating that the breather should be replaced.

Des-Case hybrid breathers protect lubricant and equipment from contamination that can lead to production downtime and costly equipment repairs.
**How it Works**

As wet, contaminated air is drawn through the unit, multiple 3-micron polyester filter elements remove solid particulate and the color-indicating silica gel extracts moisture.

When air is expelled from the container, the top foam pad prevents oil mist from contacting silica gel or entering the atmosphere.

The breather is outfitted with a resilient nylon standpipe and a clear polycarbonate body which allows for easy monitoring of the high-contrast silica gel.

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**Product Specifications**

<table>
<thead>
<tr>
<th>Product Specifications</th>
<th>DC-VG-BB</th>
<th>DC-VG-1</th>
<th>DC-VG-2</th>
<th>DC-VG-3</th>
<th>DC-VG-4</th>
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<tbody>
<tr>
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<td>5.31&quot; / 135 mm</td>
<td>6.125&quot; / 155.6 mm</td>
<td>8.125&quot; / 206.4 mm</td>
<td>10.125&quot; / 257.2 mm</td>
</tr>
<tr>
<td>Unit Diameter</td>
<td>2.52&quot; / 64.01 mm</td>
<td>2.52&quot; / 64 mm</td>
<td>4&quot; / 101.6 mm</td>
<td>4&quot; / 101.6 mm</td>
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<td>Shipping Weight (unit/case)</td>
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<td>0.14 kg / 0.97 kg</td>
<td>0.52 lbs. / 3.37 lbs.</td>
<td>0.24 kg / 1.53 kg</td>
<td>1.21 lbs. / 7.73 lbs.</td>
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<td></td>
<td>0.66 lbs / 30 kg</td>
<td>1.87 lbs / 11.74 lbs.</td>
<td>0.55 kg / 3.51 kg</td>
<td>0.85 kg / 5.32 kg</td>
<td>2.63 lbs / 16.13 lbs</td>
</tr>
<tr>
<td>Amount of Desiccant</td>
<td>0.13 lbs / 58.6 g</td>
<td>0.28 lbs / 125.1 g</td>
<td>0.66 lbs / 30 kg</td>
<td>1.22 lbs / 0.56 kg</td>
<td>1.88 lbs / 0.84 kg</td>
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<tr>
<td>Max Adsorption Capacity</td>
<td>0.79 fl. oz. / 23.3 mL</td>
<td>1.68 fl. oz. / 49.8 mL</td>
<td>4 fl. oz. / 118.2 mL</td>
<td>7.45 fl. oz. / 220.3 mL</td>
<td>11.3 fl. oz. / 333 mL</td>
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<tr>
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<td>3µ absolute (β≥200)</td>
<td>3µ absolute (β≥200)</td>
<td>3µ absolute (β≥200)</td>
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<td>-20°F to 200°F / -29°C to 93°C</td>
<td>-20°F to 200°F / -29°C to 93°C</td>
<td>-20°F to 200°F / -29°C to 93°C</td>
<td>-20°F to 200°F / -29°C to 93°C</td>
</tr>
<tr>
<td>Hydrophilic Agent</td>
<td>Silica gel</td>
<td>Silica gel</td>
<td>Silica gel</td>
<td>Silica gel</td>
<td>Silica gel</td>
</tr>
<tr>
<td>Filter Media</td>
<td>Polyester</td>
<td>Polyester</td>
<td>Polyester</td>
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<td>Polyester</td>
</tr>
<tr>
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<td>3/8&quot; Multi-fit (NPT, BSPP, BSPT)</td>
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<td>&quot;1&quot; Multi-fit (NPT, BSPT, NPSM)</td>
<td>&quot;1&quot; Multi-fit (NPT, BSPT, NPSM)</td>
</tr>
</tbody>
</table>
Extreme Duty Breathers

Environments

- Harsh environments
- Mobile equipment
- Nautical applications

Extreme Duty Breathers are designed to take contamination control to an entirely new level of lubricant protection.

The breather is outfitted with a rugged housing and an integrated standpipe, allowing for decreased oil misting while offering improved vibration resistance. Visual indicator windows show the desiccant as it changes color, indicating that the breather should be replaced. Check valves keep out ambient humidity while the system is at rest.

