

Des-Case Reliability Services Lubricant Storage & Handling Design Report

Des-Case Corporation | 675 N. Main St. | Goodlettsville, TN 37072
D: 615.672.8800 | F: 615.672.0701 | descase.com

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Project Name:	Reliability Services Storage & Handling Design
Client:	Generic Lube Room Design Reliability Engineer Address City State Zip Code
Primary Consultant:	John Crossett, CMRP Technical Consultant Des-Case Corporation 675 N. Main St. Goodlettsville, TN 37072 USA P: (615) 672-8800 C: (615) 767-6886 John.Crossett@descase.com
Account Manager:	Key Account Manager Des-Case Corporation 675 N. Main St. Goodlettsville, TN 37072 USA P: (615) 672-8800 keyaccountmanager@descase.com
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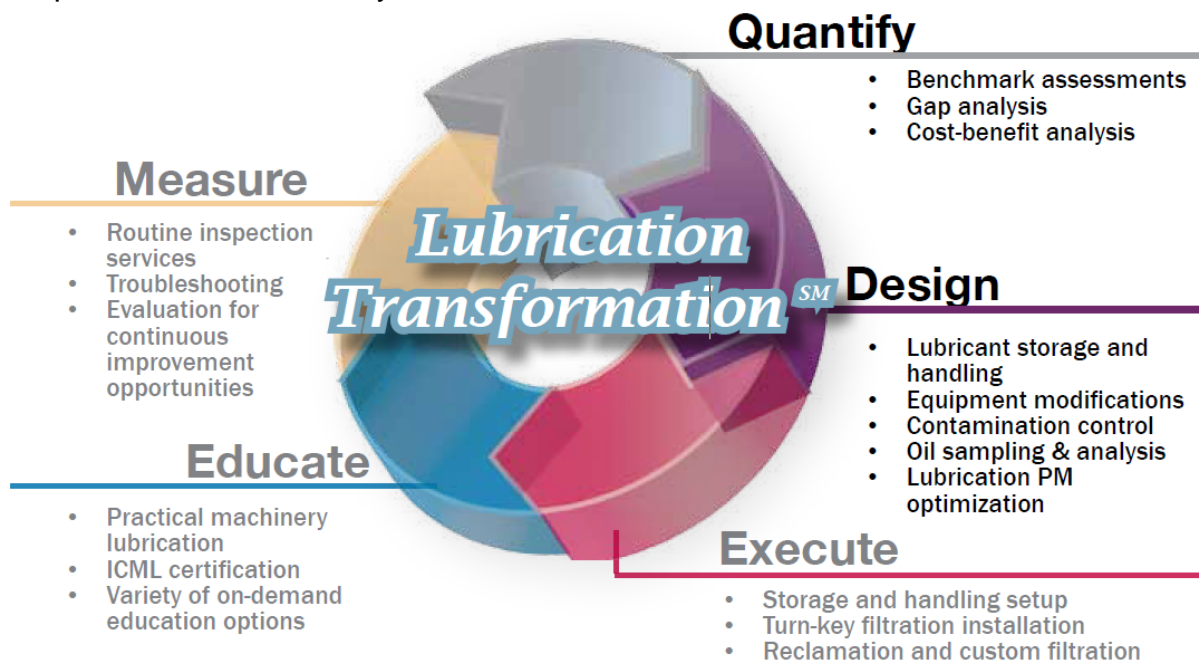
Table of Contents

1.0	Introduction.....	4
2.0	Overview.....	5
3.0	Proposed Design.....	6
4.0	Bulk Storage	8
4.1	LT LMS Bulk Storage.....	8
5.0	Mobile Filtration Unit.....	9
5.1	Wheeled FlowGuard Filtration Cart.....	9
5.2	Drum Topper Filtration Unit.....	9
5.3	Drum Filter Cart.....	10
6.0	Dedicated Filtration Units.....	10
6.1	FlowGuard™ Panel Unit.....	10
7.0	Drum Adapter Kits.....	11
8.0	IsoLink Oil Transfer Containers.....	12
9.0	Additional Accessories.....	13
Appendix 1	Additional Room Views.....	14
Appendix 2	LT LMS Feature Sheet.....	15
Appendix 3	FlowGuard Filter Cart Feature Sheet.....	21
Appendix 4	Adapter Kits Feature Sheet.....	27
Appendix 5	Drum Topper Feature Sheet.....	31
Appendix 6	FlowGuard Panel Unit Feature Sheet.....	37
Appendix 7	Drum Filter Cart Feature Sheet.....	43

1.0 Introduction

Des-Case's Lubrication Transformation Services are designed to not only show you the path from where you are to where you want to be, they can give you the tools to get it done.

The process can start in any one of five distinct areas:



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.

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. In conjunction with an array of products, 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 help you in your implementation.

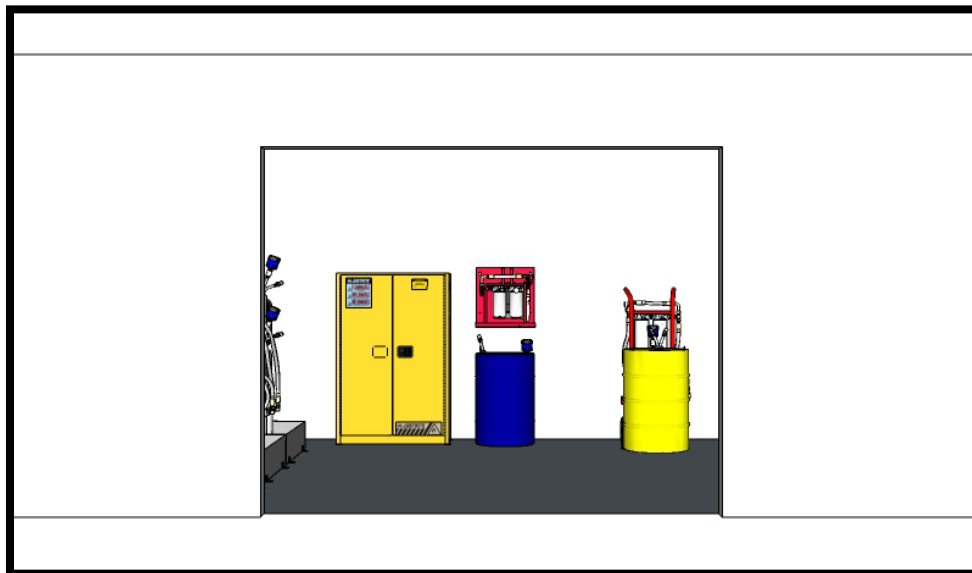
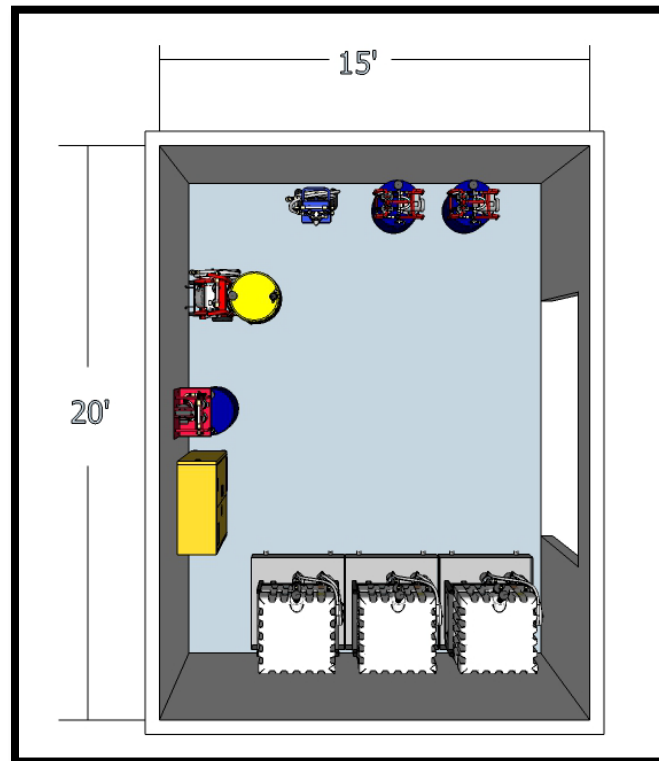
Getting clean, dry oil into machines (and keeping it that way) is one of the most fundamental elements of precision lubrication. Des-Case's lines of desiccant breathers, lubricant storage systems and oil transfer and filtration systems help plants meet or exceed the stringent contamination control targets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

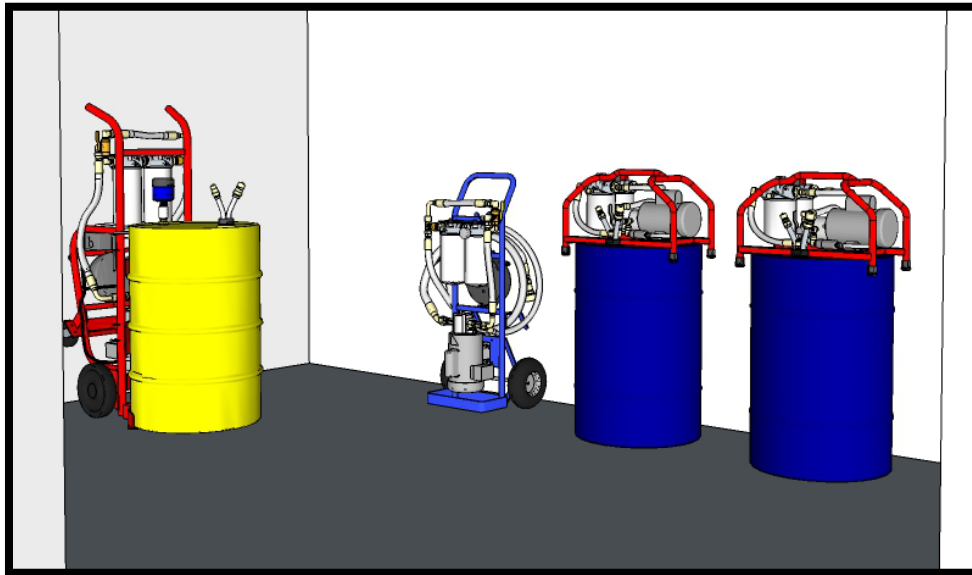
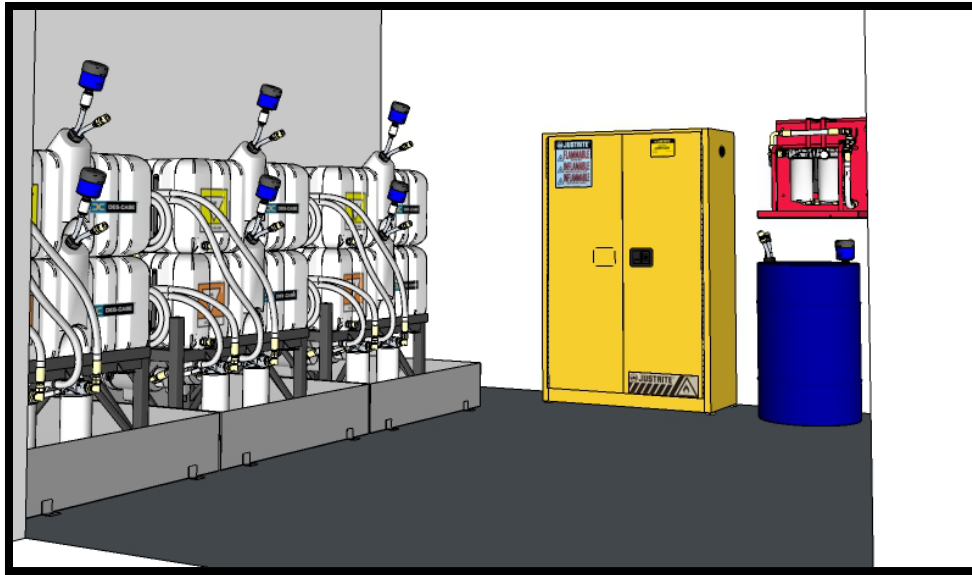
Filtration devices should be used to remove particles and water, further extending and preserving the working life of the oil. They are not just a tool for emergency remedial measures when dealing with contaminated lubricants and hydraulic fluids, but are an integral component of proactive maintenance.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

