



***Lubrication Transformation<sup>SM</sup>  
Services Lubrication Storage &  
Handling Design Report***



***Keeping contamination under control.<sup>®</sup>***

*Project Name:*                    *Lubrication Transformation Storage & Handling Design*

*Client:*                            *Mr. Customer*  
                                      *Sr Reliability Engineer*  
                                      *Your Plant, INC*  
                                      *Address | State | 12345*

*Design Manager:*            *Jason Kopschinsky, CMRP*  
                                      *Director of Reliability Services*  
                                      *Des-Case Corporation*  
                                      *905-999-0076*  
                                      [Jason.Kopschinsky@Descase.com](mailto:Jason.Kopschinsky@Descase.com)

*Account Manager:*         *Whit Gammon CLS*  
                                      *Key Account Manager*  
                                      *Des-Case Corporation*  
                                      *615-693-0317*  
                                      [Whit.Gammon@Descase.com](mailto:Whit.Gammon@Descase.com)

*Revision:*                        *1.0*  
                                      *February 11, 2014*

---



## Table of Contents

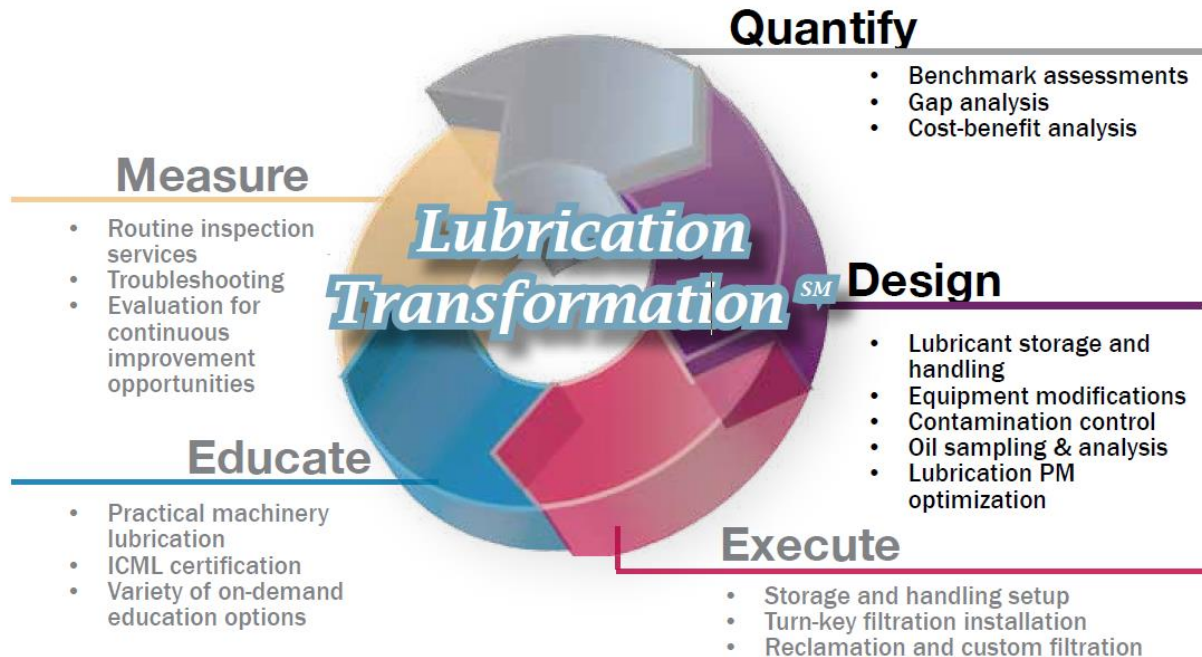
<b>1.0</b>	<b>Introduction.....</b>	<b>4</b>
<b>2.0</b>	<b>Overview.....</b>	<b>5</b>
<b>3.0</b>	<b>Proposed Design.....</b>	<b>6</b>
<b>4.0</b>	<b>Bulk Storage .....</b>	<b>7</b>
<b>4.1</b>	<b>LT LMS Bulk Storage.....</b>	<b>7</b>
<b>5.0</b>	<b>Mobile Filtration Unit.....</b>	<b>8</b>
<b>5.1</b>	<b>Wheeled FlowGuard Filtration Cart.....</b>	<b>8</b>
<b>5.2</b>	<b>Drum Topper Filtration Unit .....</b>	<b>8</b>
<b>6.0</b>	<b>Drum Adapter Kits.....</b>	<b>9</b>
<b>7.0</b>	<b>Additional Accessories.....</b>	<b>9</b>
<b>Appendix 1</b>	<b>LT LMS Feature Sheet.....</b>	<b>10</b>
<b>Appendix 1.1</b>	<b>LT LMS CAD Callouts.....</b>	<b>14</b>
<b>Appendix 2</b>	<b>FlowGuard Filter Cart.....</b>	<b>16</b>
<b>Appendix 2.1</b>	<b>Flowguard Filter Cart CAD Callouts.....</b>	<b>18</b>
<b>Appendix 3</b>	<b>Adapter Kits Feature Sheet.....</b>	<b>19</b>
<b>Appendix 3.1</b>	<b>Adapter Kits CAD Callouts.....</b>	<b>21</b>
<b>Appendix 4</b>	<b>Drum Topper Feature Sheet.....</b>	<b>22</b>
<b>Appendix 4.1</b>	<b>Drum Topper CAD Callouts.....</b>	<b>24</b>