An ideal solution for a variety of both stationary and mobile equipment applications, Des-Case’s Extreme Duty Breather can combat the most unforgiving manufacturing environment.
How it Works

As wet, contaminated air is drawn through the unit, multiple 0.3 micron filter elements remove solid particulate and the color-indicating silica gel extracts moisture. When air is expelled from the container, the top foam pad prevents oil mist from contacting silica gel or entering the atmosphere. The hydrophilic agent is partially reactivated by the dry air passing back through.

**Breathers: Extreme Duty Breathers**

### Extreme Duty Breather Adapters

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<tr>
<th>Adapter Part Number</th>
<th>Description</th>
<th>Application Connection Type/Size Number</th>
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<tbody>
<tr>
<td>DC-DSA-17</td>
<td>Connects Extreme Duty Breather to a 1 ½” x 16 UN male threaded connection.</td>
<td>3/4” Threaded Female</td>
</tr>
<tr>
<td>DC-DSA-10</td>
<td>Connects Extreme Duty Breather to a 1 ½” x 16 UN male threaded connection.</td>
<td>1” Threaded Female</td>
</tr>
<tr>
<td>DC-XDVA-12M</td>
<td>Vent Valve Adapter connects Extreme Duty Breather to a 1 ½” x 16 UN male threaded connection.</td>
<td>3/4” Threaded Female</td>
</tr>
<tr>
<td>DC-XDVA-16M</td>
<td>Vent Valve Adapter connects Extreme Duty Breather to a 1 ½” x 16 UN male threaded connection.</td>
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**Product Specifications**

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<tr>
<td></td>
<td>456 (lpm)</td>
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<td>Filter Media</td>
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<td>Connection Size</td>
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<td>Body Material</td>
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Breathers: Rebuildable Steel Breathers

Rebuildable Steel Breathers

Utilizing desiccant breathers can reduce the negative effects caused by contamination that result in millions of dollars spent annually. Contaminated lubricant and hydraulic fluid result in excess machine wear, production downtime, and repair costs.

Des-Case breathers reduce contamination, keeping dirt and water where it belongs—out of your equipment.

<table>
<thead>
<tr>
<th>Product Specifications</th>
<th>DC-RS-3</th>
<th>DC-RS-5</th>
<th>DC-RS-9</th>
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<td>85 @ 0.5 psid 2407 Lpm</td>
<td>80 @ 0.5 psid 2265 Lpm</td>
<td>205 @ 0.5 psid 5805 Lpm</td>
<td>265 @ 0.5 psid 3964 Lpm</td>
<td>140 @ 0.5 psid 3256 Lpm</td>
<td>115 @ 0.5 psid 2265 Lpm</td>
<td>80 @ 0.5 psid 7645 Lpm</td>
<td>270 @ 0.5 psid 7079 Lpm</td>
<td>240 @ 0.5 psid 6796 Lpm</td>
</tr>
<tr>
<td>Max. Operating Temp.</td>
<td>-20 to 220°F / -29 to 104°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connection Size (NPT)</td>
<td>2˝</td>
<td>2˝</td>
<td>2˝</td>
<td>3˝</td>
<td>3˝</td>
<td>3˝</td>
<td>3˝</td>
<td>4˝</td>
<td>4˝</td>
<td>4˝</td>
</tr>
<tr>
<td>Body Material</td>
<td>Carbon steel, Polyurethane, Polypropylene, Microglass, Polycarbonate, Nomex, Buna-N (Silica gel as hydrophilic agent.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Des-Case recommends use of a pressure/relief valve on any tank or storage system.
Rebuild Kits for Rebuildable Steel Breathers

Pleated Filter Element
Captures airborne contamination to 1-micron absolute, ($\beta \geq 1,000$).

Rugged Housing
Powder-coated carbon steel or stainless steel.

Easy-to-Replace Desiccant Bag
Polypropylene bag has handles for easy removal.

Water Vapor Adsorbent
Clear silica gel adsorbs water from incoming air.

Foam Pad
Disperses incoming air evenly over filtration and drying area.

Integrated Standpipe
Resilient construction provides durability and allows oil mist to coalesce and drain back into a reservoir.

Breathers: Rebuildable Steel Breathers

Outside Sight Glass Indicator
Silica gel changes color from blue to pink when the unit requires rebuilding.

Air Vents
Removable plugs keep breather inactive until installation.

Rebuild Kit Components

Replacement Filter Element
Captures airborne contamination to 1-micron absolute.

Desiccant Bag Filter
Polypropylene bag has handles for easy removal and replacement.