2.0 Overview

The objective of this project is to design the internal layout of the lubrication storage facility so that it meets the functional requirements without the need for any physical changes to the building footprint. This document is designed to provide recommendations on how to best enable the client to store, handle and dispense lubricants throughout the plant in order to maintain highly reliable components and machines. This is one of the first steps to achieving lubrication excellence.

3.0 Proposed Design





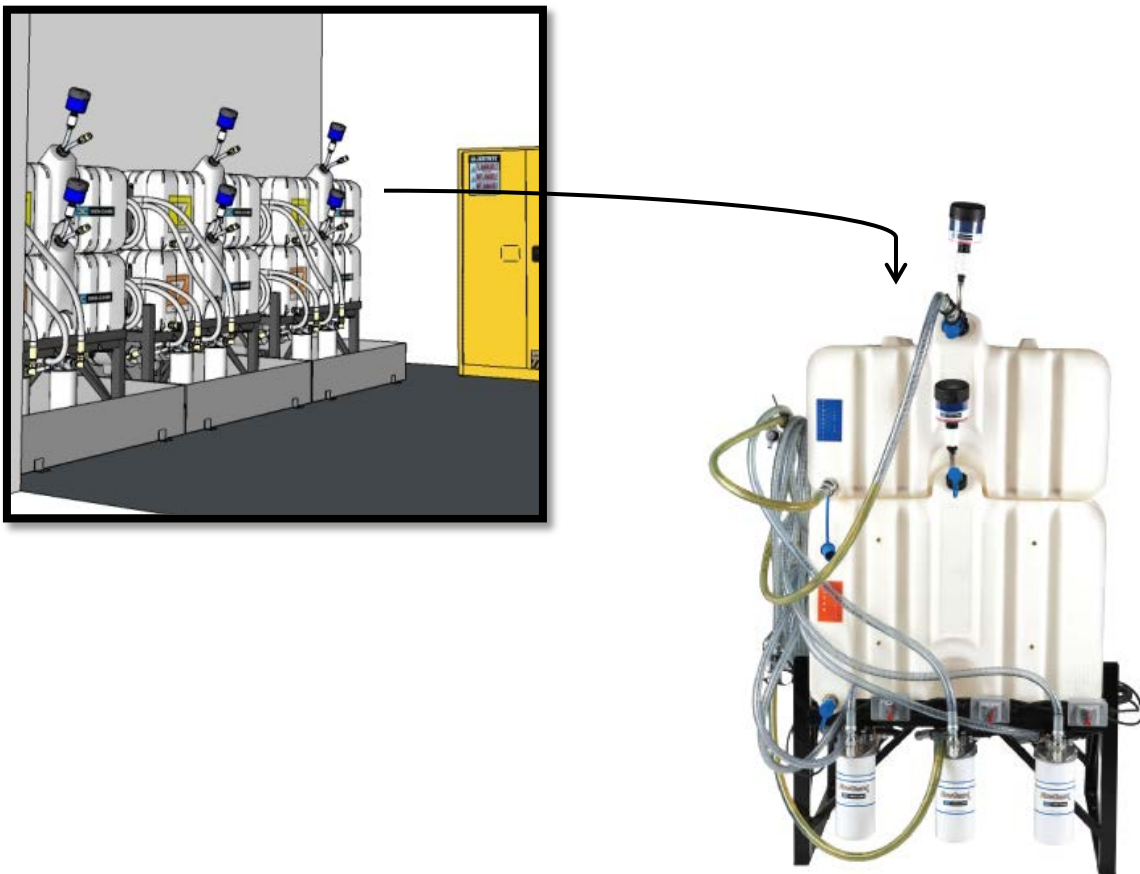
4.0 Bulk Storage

All of the high volume lubricants will be transferred to LT LMS units for storage and further conditioning and dispensing.

4.1 LT LMS Bulk Storage

The FlowGuard™ LT Series Lubricant Management System (LT-LMS) by Des-Case combines filtration, storage, and breather technologies to keep your lubricants clean before they enter your equipment.

The Des-Case LT-LMS combines easy storage with solid contamination control practices. Sturdy, stackable, and customizable pods free up valuable floor space and features like dedicated filtration, quick disconnects, and desiccant breather filters help keep fluids clean and dry.

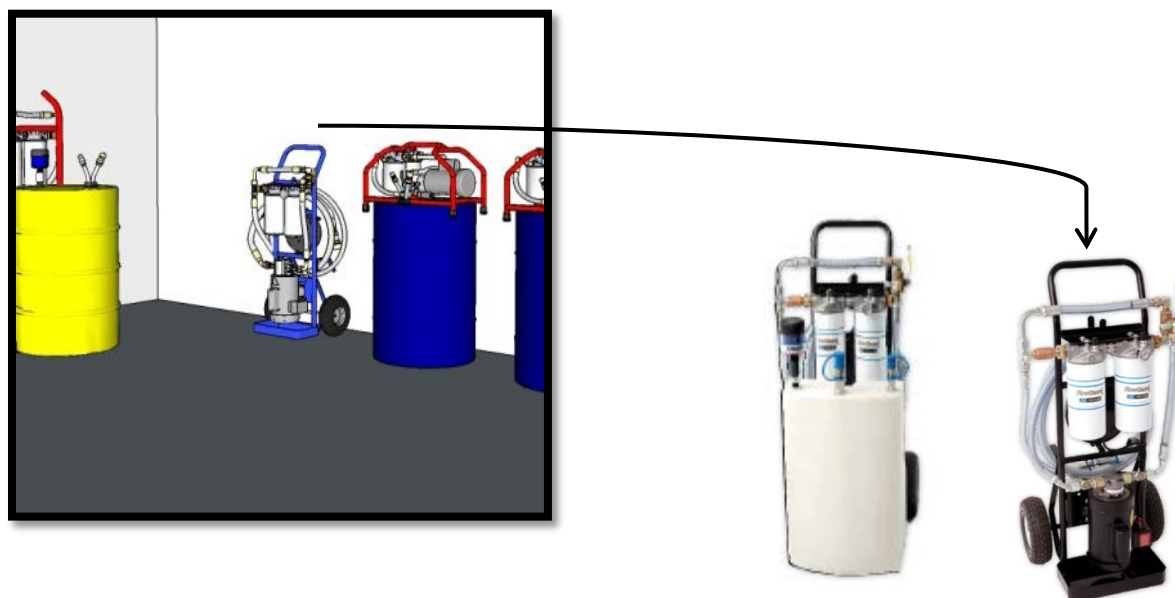


5.0 Mobile Filtration Units

Filter carts are a very important component in any world-class storage and handling facility. Based on the likely lubricant consumption and the types of lubricants used, you will need to determine the number of individual filter carts to satisfy the needs of your specialty lubricants to prevent cross contamination, mixing of base oils and additives.

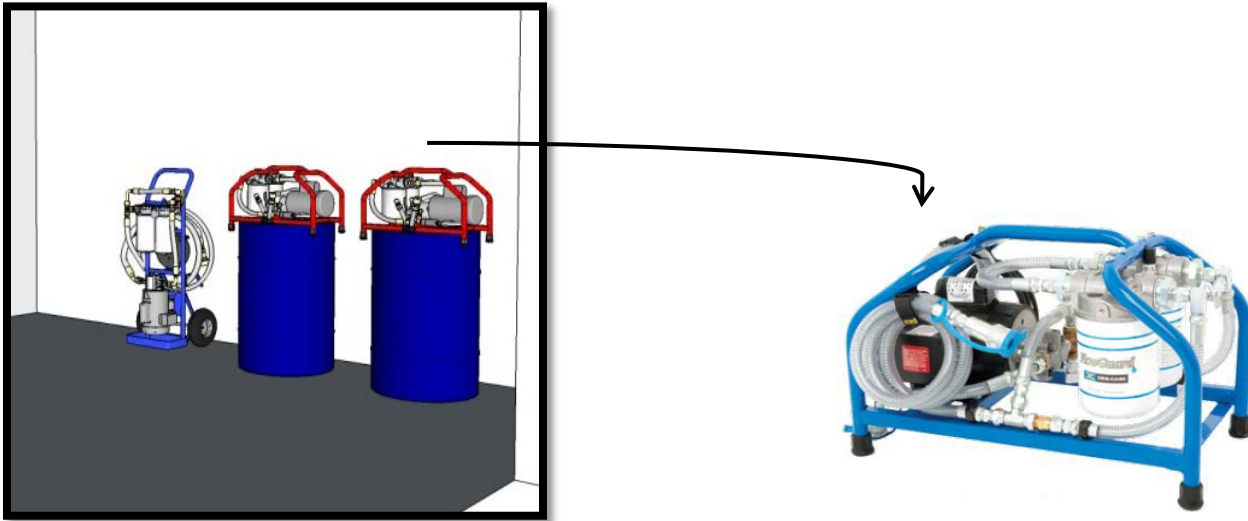
5.1 Wheeled FlowGuard™ Filtration Cart

The FlowGuard™ filtration systems represent the highest quality and most rugged systems available for purifying all types of industrial oils. These heavy-duty systems are capable of removing particles and/or free water from all types of oil—even high viscosity gear oils—and are designed for years of dependable service.



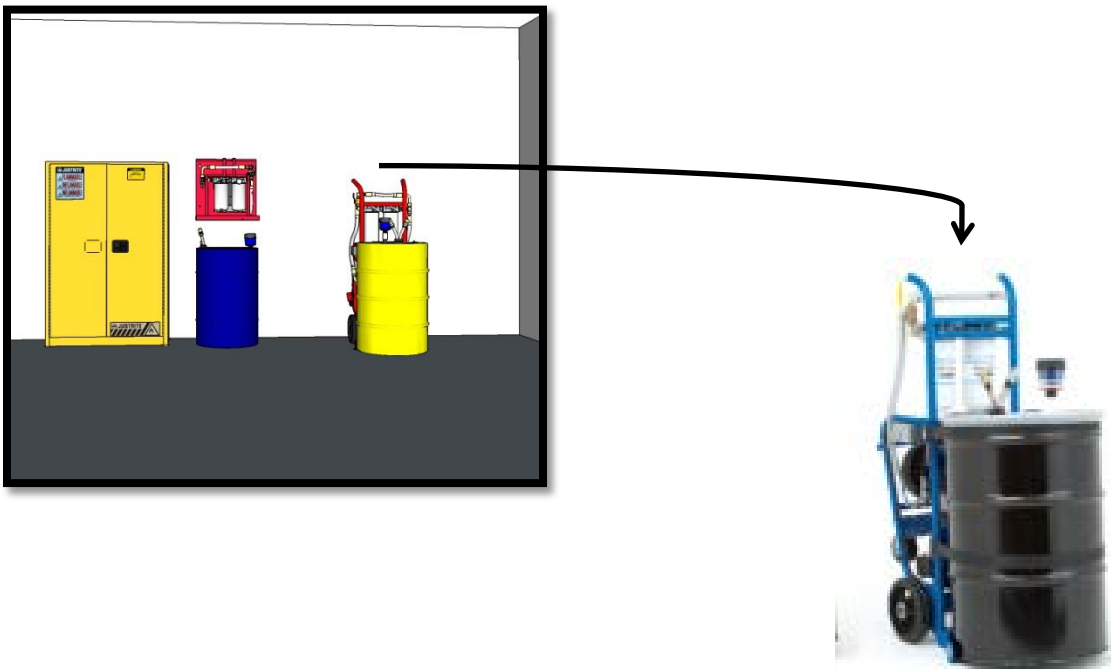
5.2 Drum Topper Filtration System

Like larger filters carts, drum toppers allow for filtration and delivery of smaller volumes of oil and are a very important component in any world-class storage and handling facility. Based on the likely lubricant consumption and the types of lubricants used, you may need to employ several drum toppers to satisfy the needs of your specialty, low consumption lubricants stored in drums to prevent cross contamination, mixing of base oils and additives.



5.3 Drum Filter Cart

Contaminated lubricating oil and hydraulic fluid results in excess machine wear, production downtime, and repair costs. Actively filtering lubricants can prevent contamination-related problems. The FlowGuard™ Drum Filter Cart is a customizable, all-in-one cart that filters and transfers oil from a conveniently attachable, secured drum.

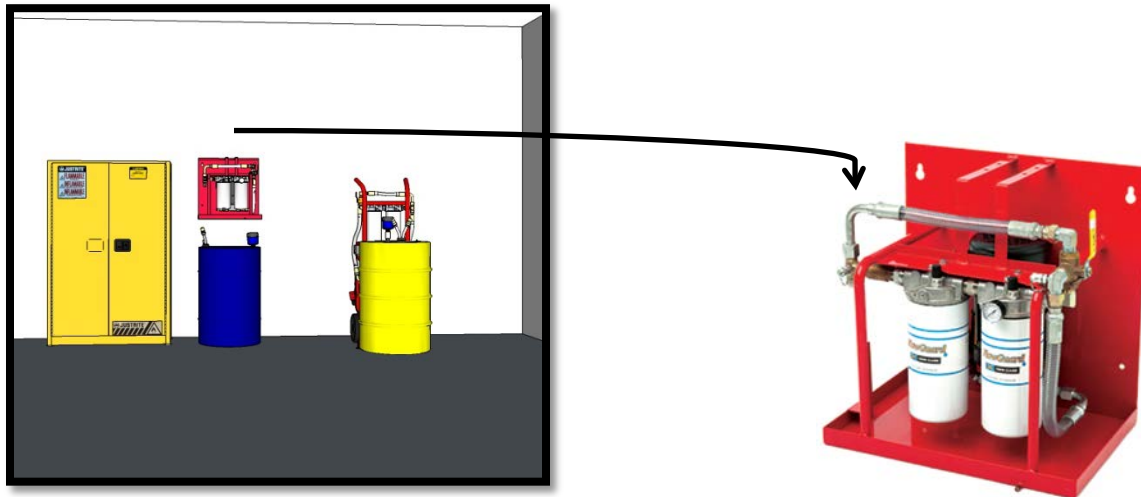


6.0 Dedicated Filtration Units

Dedicated filtration is an important component in any world-class storage and handling facility. Based on the likely lubricant consumption and the types of lubricants used, you will need to determine the number of individual dedicated filtration systems to satisfy the needs of your specialty lubricants to prevent cross contamination, mixing of base oils and additives. Dedicated filtration systems can be used as part of a lube room or as offline filtration on systems requiring additional filtration to maintain cleanliness levels.

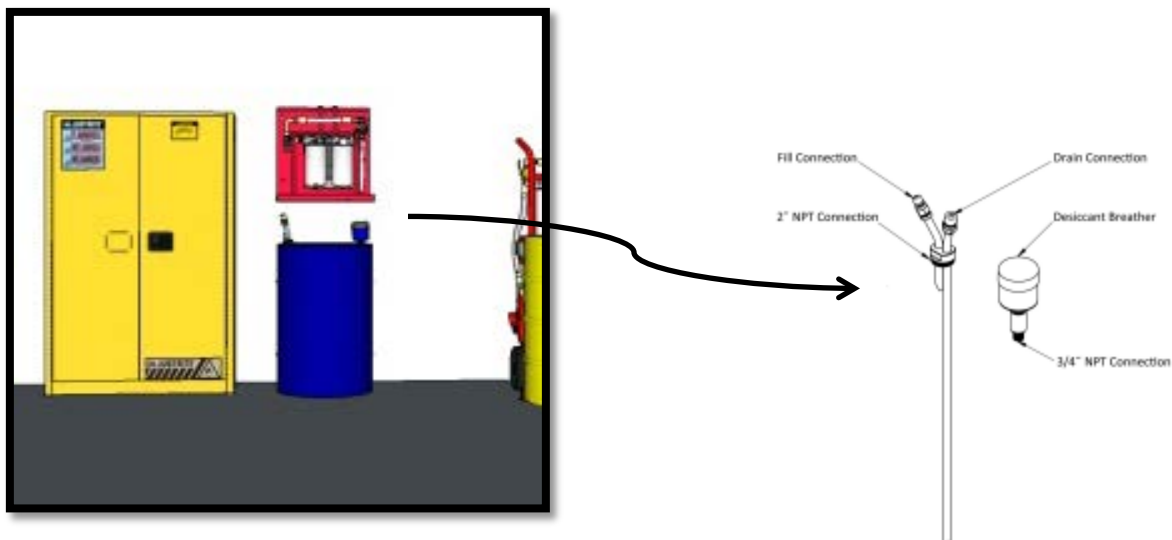
6.1 FlowGuard™ Panel Unit

The FlowGuard™ filtration systems represent the highest quality and most rugged systems available for purifying all types of industrial oils. These heavy-duty systems are capable of removing particles and/or free water from all types of oil—even high viscosity gear oils—and are designed for years of dependable service.



7.0 Drum Adapter Kit

Each drum will be fit with a Drum Adapter Kit to connect the panel mounted filtration system to the drum.



8.0 IsoLink Oil Transfer Containers

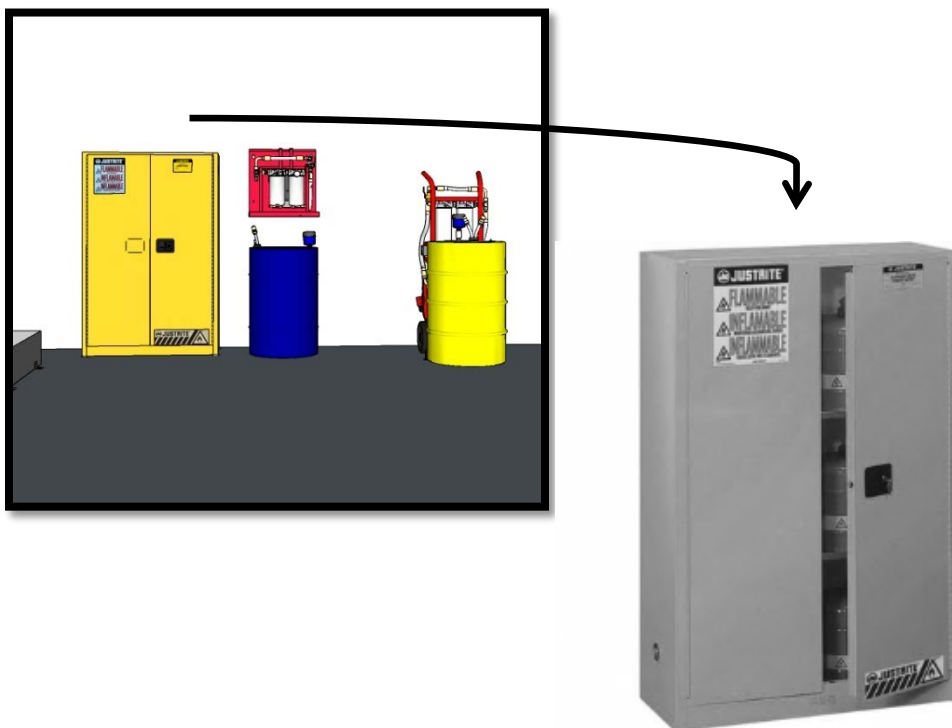
The IsoLink oil transfer containers represent the highest quality and most rugged systems available for transporting small volumes of oil. These heavy-duty oil jugs make it easy to transport and dispense oil all while keeping the oil free of contaminants. The valve system inside the dispensing top ensures that the container is sealed when not in use, and the option of a quick connect port makes filling the oil just faster and cleaner.