Sight Glass Indicator
Silica gel changes color from blue to pink when the unit requires rebuilding.

Gasket
Seals breather at removable lid.

Foam Pad
Disperses incoming air evenly over filtration and drying areas.

Rebuild kits can be ordered in a variety of the below materials to meet chemical compatibility needs:

Steel Housings
- Carbon Steel (Standard)
- 304 Stainless Steel
- 316 Stainless Steel

Gasket/Seal Material
- Buna-N (Standard)
- Viton
- EPDM
- SBR Rubber

Filter Material
- Microglass/Polyurethane Filter (Standard)
- Microglass/Plastisol Filter

Parts and Accessories

<table>
<thead>
<tr>
<th>Model #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC-RS-X-RK</td>
<td>Rebuildable Steel Breather Rebuild Kits</td>
</tr>
<tr>
<td>DC-RS-X-F1</td>
<td>Rebuildable Steel Breather Microglass Filter Elements</td>
</tr>
<tr>
<td>DC-RS-X-D1</td>
<td>Rebuildable Steel Breather Desiccant Bag Sets</td>
</tr>
<tr>
<td>DC-RS-X-SG1</td>
<td>Rebuildable Steel Breather Sight Glass Cartridges</td>
</tr>
<tr>
<td>DC-RS-X-P1</td>
<td>Rebuildable Steel Breather Foam Pad Inserts</td>
</tr>
<tr>
<td>DC-RS-X-G1</td>
<td>Rebuildable Steel Breather Gasket Seals</td>
</tr>
</tbody>
</table>

* For part codes containing X substitute the appropriate RS model number (Example: the part code for a sight glass cartridge for the DC RS 150 would be DC RS 150 SG1)

Des-Case recommends use of a pressure/relief valve on any tank or storage system.
Des-Case Non-Desiccant Breathers, with oil coalescing filters, protect equipment and lubricant from harmful contamination. Contaminated lubricating oil and hydraulic fluid result in excess machine wear, production downtime, and higher repair costs.

Des-Case non-desiccant breathers are best suited for low humidity applications, arid/high-dust environments, and applications that create “oil misting”.

**How it Works**

As wet, contaminated air is drawn through the unit, the hydrophobic media repels water and the pleated oil coalescing particulate filter captures contamination, preventing both from entering the equipment.

**Benefits**

- Low humidity applications
- Arid, high dust environments
- Applications that create “oil misting”
Non-Desiccant Breathers: DC-ND-2

Benefits

• Low humidity applications
• Arid, high dust environments
• Applications that create “oil misting”

Industry spends millions of dollars annually treating the negative effects of contamination caused by wet, dirty air. Contaminated lubricating oil and hydraulic fluid result in excess machine wear, production downtime, and repair costs.

Des-Case non-desiccant breathers are best suited for low humidity applications, continuous operations with frequent washdowns, arid/high-dust environments, and low-flow applications.

Des-Case breathers attack the source of contamination, allowing your equipment and lubricants to run longer and harder.

How it Works

As wet, contaminated air is drawn through the unit, the hydrophobic media repels water and the oil coalescing particulate filter captures dirt, preventing both from entering the equipment.

<table>
<thead>
<tr>
<th>Product Specifications</th>
<th>DC-ND-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Height</td>
<td>1.35” / 34.3 mm</td>
</tr>
<tr>
<td>Unit Diameter</td>
<td>1.80” / 45.7 mm</td>
</tr>
<tr>
<td>Shipping Weight per Unit</td>
<td>0.06 lbs. / 0.026 kg</td>
</tr>
<tr>
<td>Amount of Desiccant</td>
<td>n/a</td>
</tr>
<tr>
<td>Max. Adsorption Capacity</td>
<td>n/a</td>
</tr>
<tr>
<td>Max. Flow Rate (cfm)</td>
<td>0.67 @ 1 psid</td>
</tr>
<tr>
<td>(lpm)</td>
<td>19</td>
</tr>
<tr>
<td>Filtration</td>
<td>0.3µ absolute (β₀.3 ≥1000)</td>
</tr>
<tr>
<td>Operating Temp. Range</td>
<td>-40°F to 300°F / -40°C to 149°C</td>
</tr>
<tr>
<td>Hydrophilic Agent</td>
<td>n/a</td>
</tr>
<tr>
<td>Filter Media</td>
<td>ePTFE</td>
</tr>
<tr>
<td>Connection Size (NPT)</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Body Material</td>
<td>Nylon 6/6 (33% glass-filled)</td>
</tr>
</tbody>
</table>
Des-Case’s Customized Desiccant Breathers have been designed to work in a wide variety of industries. Des-Case offers several secondary agent media options that prevent fumes and other contaminants from entering equipment. The media in secondary agent breathers can be mixed to meet specific environmental and chemical needs.