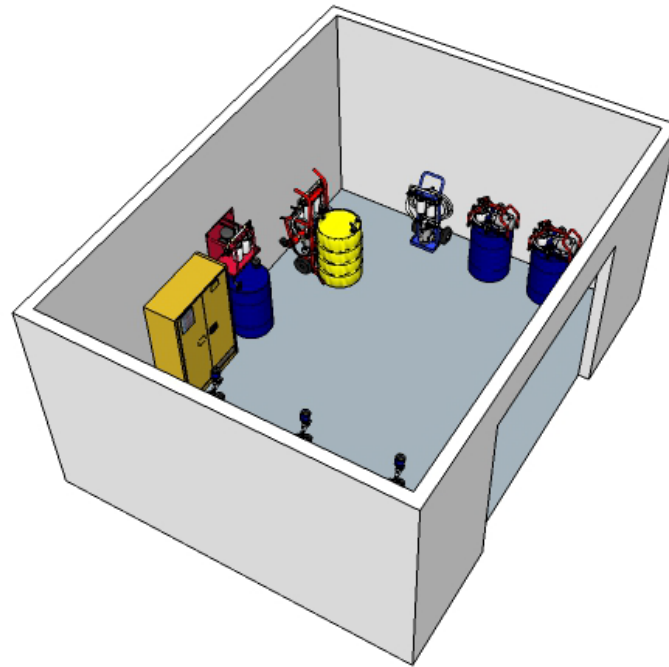
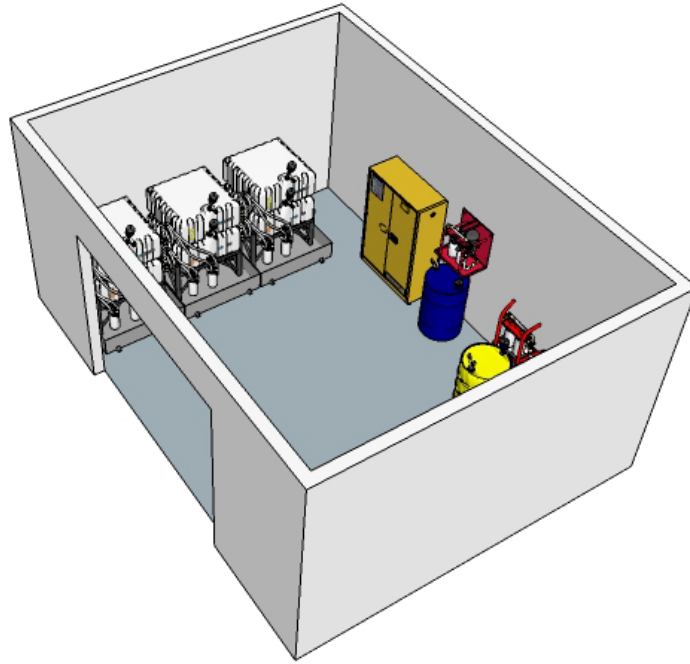
9.0 Additional Accessories

Safety Cabinets

A series of safety cabinets should be placed within the lubricant store room to hold accessories, top up containers and other necessary tools. These are an excellent location to store the IsoLink Oil jugs, providing a consistent location for stored oil.



Appendix 1



Fluid Handling: **LT Series Lubricant Management System (LT-LMS)**



This system combines filtration, storage, and breathers in one simple solution to keep your lubricants clean and dry.

The Overview

The LT-LMS:

Where It's Used

- Storing lubricant
- Dispensing new oil
- Pre-filtering new oil
- Collecting oil samples for analysis

What Is Standard?

- Automatic pressure relief valve
- Dedicated pump and motor per tank
- Desiccant breathers
- Heavy-duty stand
- 12' hose assemblies with various hose-end connections
- One-year warranty
- Industrial powder-coated paint

What Can I Customize?

- Flow rates
- Various tank sizes in high-density polyethylene (HDPE) or steel
- Manual gravity drain
- Sample valves
- Filter micron rating
- Hose-end connection sizes and types

Did You Know?

New oil isn't clean. One of the best places to start any improvement is in the lube room. While it may not have the biggest effect on the quality of the lubricant in each machine, it helps to set the tone for the whole lubrication program, changing the way mechanics, lubricators and operators think about lubrication.

Performance

For filtering mineral-based industrial oils and most synthetic oils with a maximum operating viscosity range of ISO VG 680 (3000ssu/648cSt) at 100°F/38°C within ambient temperature ranges of -15°F to 150°F (-26°C to 66°C)

Materials:

- Stand: Carbon steel
- Tank: HDPE or steel
- Paint: Industrial powder coat
- Filter Heads: Aluminum
- Fittings: Zinc-plated steel and/or brass
- Pumps: Aluminum/steel
- Hoses: Clear PVC with steel wire
- Gaskets: Buna-N

Filter Indicators:

- Filter indicator pops at 22psid (1.55bar) as warning that filter elements need to be replaced.

Pump Relief:

- Opens at 65psi (5.49bar)

Stacking Recommendations for HDPE Tanks:

- Stack tanks to a maximum height of 75" tall (including the stand, which is 20" tall).

Tank Dimensions:

80-gallon tank: 36"L x 36"W x 18"H

120-gallon tank: 36"L x 36"W x 27"H

180-gallon tank: 36"L x 36"W x 39"H

240-gallon tank: 36"L x 36"W x 49"H

Stacking Recommendations for Steel Tanks:

- 75-gallon tank: maximum of 3 stacked high
- 150-gallon tank: non-stackable
- 300-gallon tank: non-stackable

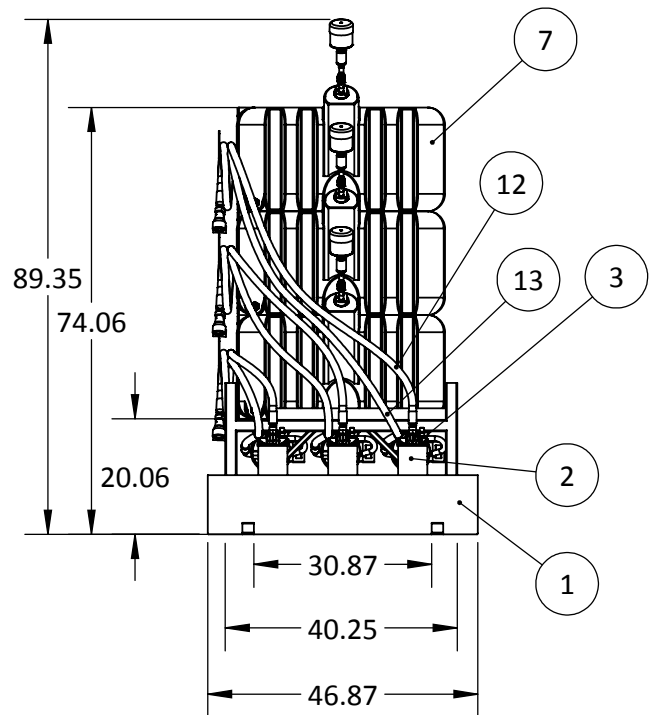
Don't see the options you need? Contact our Technical Support team at (615) 672-8800 or sales@descase.com. Also contact us for information about accessories, such as spill containment reservoirs.

The Specs

By the Numbers

Item No.	Description	Qty.*
1	Spill Containment Pan (purchased separately)	1
2	Filter Element	3
3	Filter Head	3
4	Stand	1
5	Gear Pump	3
6	Motor	3
7	HDPE Tank	3
8	Tote Adapter	3
9	Drain Port	3
10	Fill Port	3
11	Desiccant Breather	3
12	Discharge Hose	3
13	Suction Hose	3

*For a 3-tank system configuration



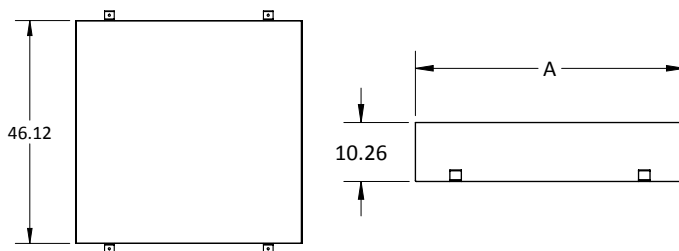
How to Size Spill Containment Pans:

- 110% of the volume of the largest container
- Ex:** For a 3-stackable 80-gallon HDPE tank system, use the 95-gallon containment pan.

Aluminum Spill Containments:

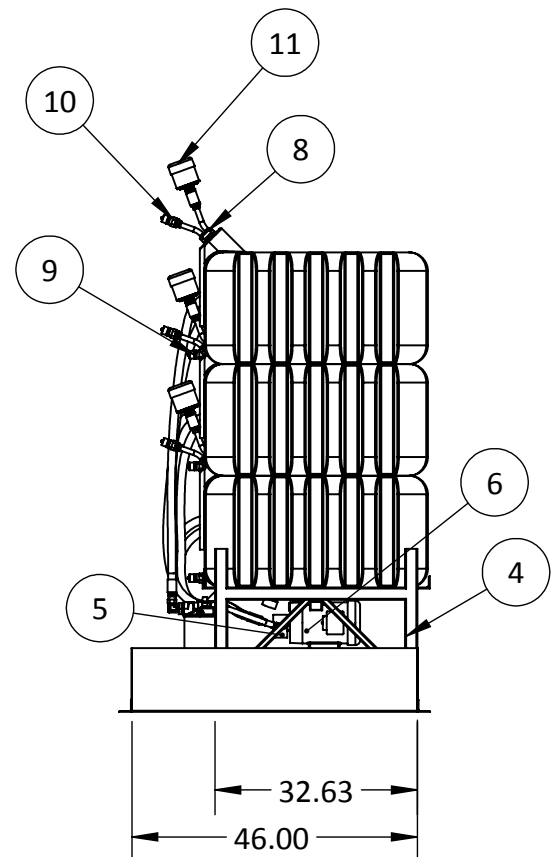
- "A" L x 46.20"W x 10.26"H

Spill Containment Size	"A" Dimension
95	46.87
135	66.62
200	98.62
265	130.62



HDPE Spill Containment Pan:

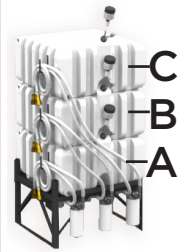
- 203 gallon (for 80-gal and 120-gal options)
- 58"L x 52"W x 20"H



For ordering information, please see insert or contact us at (615) 672-8800.

To Order: LT-LMS

LT	C Upper Unit								
LT	B Middle Unit								
LT	A Lower Unit								
	Box 1	Box2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8	Box 9



Tank Size [Box 2]

Code	Description
75	75-gallon tank (Steel only)
80	80-gallon tank (HDPE only)
120	120-gallon tank (HDPE only)
150	150-gallon tank (Steel only)
180	180-gallon tank (HDPE only)
240	240-gallon tank (HDPE only)
300	300-gallon tank (Steel only)

Pump/Motor Combinations [Box 3]

60 Hz Options		50 Hz Options	
Code	Description	Code	Description
02E	2gpm/1 hp electric, 115 vac, 60 Hz, 1725 rpms, 13 amps	02G	1.5gpm/1 hp electric, 110 vac, 50 Hz, 1425 rpms, 12.4 amps
05E	5gpm/1 hp electric, 115 vac, 60 Hz, 1725 rpms, 13 amps	05G	4gpm/1 hp electric, 110 vac, 50 Hz, 1425 rpms, 12.4 amps
10E*	10gpm/1 hp electric, 115 vac, 60 Hz, 1725 rpms, 13 amps	10G*	8gpm/1 hp electric, 110 vac, 50 Hz, 1425 rpms, 12.4 amps
02F	2gpm/1 hp electric, 230 vac, 60 Hz, 1725 rpms, 6.5 amps	02H	1.5gpm/1 hp electric, 220 vac, 50 Hz, 1425 rpms, 6.2 amps
05F	5gpm/1 hp electric, 230 vac, 60 Hz, 1725 rpms, 6.5 amps	05H	4gpm/1 hp electric, 220 vac, 50 Hz, 1425 rpms, 6.2 amps
10F*	10gpm/1 hp electric, 230 vac, 60 Hz, 1725 rpms, 6.5 amps	10H*	8gpm/1 hp electric, 220 vac, 50 Hz, 1425 rpms, 6.2 amps
Pneumatic Options		Pneumatic Options	
02A	2gpm/1 hp air, 0-3000 rpms	08A	8gpm/1 hp air, 0-3000 rpms

NOTE: Performance will vary depending on operating temperature, fluid type, and unit options. Call Des-Case for assistance in choosing a flow rate specific to your needs. 65psi pressure relief valve included.

*Not recommended for steel tanks.

Options 4 through 9 listed on next page.

Drain & Fill Connector Type [Box 4]

Code	Description
B	ISO B Connector
A	ISO A Connector
F	Flush Face Connector
R	ISO B Connector-BSPP
Q	ISO A Connector-BSPP
P	Flush Face Connector-BSPP

NOTE: All connectors are coupler ends (female)

Filter Box [Box 6]

Code	Description
Large Filter	
A	3-micron Particulate Filter
B	6-micron Particulate Filter
C	12-micron Particulate Filter
D	25-micron Particulate Filter
J	Water Filter

Breather Filters [Box 9]

Code	Description
2*	3-micron particulate desiccant breather [DC-2]
3	3-micron particulate desiccant breather [DC-3]
4	3-micron particulate desiccant breather [DC-4]

*Standard

Replace Your Elements

Part No.	Micron Rating
FC-AF	Beta 200 @ 3um
FC-BF	Beta 200 @ 6um
FC-CF	Beta 200 @ 12um
FC-DF	Beta 200 @ 25um
FC-JF	Water Removal

NOTE: Other micron sizes available upon request.

Drain & Fill Sizing [Box 5]

Code	Description
1	Drain: 1" hose & connection Fill: ¾" hose & connection
2	Drain: ¾" hose & connection Fill: ½" hose & connection

NOTE: Units are built for optimum performance when using 1" (drain) and ¾" (fill) connections. Decrease in performance may occur when selecting other size combinations. Hoses are 1" and ¾" respectively, regardless of connection sizes.

Sample Valves [Box 7]

Code	Description
0	None
1	Standard Minimes
2	High Viscosity

Manual Gravity Drain [Box 8]

Code	Description
0	None
D	Gravity Drain

You also can customize your system online at www.descase.com.

Fluid Handling: The Entire Des-Case Line

We offer a full range of fluid handling and filtration products in Portable Filtration, Dedicated Filtration, Water Removal, Lubricant Storage & Filtration, Filter Elements, and Adapter Kits to suit your needs.

Customize your system today at www.descase.com.

Des-Case Corporation
675 N. Main St.
Goodlettsville, TN 37072
(615) 672-8800
Fax (615) 672-0701
www.descase.com

Keeping Contamination Under Control[®]

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Fluid Handling: **Filter Cart**



A portable, offline filtration system that's ideal for mineral-based industrial fluids and a wide range of applications.

The Overview

The Filter Cart:

Where It's Used

- Decontaminating systems
- Flushing new or repaired systems
- Dispensing oil
- Pre-filtering new oil
- Evacuating used oil
- Topping off reservoirs
- Collecting oil samples for analysis

What Is Standard?

- Automatic pressure relief valve
- Dual-stage filtration
- 12' hose assemblies with various quick connect options
- Pneumatic wheels for easy mobility
- Industrial powder-coated paint
- Heavy-duty cart with oil catch pan
- One-year warranty

What Can I Customize?

- Flow rates
- Filter bypass
- Sample valves
- Y-strainer
- Connection sizes
- Color
- Hose-end connection sizes and types
- Micron rating of filters

Performance

For filtering mineral-based industrial oils and most synthetic oils with a maximum operating viscosity range of ISO VG 680 (3000ssu/648cSt) at 100°F/38°C within ambient temperature ranges of -15°F to 150°F (-26°C to 66°C)

Materials:

- Frame: Carbon steel
- Paint: Industrial powder coat
- Filter Heads: Aluminum
- Fittings: Zinc-plated steel and/or brass
- Pumps: Aluminum/steel
- Hoses: Clear PVC with steel wire or hydraulic hose
- Gaskets: Buna-N

Filter Indicators:

- Filter indicator pops at 22psid (1.55bar) as warning that filter elements need to be replaced

Pump Relief:

- Opens at 65psi

Weight:

- Approximately 100-150lbs (will vary depending on options selected)

Dimensions:

- 18.8"L x 21.5"W x 46.4"H

Call Des-Case for the Following Needs:

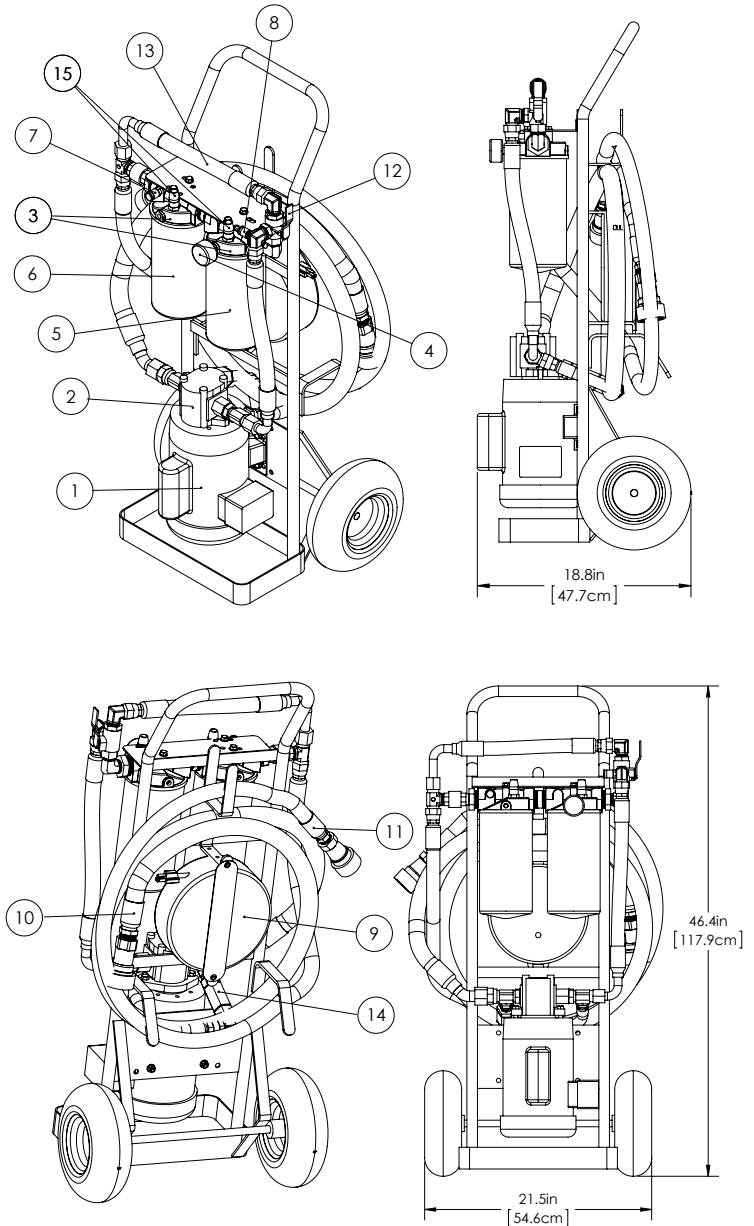
- CE certification
- Explosion-proof
- Wands
- Threaded end connectors
- Particle counters
- Hydraulic hoses
- Viton® gaskets
- High viscosity push button sample valves

Don't see the options you need? Contact our Technical Support team at (615) 672-8800 or sales@descase.com.

The Specs

By the Numbers

Item No.	Description	Qty.
1	Motor	1
2	Gear Pump	1
3	Filter Head	2
4	Pressure Gauge	1
5	Filter Element A	1
6	Filter Element B	1
7	Post-Filter Sample Valve	1
8	Pre-Filter Sample Valve	1
9	25' Cord or Cord Reel	1
10	12' Suction Hose	1
11	12' Pressure Hose	1
12	Manual Filter Bypass Valve	1
13	Filter Bypass	1
14	Pump Relief-65psi	1
15	Filter Change Indicator	1



Did You Know?

The filter cart pairs perfectly with Des-Case's tote, drum, hydraulic, gearbox, and drain port adapter kits. Customize your mating kit at www.descase.com

For ordering information, please see insert or contact us at (615) 672-8800.

To Order: Filter Cart

FC										
	Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8	Box 9	Box 10

Pump/Motor Combinations [Box 1]

60 Hz Options		50 Hz Options	
Code	Description	Code	Description
02E	2gpm/1 hp electric, 115 vac, 60 Hz, 1725 rpms, 13 amps	02G	1.5gpm/1 hp electric, 110 vac, 50 Hz, 1425 rpms, 12.4 amps
05E	2gpm/1 hp electric, 115 vac, 60 Hz, 1725 rpms, 13 amps	05G	4gpm/1 hp electric, 110 vac, 50 Hz, 1425 rpms, 12.4 amps
10E	2gpm/1 hp electric, 115 vac, 60 Hz, 1725 rpms, 13 amps	10G	8gpm/1 hp electric, 110 vac, 50 Hz, 1425 rpms, 12.4 amps
02F	2gpm/1 hp electric, 230 vac, 60 Hz, 1725 rpms, 6.5 amps	02H	1.5gpm/1 hp electric, 220 vac, 50 Hz, 1425 rpms, 6.2 amps
05F	2gpm/1 hp electric, 230 vac, 60 Hz, 1725 rpms, 6.5 amps	05H	4gpm/1 hp electric, 220 vac, 50 Hz, 1425 rpms, 6.2 amps
10F	10gpm/1 hp electric, 230 vac, 60 Hz, 1725 rpms, 6.5 amps	10H	8gpm/1 hp electric, 220 vac, 50 Hz, 1425 rpms, 6.2 amps
Pneumatic Options		Pneumatic Options	
02A	2gpm/1.7 hp air, 0-3000 rpms	08A	8gpm/1.7 hp air, 0-3000 rpms

NOTE: Performance will vary depending on operating temperature, fluid type, and unit options. 65psi pressure relief valve included.