Each breather is outfitted with a clear, rugged polycarbonate casing and an integrated nylon standpipe that provides greater chemical compatibility and vibration resistance.

With over 25 years of contamination control expertise, Des-Case’s innovative breathers are an affordable and cost effective solution to extend lubricant life and increase equipment productivity.
**Breathers:** Customized Desiccant Breathers

Customized Desiccant Options Include:

- **Orange Silica Gel**
- **Activated Carbon**
- **Molecular Sieve**
- **Activated Alumina**
- Layered (Blue Silica Gel & Molecular Sieve)

### Model Specifications

<table>
<thead>
<tr>
<th>Model No.</th>
<th>DC-2SBNCXX*</th>
<th>DC-3SBNCXX*</th>
<th>DC-4SBNCXX*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Height</td>
<td>6.125” / 155.6 mm</td>
<td>8.125” / 206.4 mm</td>
<td>10.125” / 257.2 mm</td>
</tr>
<tr>
<td>Diameter</td>
<td>4” / 101.6 mm</td>
<td>4” / 101.6 mm</td>
<td>4” / 101.6 mm</td>
</tr>
<tr>
<td>Shipping Weight (unit/case)</td>
<td>1.21 lbs / 0.55 kg</td>
<td>1.87 lbs / 0.85 kg</td>
<td>2.63 lbs / 1.2 kg</td>
</tr>
<tr>
<td>Amount of Desiccant</td>
<td>0.66 lbs / 0.30 kg</td>
<td>1.22 lbs / 0.56 kg</td>
<td>1.88 lbs / 0.84 kg</td>
</tr>
<tr>
<td>Max. Adsorption Capacity**</td>
<td>7.45 fl. oz / 220.3 mL</td>
<td>11.3 fl. oz / 333 mL</td>
<td></td>
</tr>
<tr>
<td>Max. Flow Rate</td>
<td>16 @ 1 psid</td>
<td>16 @ 1 psid</td>
<td>16 @ 1 psid</td>
</tr>
<tr>
<td>Operating Temp. Range</td>
<td>-20°F to 200°F / -29°C to 93°C</td>
<td>-20°F to 200°F / -29°C to 93°C</td>
<td>-20°F to 200°F / -29°C to 93°C</td>
</tr>
<tr>
<td>Hydrophilic Agent</td>
<td>Silica Gel</td>
<td>Silica Gel</td>
<td>Silica Gel</td>
</tr>
<tr>
<td>Filter Media</td>
<td>Polyester</td>
<td>Polyester</td>
<td>Polyester</td>
</tr>
<tr>
<td>Connection Size</td>
<td>1” Multi-Fit (NPT, BSPT, NPSM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body Material</td>
<td>Polycarbonate, Nylon, Polypropylene, Polyester, Polyurethane, Buna-N, PVC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above specifications are for a silica gel-only hydrophilic agent breather. Some specifications for a breather containing a secondary agent would change.

*Note:* “XX” denotes percentage of secondary agent. For example, DC-2SBNC25 is a DC-2 with 25% activated carbon.

**Same as the equivalent standard desiccant breather at maximum.

---

**Example:** 25% Activated Carbon Breather

- **Foam Pad**
  - Captures any oil mist and disperses incoming air evenly over filtration and drying areas.
  - Reduces oil mist that contacts silica gel during exhalation and ensures outgoing air is evenly dispersed through the filters and desiccant.

- **Activated Carbon**
  - Secondary adsorbent filters additional contaminants for your application.
  - Can be added in 25% ratios.

- **Water Vapor Adsorbent**
  - Silica gel absorbs water from incoming air.
  - Indicates condition by change of color from blue to pink.

- **Filter Element**
  - Second polyester filter element protects against any migration of desiccant dust, providing maximum efficiency.

- **Resilient Polycarbonate Body**
  - Shock-absorbing, clear casing provides reliable service and easy maintenance.