Drain & Fill Connector Type [Box 2]

Code	Description
B	ISO B Connector
A	ISO A Connector
F	Flush Face Connector
R	ISO B Connector-BSPP
Q	ISO A Connector-BSPP
P	Flush Face Connector-BSPP

NOTE: All connectors are coupler ends (female)

Drain & Fill Sizing [Box 3]

Code	Description
1	Drain: 1" hose & connection Fill: ¾" hose & connection
2	Drain: ¾" hose & connection Fill: ½" hose & connection

NOTE: Units are built for optimum performance when using 1" (drain) and ¾" (fill) connections. Decrease in performance may occur when selecting other size combinations. Hoses are 1" and ¾" respectively regardless of connection sizes.

Filter A [Box 4]/Filter B [Box 5]

Code	Description
K	3-micron Particulate Filter
L	6-micron Particulate Filter
M	12-micron Particulate Filter
N	25-micron Particulate Filter
W	Water Filter

Manual Filter Bypass [Box 6]

Code	Description
0	None
B	Filter Bypass

Sample Valves [Box 7]

Code	Description
0	None
1	Standard Minimess
2	High Viscosity

Options 8 through 10 continued on next page.

Cord Reel [Box 8]

Code	Description
0	None*
C	25' cord reel**

*Comes with the standard cord or no cord for pneumatic/air systems
**60Hz motor option only

Y-Strainer [Box 9]

Code	Description
0	None
Y	Y-Strainer

Custom Colors [Box 10]

Code	Description
1	Brushed Aluminum
2	Black
3	White
4	Blue
5	Red
6	Yellow

You also can customize your system online at www.descase.com.

Replace Your Elements

Part No.	Micron Rating
FC-AF	Beta 200 @ 3um
FC-BF	Beta 200 @ 6um
FC-CF	Beta 200 @ 12um
FC-DF	Beta 200 @ 25um
FC-JF	Water Removal

NOTE: Other micron sizes available upon request.



Fluid Handling: The Entire Des-Case Line

We offer a full range of fluid handling and filtration products in Portable Filtration, Dedicated Filtration, Water Removal, Lubricant Storage & Filtration, Filter Elements, and Adapter Kits to suit your needs.

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Fluid Handling: Drum Adapter Kit



Easily connect your drum of oil to your filtration system while keeping your lubricants and equipment clean and dry.

The Overview

The Drum Adapter Kit: The Key Benefits

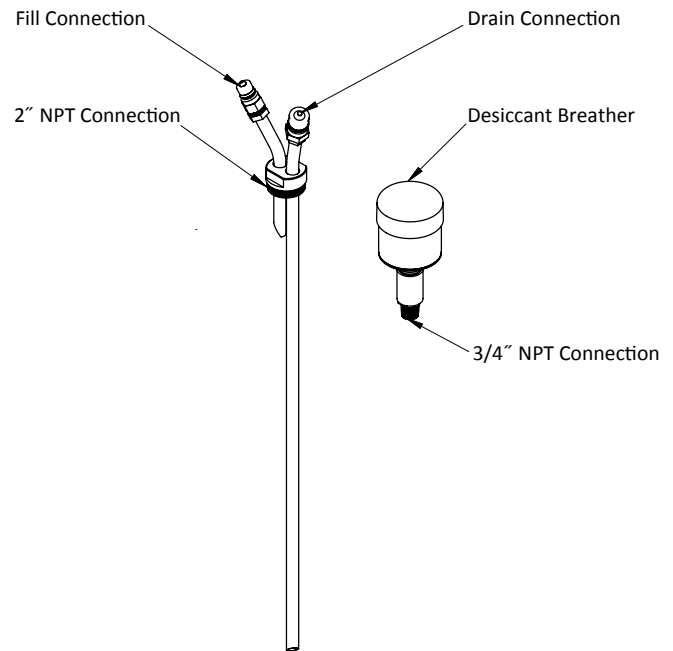
- Prohibits entry of dirt and moisture
- Allows for easy equipment adaptation and quick connection to a filtration system
- Allows for customization

What Are All the Features?*

- Replaceable breather with color-indicating desiccant
- Quick connect plugs
- Sample valve
- 2" male NPT connection size
- Customizable colors

*Don't see the options you need? Contact our Technical Support team at (615) 672-8800 or sales@descase.com.

Which Part Is Which?



Did You Know?

Pairing fluid handling filtration with breather protection, via a Des-Case adapter kit, allows for maximum system integrity—requiring less equipment and labor while reducing system contamination.

Try the Entire Selection of Des-Case Adapter Kits



To Order: Drum Adapter Kit

DA						
	Box 1	Box 2	Box 3	Box 4	Box 5	Box 6

Drain & Fill Connector Type [Box 1]

Code	Description
B	ISO B Connector
A	ISO A Connector
F	Flush Face Connector
R	ISO B Connector-BSPP
Q	ISO A Connector-BSPP
P	Flush Face Connector-BSPP

NOTE: All connectors are plug ends (male). Includes a 6" fill tube and a 35" drain tube.

Sample Valve [Box 3]

Code	Description
0	None
1	Standard Minimess
2	High Viscosity

Breather Filter[†] [Box 5]

Code	Description	
02*	3-micron particulate desiccant breather; 0-200 gallons; 120gpm	[DC-2]
03	3-micron particulate desiccant breather; 201-350 gallons; 120gpm	[DC-3]
04	3-micron particulate desiccant breather; 351-500 gallons; 120gpm	[DC-4]
V2	3-micron particulate desiccant hybrid breather; 0-200 gallons; 18.75gpm	[DC-VG-2]
V3	3-micron particulate desiccant hybrid breather; 201-350 gallons; 17.1gpm	[DC-VG-3]
V4	3-micron particulate desiccant hybrid breather; 351-500 gallons; 13.5gpm	[DC-VG-4]

*Standard for drum adapters

NOTE: For breather replacement, use bracketed part number.

[†]Considerations such as humidity level, frequency, and maximum amount of air flow, ambient temperatures, gallons of lubricant, and chemical compatibility are very important in sizing a desiccant breather properly. Call Des-Case for assistance in sizing the appropriate breather for your application.

Custom Colors [Box 6]

Code	Description
1	Brushed Aluminum
2*	Black
3	White
4	Blue
5	Red
6	Yellow

*Black is standard

Drain & Fill Sizing [Box 2]

Code	Description
1	Drain: 1" connection Fill: ¾" connection
2	Drain: ¾" connection Fill: ½" connection

NOTE: Units are built for optimum performance when using 1" (drain) and ¾" (fill) connections. Decrease in performance may occur when selecting other size combinations.

Sample Tube Length [Box 4]

Code	Description
00	None
17*	17" Sample Tube Length

NOTE: Must be selected if a sample valve is selected

You also can customize your system online at www.descase.com.

Fluid Handling: The Entire Des-Case Line

We offer a full range of fluid handling and filtration products in Portable Filtration, Dedicated Filtration, Water Removal, Lubricant Storage & Filtration, Filter Elements, and Adapter Kits to suit your needs.

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Des-Case Corporation
675 N. Main St.
Goodlettsville, TN 37072
(615) 672-8800
Fax (615) 672-0701
www.descase.com

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Fluid Handling: Drum Topper



Convenient, portable filtration in a compact design that you can carry wherever you need to go.

The Overview

The Drum Topper: Where It's Used

- Decontaminating systems
- Flushing new or repaired systems
- Dispensing new oil
- Pre-filtering new oil
- Evacuating used oil
- Topping off reservoirs
- Collecting oil samples for analysis

What Is Standard?

- Automatic pressure relief valve
- Dual-stage filtration
- 6' hose assemblies with various hose-end connections
- Industrial powder-coated paint
- One-year warranty

What Can I Customize?

- Flow rates
- Filter bypass
- Sample valves
- Color
- Hose-end connection sizes and types
- Micron rating of filters

Performance

For filtering mineral-based industrial oils and most synthetic oils with a maximum operating viscosity range of ISO 10-460 (2000ssu/431cSt) at 100°F/38°C within ambient temperature ranges of -8°F to 104°F (-22°C to 40°C)

Materials:

- Frame: Aluminum
- Paint: Industrial powder coat
- Filter Heads: Aluminum
- Fittings: Zinc-plated steel and/or brass
- Pumps: Aluminum/steel
- Hoses: Clear PVC with steel wire
- Gaskets: Buna-N

Filter Indicators:

- Filter indicator pops at 22psid (1.55bar) as warning that filter elements need to be replaced

Pump Relief:

- Opens at 65psi (5.49bar)

Weight:

- Approximately 45-55lbs/20.4-24.9Kg (will vary depending on options selected)

Dimensions:

- 24.5"L x 13.5"W x 15.4"H

Call Des-Case for the Following Needs:

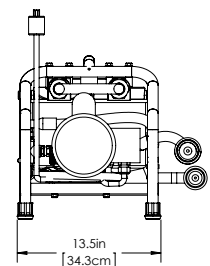
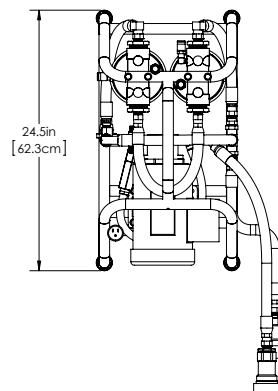
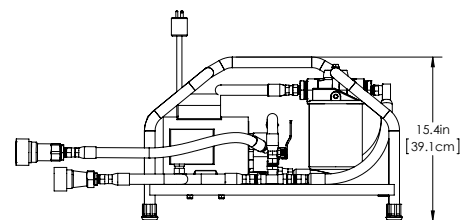
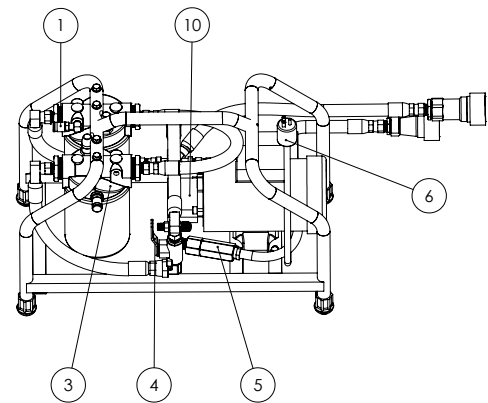
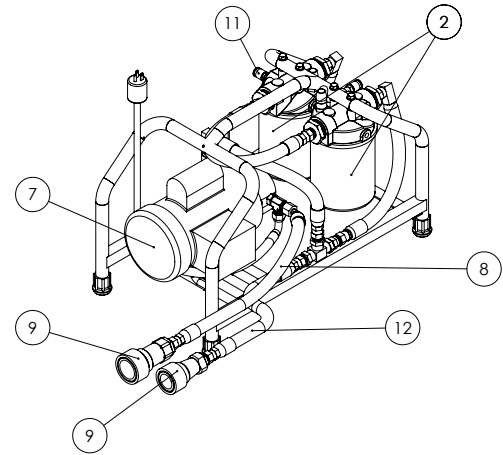
- Explosion-proof
- Wands
- Threaded end connectors
- Hydraulic hoses
- Viton® gaskets
- High-viscosity push button sample valves

Don't see the options you need? Contact our Technical Support team at (615) 672-8800 or sales@descase.com.

The Specs

By the Numbers

Item No.	Description	Qty.
1	Post-Filter Sample Valve	1
2	Filter Element	2
3	Filter Head	1
4	Manual Filter Bypass Valve	1
5	Pump Relief-65psi	1
6	10' Power Cord	1
7	Motor	1
8	½" Inlet Hose	1
9	Quick Connect	1
10	Gear Pump	1
11	Pre-Filter Sample Valve	1
12	½" Outlet Hose	1



Did You Know?

The drum topper pairs perfectly with Des-Case's tote, drum, hydraulic, gearbox, and drain port adapter kits.

For ordering information, please see insert or contact us at (615) 672-8800.

To Order: Drum Topper

DT								
Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8	

Pump/Motor Combinations [Box 1]

High-Viscosity Option (ISO VG 150 to 460 at 60°F to 100°F)

Code	Description
------	-------------

60 Hz Options

01E	1gpm/.25 hp electric, 115 vac, 60 Hz, 1725 rpms, 5 amps
-----	---

01F	1gpm/.25 hp electric, 230 vac, 60 Hz, 1725 rpms, 2.5 amps
-----	---

50 Hz Options

01G	.75gpm/.25 hp electric, 110 vac, 50 Hz, 1425 rpms, 5.4 amps
-----	---

01H	.75gpm/.25 hp electric, 220 vac, 50 Hz, 1425 rpms, 2.7 amps
-----	---

Low-Viscosity Option (ISO VG 100 at 60°F to 100°F)

60 Hz Options

03E	3.5gpm/.25 hp electric, 115 vac, 60 Hz, 1725 rpms, 5 amps
-----	---

03F	3.5gpm/.25 hp electric, 230 vac, 60 Hz, 1725 rpms, 2.5 amps
-----	---

50 Hz Options

03G	2.75gpm/.25 hp electric, 110 vac, 50 Hz, 1425 rpms, 5.4 amps
-----	--

03H	2.75gpm/.25 hp electric, 220 vac, 50 Hz, 1425 rpms, 2.7 amps
-----	--

Pneumatic Options

02A	2gpm/1.7 hp air, 0-3000 rpms
-----	------------------------------

08A	8gpm/1.7 hp air, 0-3000 rpms
-----	------------------------------

NOTE: Performance will vary depending on operating temperature, fluid type and unit options. Call Des-Case for assistance.

Manual Filter Bypass [Box 6]

Code	Description
------	-------------

0	None
---	------

B	Filter Bypass
---	---------------

Sample Valves [Box 7]

Code	Description
------	-------------

0	None
---	------

1	Standard Minimess
---	-------------------

2	High Viscosity
---	----------------

Drain & Fill Connector Type [Box 2]

Code	Description
------	-------------

B	ISO B Connector
---	-----------------

A	ISO A Connector
---	-----------------

F	Flush Face Connector
---	----------------------

R	ISO B Connector-BSPP
---	----------------------

Q	ISO A Connector-BSPP
---	----------------------

P	Flush Face Connector-BSPP
---	---------------------------

NOTE: All connectors are coupler ends (female)

Drain & Fill Sizing [Box 3]

Code	Description
------	-------------

1	Drain: 1" hose & connection Fill: ¾" hose & connection
---	---

2	Drain: ¾" hose & connection Fill: ½" hose & connection
---	---

NOTE: Units are built for optimum performance when using 1" (drain) and ¾" (fill) connections. Decrease in performance may occur when selecting other size combinations. Hoses are 1" and ¾" respectively regardless of connection sizes.

Filter A [Box 4]/Filter B [Box 5]

Code	Description
------	-------------

K	3-micron Particulate Filter
---	-----------------------------

L	6-micron Particulate Filter
---	-----------------------------

M	12-micron Particulate Filter
---	------------------------------

N	25-micron Particulate Filter
---	------------------------------

W	Water Filter
---	--------------

Custom Colors [Box 8]

Code	Description
------	-------------

1	Brushed Aluminum
---	------------------

2	Black
---	-------

3	White
---	-------

4	Blue
---	------

5	Red
---	-----

6	Yellow
---	--------

For replacement elements, see next page.

You also can customize your system online at www.descase.com.

Replace Your Elements

Part No.	Micron Rating
FC-KF	Beta 200 @ 3um
FC-LF	Beta 200 @ 6um
FC-MF	Beta 200 @ 12um
FC-NF	Beta 200 @ 25um
FC-WF	Water Removal



Fluid Handling: The Entire Des-Case Line

We offer a full range of fluid handling and filtration products in Portable Filtration, Dedicated Filtration, Water Removal, Lubricant Storage & Filtration, Filter Elements, and Adapter Kits to suit your needs.

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Fluid Handling: **Panel Unit**



A permanently mounted, continuous-duty system for critical applications or difficult to access equipment. It also can serve as a maintenance station.

The Overview

The Panel Unit:

Where It's Used

- Decontaminating systems
- Cooling systems
- Collecting oil samples for analysis

What Is Standard?

- Automatic pressure relief valve
- Dual-stage filtration
- Durable frame with drip pan for direct mounting
- Industrial powder-coated paint
- One-year warranty

What Can I Customize?

- Flow rates
- Filter bypass
- Sample valves
- Oil cooler
- Temperature gauge
- Color
- Hose-end connection sizes and types
- Micron rating of filters

Call Des-Case for the Following Needs:

- Explosion-proof
- Particle counters
- Hydraulic plumbing hoses
- Viton® gaskets
- High viscosity push button sample valves

Performance

For filtering mineral-based industrial oils and most synthetic oils with a maximum operating viscosity range of ISO VG 680 (3000ssu/648cSt) at 100°F/38°C within ambient temperature ranges of -15°F to 150°F (-26°C to 66°C)

Materials:

- Frame: Carbon steel
- Paint: Industrial powder coat
- Filter Heads: Aluminum
- Fittings: Zinc-plated steel and/or brass
- Pumps: Aluminum/steel
- Plumbing Hoses: Clear PVC with steel wire
- Gaskets: Buna-N

Filter Indicators:

- Filter indicator pops at 22psid (1.55bar) as warning that filter elements need to be replaced

Pump Relief:

- Opens at 65psi (5.49bar)

Weight:

- Approximately 100-130lbs (will vary depending on options selected)

Dimensions:

- 15.6"L x 23.4"W x 25.8"H

Did You Know?

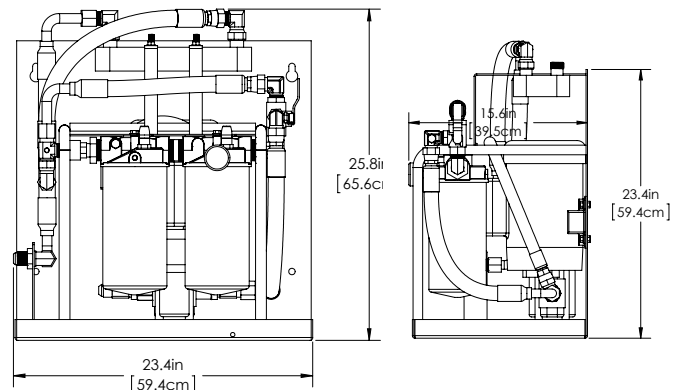
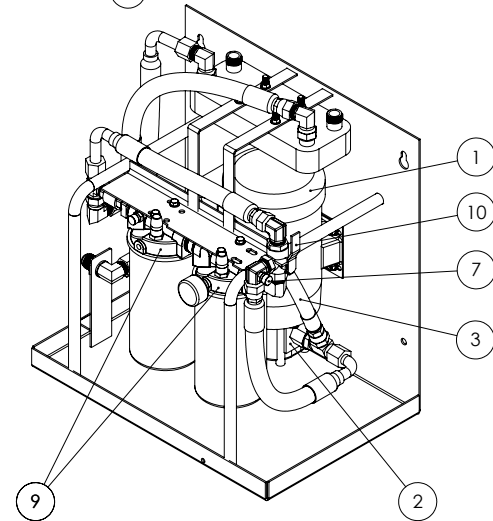
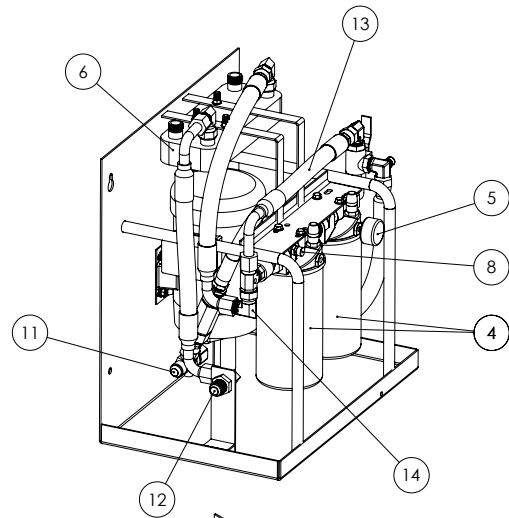
New oil isn't clean. One of the best places to start any improvement is in the lube room. While it may not have the biggest effect on the quality of the lubricant in each machine, it helps to set the tone for the whole lubrication program, changing the way mechanics, lubricators and operators think about lubrication.

Don't see the options you need? Contact our Technical Support team at (615) 672-8800 or sales@descase.com.

The Specs

By the Numbers

Item No.	Description	Qty.
1	Motor	1
2	Gear Pump	1
3	Pump Relief-65psi	1
4	Filter Element	2
5	Pressure Gauge	1
6	Heat Exchanger	1
7	Pre-Filter Sample Valve	1
8	Post-Filter Sample Valve	1
9	Filter Head	2
10	Manual Filter Bypass Valve	1
11	¾" JIC Inlet Port	1
12	¾" JIC Outlet Port	1
13	Filter Bypass	1
14	Outlet Port location if no heat exchanger	1



For ordering information, please see insert or contact us at (615) 672-8800.

To Order: Panel Unit

P								
	Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8

Pump/Motor Combinations [Box 1]

60Hz Options		50Hz Options	
Code	Description	Code	Description
02E	2gpm/1 hp electric, 115 vac, 60 Hz, 1725 rpms, 13 amps	02G	1.5gpm/1 hp electric, 110 vac, 50 Hz, 1425 rpms, 12.4 amps
05E	5gpm/1 hp electric, 115 vac, 60 Hz, 1725 rpms, 13 amps	05G	4gpm/1 hp electric, 110 vac, 50 Hz, 1425 rpms, 12.4 amps
10E	10gpm/1 hp electric, 115 vac, 60 Hz, 1725 rpms, 13 amps	10G	8gpm/1 hp electric, 110 vac, 50 Hz, 1425 rpms, 12.4 amps
02F	2gpm/1 hp electric, 230 vac, 60 Hz, 1725 rpms, 6.5 amps	02H	1.5gpm/1 hp electric, 220 vac, 50 Hz, 1425 rpms, 6.2 amps
05F	5gpm/1 hp electric, 230 vac, 60 Hz, 1725 rpms, 6.5 amps	05H	4gpm/1 hp electric, 220 vac, 50 Hz, 1425 rpms, 6.2 amps
10F	10gpm/1 hp electric, 230 vac, 60 Hz, 1725 rpms, 6.5 amps	10H	8gpm/1 hp electric, 220 vac, 50 Hz, 1425 rpms, 6.2 amps
Pneumatic Options		Pneumatic Options	
02A	2gpm/1 hp air, 0-3000 rpms	08A	8gpm/1 hp air, 0-3000 rpms

NOTE: Performance will vary depending on operating temperature, fluid type, and unit options. Call Des-Case for assistance in choosing a flow rate specific to your needs. 65psi pressure relief valve included.