- **Threaded Mounting**
  - Easily replaces standard filler/breather cap with one of several adapters.
Des-Case’s breather accessory and adapter products offer an optimum solution for various equipment connection needs. No matter the connection type and size, breather adapters provide a sealed system that will protect equipment from external moisture and harmful particle contamination. Choose from a variety of materials, connection port size, and thread requirements in order to properly outfit your equipment application.

**Breather Accessories & Adapters**

**DC-13-T**
- **Breather Connection**: Connects Standard Disposable (DC-2, DC-3, DC-4), Ventguard (DC-VG-2, DC-VG-3), Hydroguard (DC-HG-8) breathers to 1” female NPT adapter
- **Equipment Connection Port/Size**: 1” Male NPT
- **Breathers**: Standard Disposable (DC-2, DC-3, DC-4), Ventguard (DC-VG-2, DC-VG-3), Hydroguard (DC-HG-8)

**DC-17-T**
- **Breather Connection**: Connects Standard Disposable (DC-2, DC-3, DC-4), Ventguard (DC-VG-2, DC-VG-3), Hydroguard (DC-HG-8) breathers to 1” female NPT adapter
- **Equipment Connection Port/Size**: 3/4” Female NPT
- **Breathers**: Standard Disposable (DC-2, DC-3, DC-4), Ventguard (DC-VG-2, DC-VG-3), Hydroguard (DC-HG-8)

**DC-35**
- **Breather Connection**: Connects Standard Disposable (DC-BB, DC-1), Ventguard (DC-VG-BB, DC-VG-1), Hydroguard (DC-HG-1) breathers to 1” female NPT adapter
- **Equipment Connection Port/Size**: 3/4” Female NPT
- **Breathers**: Standard Disposable (DC-BB, DC-1), Ventguard (DC-VG-BB, DC-VG-1), Hydroguard (DC-HG-1)

**DC-36**
- **Breather Connection**: Connects Standard Disposable (DC-BB, DC-1), Ventguard (DC-VG-BB, DC-VG-1), Hydroguard (DC-HG-1) breathers to 3/8” female NPT adapter
- **Equipment Connection Port/Size**: 1” Female NPT
- **Breathers**: Standard Disposable (DC-BB, DC-1), Ventguard (DC-VG-BB, DC-VG-1), Hydroguard (DC-HG-1)

**DC-37**
- **Breather Connection**: Connects Standard Disposable (DC-BB, DC-1), Ventguard (DC-VG-BB, DC-VG-1), Hydroguard (DC-HG-1) breathers to 3/8” female NPT adapter
- **Equipment Connection Port/Size**: 1/2” Female NPT
- **Breathers**: Standard Disposable (DC-BB, DC-1), Ventguard (DC-VG-BB, DC-VG-1), Hydroguard (DC-HG-1)

**Bayonet Adapter**

**DC-15-T**
- **Breather Connection**: Connects Standard Disposable (DC-2, DC-3, DC-4), Ventguard (DC-VG-2, DC-VG-3), Hydroguard (DC-HG-8) breathers to 1” female NPT adapter
- **Equipment Connection Port/Size**: 1 1/2” Bayonet Style
- **Breathers**: Standard Disposable (DC-2, DC-3, DC-4), Ventguard (DC-VG-2, DC-VG-3), Hydroguard (DC-HG-8),
**Breathers: Breather Accessories & Adapters**

### Flange Adapter

**DC-12-T**
- **Breather Connection:** Connects Standard Disposable (DC-2, DC-3, DC-4), Ventguard (DC-VG-2, DC-VG-3), Hydroguard (DC-HG-8) breathers to 1” female NPT adapter
- **Equipment Connection Port/Size:** 6 bolt circular mounting (Ø 3.5”)
- **Breathers:** Standard Disposable (DC-2, DC-3, DC-4), Ventguard (DC-VG-2, DC-VG-3), Hydroguard (DC-HG-8)

### Vacuum Indicator Adapters

**DC-13-T-VI**
- **Breather Connection:** Connects Standard Disposable (DC-2, DC-3, DC-4), Ventguard (DC-VG-2, DC-VG-3), Hydroguard (DC-HG-8) breathers to 1” female NPT adapter, with single position vacuum indicator
- **Equipment Connection Port/Size:** 1” Male NPT
- **Breathers:** Standard Disposable (DC-2, DC-3, DC-4), Ventguard (DC-VG-2, DC-VG-3), Hydroguard (DC-HG-8)