Filter A [Box 2]/ Filter B [Box 3]

Code	Description
A	3-micron Particulate Filter
B	6-micron Particulate Filter
C	12-micron Particulate Filter
D	25-micron Particulate Filter
J	Water Filter

Sample Valves [Box 4]

Code	Description
0	None
1	Standard Minimes
2	High Viscosity

Oil Cooler [Box 5]

Code	Description
0	None
C	Oil Cooler

NOTE: Not available for pneumatic motor systems

Temperature Gauge [Box 6] Manual Filter Bypass [Box 7]

Code	Description
0	None
T	Temperature Gauge

Code	Description
0	None
B	Filter Bypass

Custom Colors [Box 8]

Code	Description
1	Brushed Aluminum
2	Black
3	White
4	Blue
5	Red
6	Yellow

For replacement elements, see next page.

You also can customize your system online at www.descase.com.

Replace Your Elements

Part No.	Micron Rating
FC-AF	Beta 200 @ 3um
FC-BF	Beta 200 @ 6um
FC-CF	Beta 200 @ 12um
FC-DF	Beta 200 @ 25um
FC-JF	Water Removal

NOTE: Other micron sizes available upon request.



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Fluid Handling: Drum Filter Cart



This cart is ideal for pre-cleaning, protecting, and transferring oil from a conveniently attachable, secured drum. A drum adapter kit with a desiccant breather is included for complete contamination control.



The Overview

The Drum Filter Cart: Where It's Used

- Decontaminating systems
- Flushing new or repaired systems
- Dispensing oil
- Pre-filtering new oil
- Evacuating used oil
- Topping off reservoirs
- Collecting oil samples for analysis

What is Standard?

- Automatic pressure relief valve
- Dual-stage filtration
- 12' hose assemblies with various quick connect options
- Rugged, powder-coated dolly with plastic removeable drip pan
- Adjustable, heavy-duty straps with spring-loaded clips to secure drum
- Remote-mounted power switch
- Spring-loaded kick stand to hold cart in place
- Casters for easy mobility
- Mating color-coded drum adapter kit for easy connection
- One-year warranty

What Can I Customize?

- Flow rates
- Filter bypass
- Sample valves
- Y-strainer
- Color
- Hose-end connection sizes and types
- Micron rating of filters

Don't see the options you need? Contact our Technical Support team at (615) 672-8800 or sales@descase.com.

Performance

For filtering mineral-based industrial oils and most synthetic oils with a maximum operating viscosity range of ISO VG 680 (3000ssu/648cSt) at 100°F/38°C within ambient temperature ranges of -15°F to 150°F (-26°C to 66°C)

Materials:

- Frame: Carbon steel
- Paint: Industrial powder coat
- Filter Heads: Aluminum
- Fittings: Zinc plated steel and/or brass
- Pumps: Aluminum/steel
- Hoses: Clear PVC with steel wire or hydraulic hose
- Gasket: Buna-N

Filter Indicators:

- Filter indicator pops at 22psid (1.55bar) as warning that filter elements need to be replaced

Pump Relief:

- Opens at 65psi

Weight:

- Approximately 175-250lbs without drum (will vary depending on options selected)

Dimensions:

- 30"L x 24.75"W x 57.85"H

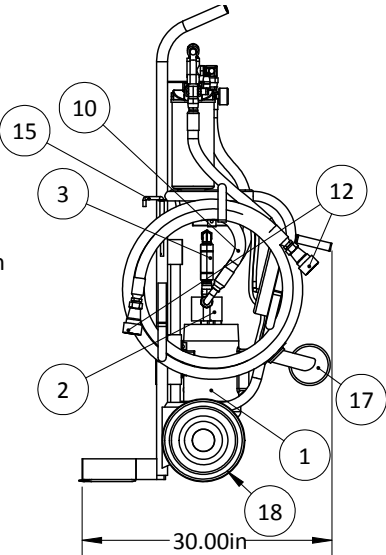
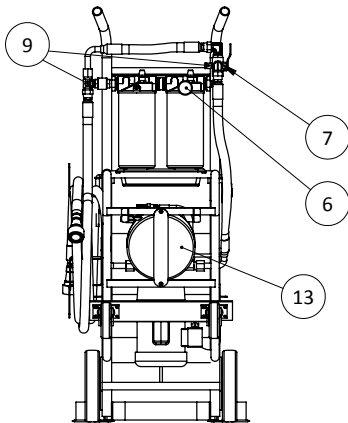
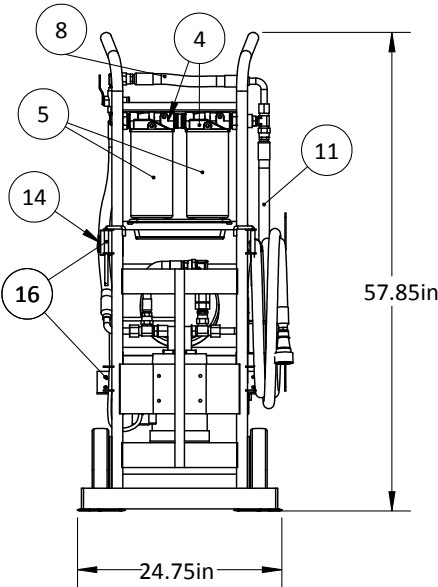
Call Des-case for the Following Needs:

- Explosion-proof
- Wands
- Threaded end connectors
- Particle counters
- Hydraulic hoses
- Viton® gaskets
- High-viscosity push button sample valves

The Specs

By The Numbers

Item No.	Description	Qty.
1	Motor	1
2	Gear Pump	1
3	Pump Relief-65psi	1
4	Filter Head	2
5	Filter Element	2
6	Pressure Gauge	1
7	Filter Bypass Valve	1
8	Filter Bypass Line	1
9	Sample Valve	2
10	12' Suction Hose	1
11	12' Discharge Hose	1
12	Quick Connects	2
13	25' Cord Reel	1
14	Remote Mount Power Switch	1
15	Spring Loaded Clips	2
16	Adjustable Straps	2
17	Castors	2
18	Wheels	2



Did You Know?

The drum filter cart pairs perfectly with Des-Case's tote, drum, hydraulic, gearbox, and drain port adapter kits. Customize your mating kit at www.descase.com

For ordering information, please see insert or contact us at (615) 672-8800.

To Order: Drum Filter Cart

DF										
	Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8	Box 9	Box 10

NOTE: Drum adapter kit with DC-2 breather included. To customize adapter kit, contact Des-Case.

Pump/Motor Combination [Box 1]

60 Hz Options		50 Hz Options	
Code	Description	Code	Description
02E	2gpm/1 hp electric, 115 vac, 60 Hz, 1725 rpms, 13 amps	02G	1.5gpm/1 hp electric, 110 vac, 50 Hz, 1425 rpms, 12.4 amps
05E	5gpm/1 hp electric, 115 vac, 60 Hz, 1725 rpms, 13 amps	05G	4gpm/1 hp electric, 110 vac, 50 Hz, 1425 rpms, 12.4 amps
10E	10gpm/1 hp electric, 115 vac, 60 Hz, 1725 rpms, 13 amps	10G	8gpm/1 hp electric, 110 vac, 50 Hz, 1425 rpms, 12.4 amps
02F	2gpm/1 hp electric, 230 vac, 60 Hz, 1725 rpms, 6.5 amps	02H	1.5gpm/1 hp electric, 220 vac, 50 Hz, 1425 rpms, 6.2 amps
05F	5gpm/1 hp electric, 230 vac, 60 Hz, 1725 rpms, 6.5 amps	05H	4gpm/1 hp electric, 220 vac, 50 Hz, 1425 rpms, 6.2 amps
10F	10gpm/1 hp electric, 230 vac, 60 Hz, 1725 rpms, 6.5 amps	10H	8gpm/1 hp electric, 220 vac, 50 Hz, 1425 rpms, 6.2 amps
Pneumatic Options		Pneumatic Options	
02A	2gpm/1.7 hp air, 0-3000 rpms	08A	8gpm/1.7 hp air, 0-3000 rpms

NOTE: Performance will vary depending on operating temperature, fluid type and unit options. 65 psi pressure relief valve included.

Drain & Fill Connector Type* [Box 2]

Code	Description
B	ISO B Connector
A	ISO A Connector
F	Flush Face Connector
R	ISO B Connector-BSPP
Q	ISO A Connector-BSPP
P	Flush Face Connector-BSPP

NOTE: All connectors are coupler ends (female)

Filter A [Box 4]/Filter B [Box 5]

Code	Description
A	3-micron Particulate Filter
B	6-micron Particulate Filter
C	12-micron Particulate Filter
D	25-micron Particulate Filter
J	Water Filter

Drain & Fill Sizing [Box 3]

Code	Description
1	Drain: 1" hose & connection Fill: ¾" hose & connection
2	Drain: ¾" hose & connection Fill: ½" hose & connection

NOTE: Units are built for optimum performance when using 1" (drain) and ¾" (fill) connections. Decrease in performance may occur when selecting other size combinations. Hoses are 1" and ¾" respectively regardless of connection sizes.

Manual Filter Bypass [Box 6]

Code	Description
O	None
B	Filter Bypass

Sample Valves [Box 7]

Code	Description
O	None
1	Standard Minimess
2	High Viscosity

Options 8-10 continued on next page.

Cord Reel [Box 8]

Code	Description
O	None*
C	25' cord reel**

*Comes with the standard cord or no cord for pneumatic/air systems
**60Hz motor option only

Y-Strainer [Box 9]

Code	Description
O	None
Y	Y-Strainer

Custom Colors [Box 10]

Code	Description
1	Brushed Aluminum
2	Black
3	White
4	Blue
5	Red
6	Yellow

You also can customize your system online at www.descase.com.

Replace Your Elements

Part No.	Micron Rating
FC-AF	Beta 200 @ 3um
FC-BF	Beta 200 @ 6um
FC-CF	Beta 200 @ 12um
FC-DF	Beta 200 @ 25um
FC-JF	Water Removal

NOTE: Other micron sizes available upon request