**DC-SB-VI**
- **Breather Connection:** Connects Non-Desiccant Breather (DC-ND-35) to 1” male NPT adapter, with single position vacuum indicator
- **Equipment Connection Port/Size:** 1” Female NPT
- **Breathers:** Non-Desiccant Breather (DC-ND-35)

**DC-OCM5-VI**
- **Breather Connection:** Connects Standard Disposable (DC-2, DC-3, DC-4), Ventguard (DC-VG-2, DC-VG-3), Hydroguard (DC-HG-8) breathers to 1” female NPT adapter, with single position vacuum indicator and oil coalescing filter media
- **Equipment Connection Port/Size:** 1” Male NPT
- **Breathers:** Standard Disposable (DC-2, DC-3, DC-4), Ventguard (DC-VG-2, DC-VG-3), Hydroguard (DC-HG-8)

### Multiple Breather Adapters

**DC-ME-2-T**
- **Breather Connection:** Connects two, three, or four Standard Disposable (DC-2, DC-3, DC-4), Ventguard (DC-VG-2, DC-VG-3), Hydroguard (DC-HG-8) breathers to a 1” female NPT adapter
- **Equipment Connection Port/Size:** 2” Female NPT
- **Breathers:** Standard Disposable, Ventguard (DC-VG-2, DC-VG-3), Hydroguard (DC-HG-8)

**DC-ME-3-T**
- **Breather Connection:** Connects two, three, or four Standard Disposable (DC-2, DC-3, DC-4), Ventguard (DC-VG-2, DC-VG-3), Hydroguard (DC-HG-8) breathers to a 1” female NPT adapter
- **Equipment Connection Port/Size:** 2” Female NPT
- **Breathers:** Standard Disposable, Ventguard (DC-VG-2, DC-VG-3), Hydroguard (DC-HG-8)

**DC-ME-4-T**
- **Breather Connection:** Connects two, three, or four Standard Disposable (DC-2, DC-3, DC-4), Ventguard (DC-VG-2, DC-VG-3), Hydroguard (DC-HG-8) breathers to a 1” female NPT adapter
- **Equipment Connection Port/Size:** 2” Female NPT
- **Breathers:** Standard Disposable, Ventguard (DC-VG-2, DC-VG-3), Hydroguard (DC-HG-8)

### Rebuildable Steel Adapters

**DC-13-6C**
- **Breather Connection:** Connects Rebuildable Steel Breathers (DC-RS-3, DC-RS-5, and DC-RS-9) to 2” female NPT adapter
- **Equipment Connection Port/Size:** 4 bolt circular mounting (Ø 6.0”)
- **Breathers:** Rebuildable Steel Breathers (DC-RS-3, DC-RS-5, DC-RS-9)

**DC-13-10C**
- **Breather Connection:** Connects Rebuildable Steel Breathers (DC-RS-15, DC-RS-25, DC-RS-50, and DC-RS-75) to 3” female NPT adapter
- **Equipment Connection Port/Size:** 4 bolt circular mounting (Ø 7.5”)
- **Breathers:** Rebuildable Steel Breathers (DC-RS-15, DC-RS-25, DC-RS-50, DC-RS-75)

**DC-13-40C**
- **Breather Connection:** Connects Rebuildable Steel Breathers (DC-RS-100, DC-RS-150, and DC-RS-200) to 4” female NPT adapter
- **Equipment Connection Port/Size:** 8 bolt circular mounting (Ø 9.0”)
- **Breathers:** Rebuildable Steel Breathers (DC-RS-100, DC-RS-150, DC-RS-200)

### Extreme Duty Breather Adapters

**DC-XDVA-12M**
- **Breather Connection:** Vent Valve Adapter connects Extreme Duty Breather (DC-XD-6) to 1 1/2” x 16 UN male adapter
- **Equipment Connection Port/Size:** 3/4” Female NPT
- **Breathers:** Extreme Duty Breather (DC-XD-6)

**DC-XDVA-16M**
- **Breather Connection:** Vent Valve Adapter connects Extreme Duty Breather (DC-XD-6) to 1 1/2” x 16 UN male adapter
- **Equipment Connection Port/Size:** 1” Female NPT
- **Breathers:** Extreme Duty Breather (DC-XD-6)

**DC-DSA-17**
- **Breather Connection:** Connects Extreme Duty Breather (DC-XD-6) to 1 1/2” x 16 UN male adapter
- **Equipment Connection Port/Size:** 3/4” Female NPT
- **Breathers:** Extreme Duty Breather (DC-XD-6)

**DC-DSA-10**
- **Breather Connection:** Connects Extreme Duty Breather (DC-XD-6) to 1 1/2” x 16 UN male adapter
- **Equipment Connection Port/Size:** 1” Female NPT
- **Breathers:** Extreme Duty Breather (DC-XD-6)
**Portable Filtration**

Portable filtration units are ideal tools to remediate contaminated systems, flush new equipment during commissioning, or periodically decontaminate systems that have inadequate on-board filtration to meet target cleanliness levels.

**Dedicated Filtration**

Whether you have an application that needs regular filtration, or a maintenance location where you bring equipment to be filtered, permanently-mounted filtration is usually the best choice for improving equipment reliability because it is continuous-duty, “always-on” filtration that cleans the oil and then keeps the oil clean.
### Fluid Handling Products

#### Lubricant Storage & Filtration

Des-Case combines filtration, storage and breather technologies with its lubricant management systems to properly store and pre-filter lubricants. The simple, stackable design frees up valuable floor space in any lube room. Dedicated filtration per container ensures no cross-contamination of fluids, while disposable desiccant breathers prevent dirt and water ingestion.

#### Water Removal

Actively filtering moisture from lubricants can prevent contamination-related problems such as oxidation, degradation, and corrosion. Des-Case provides solutions to remove both small and large quantities of free, emulsified and dissolved water to keep your lubricants clean and dry.

#### Adapter Kits

Adapter kits function as the connection between your application and filtration system. Pairing fluid handling filtration with breather protection allows for maximum system integrity – requiring less equipment and labor while reducing system contamination.

#### Filter Elements

Des-Case offers an array of filter elements to tackle water, particulate, varnish, sludge and acid removal in a wide variety of industrial applications.
The Lubricant Management System (LMS) by Des-Case combines filtration and breather technologies to keep your lubricants clean and dry before they enter your equipment.

Combining easy storage with solid contamination control practices, the sturdy, stackable, and customizable pods free up valuable floor space. Features like dual-stage filtration, timers, quick disconnects, and desiccant breather filters make this all-in-one system ideal for any lube storage room.
The LT Series Lubricant Management System (LT-LMS) by Des-Case is a cost effective, simple way to keep your lubricants clean and dry before they enter your equipment.
IsoLink™ Oil Transfer Containers provide the first best practice solution to keep oil clean and dry during oil transfer. With non-desiccant and desiccant breather options available, as well as quick connects for clean filling, IsoLink™ isolates oil from the environment providing the ultimate in best practice contamination control.
### Lubrication Transformation™ Services

<table>
<thead>
<tr>
<th>Assessment Lite</th>
<th>Full Assessment</th>
<th>Enterprise Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Benchmark Survey</strong></td>
<td>Benchmark score in each of the ten key categories of precision lubrication based on a 50-question survey.</td>
<td>Benchmark score in each of the ten key categories of lubrication best practices based on 50-question survey. On-site personnel can help you complete this survey.</td>
</tr>
<tr>
<td><strong>Gap Analysis and Category Specific Recommendations</strong></td>
<td>General recommendations for best practices in each of the ten categories of precision lubrication.</td>
<td>Customized recommendations for best practices in each of the ten categories of precision lubrication, including a plant-specific gap analysis.</td>
</tr>
<tr>
<td><strong>Business Case Analysis</strong></td>
<td>Estimation of current losses due to substandard lubrication practices.</td>
<td>Estimation of current losses due to substandard lubrication practices and investment analysis detailing return on investment for implementing specific action items.</td>
</tr>
<tr>
<td><strong>Project Plan and Action Item List</strong></td>
<td>General list of recommended action items based on specific responses to the benchmark survey.</td>
<td>Specific list of recommended action items based on response to the benchmark survey, plus a detailed project plan including action items, timelines and implementation support.</td>
</tr>
<tr>
<td><strong>Post-Survey Wrap Up and Support</strong></td>
<td>Two hour teleconference with Des-Case project planner, plus ongoing implementation support.</td>
<td>Four hour post-survey report and strategy session, ongoing implementation support and monthly project review sessions via teleconference.</td>
</tr>
</tbody>
</table>
Thousands of satisfied Des-Case product users around the world enjoy an outstanding record of trouble-free service and quality product support. If you have questions regarding Des-Case products, one of our trained professionals will assist you in getting the information you need quickly.