## 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.



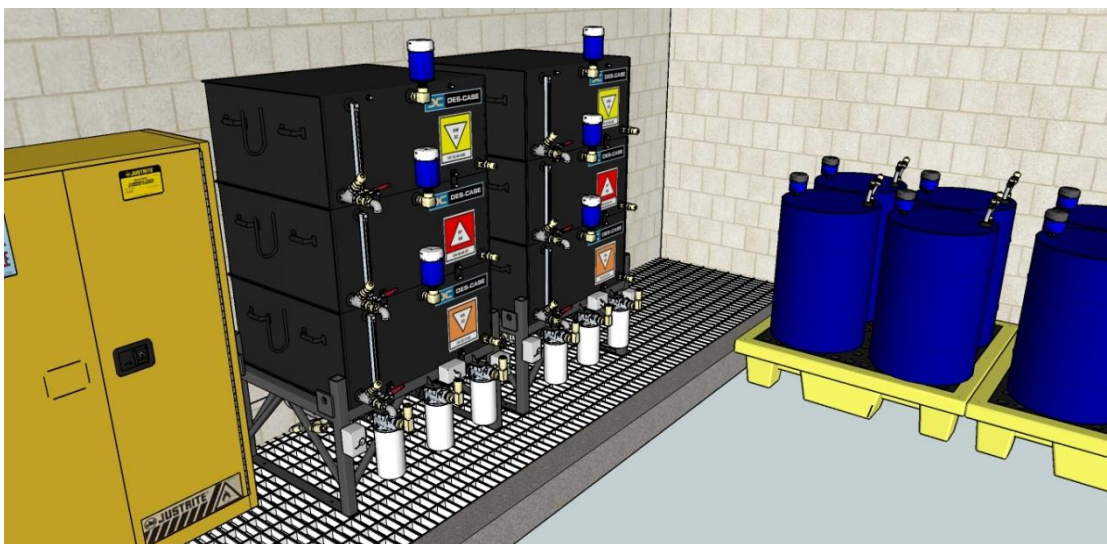
## 2.0 Overview

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



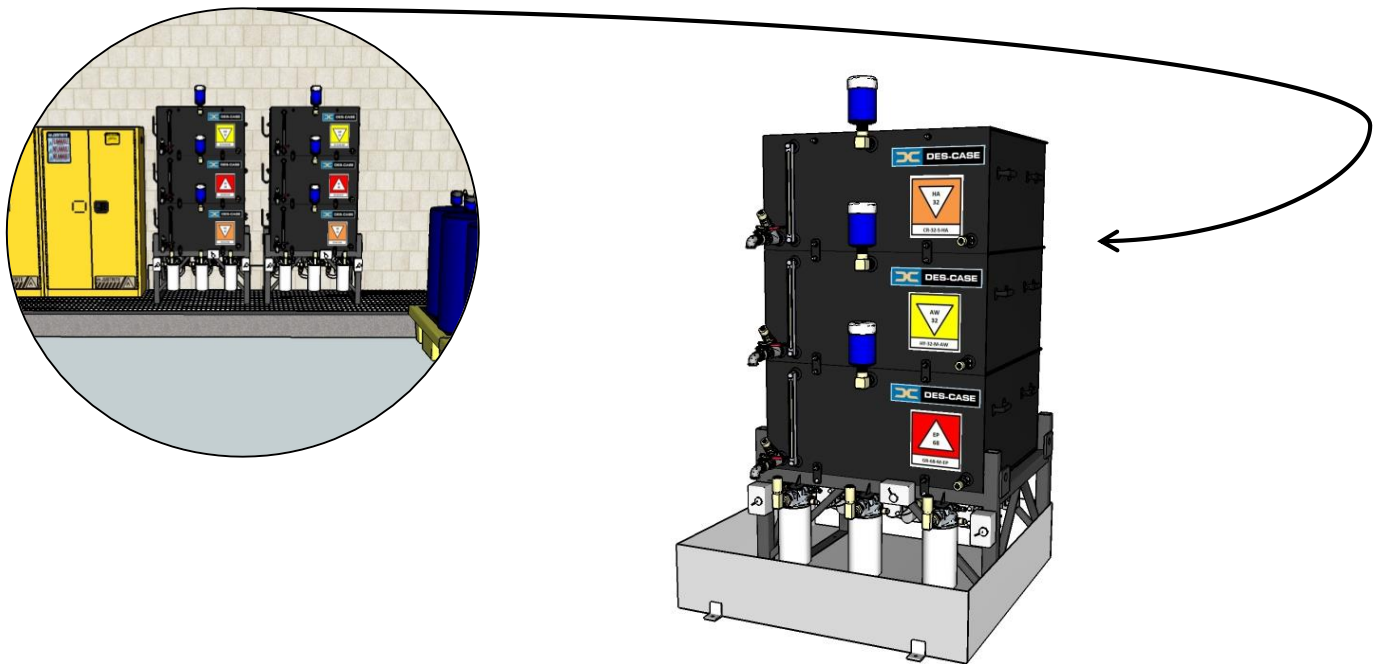
## 4.0 Bulk Storage

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

### 4.1 Steel LT LMS Bulk Storage

The FlowGuard™ Steel 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 Steel 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.

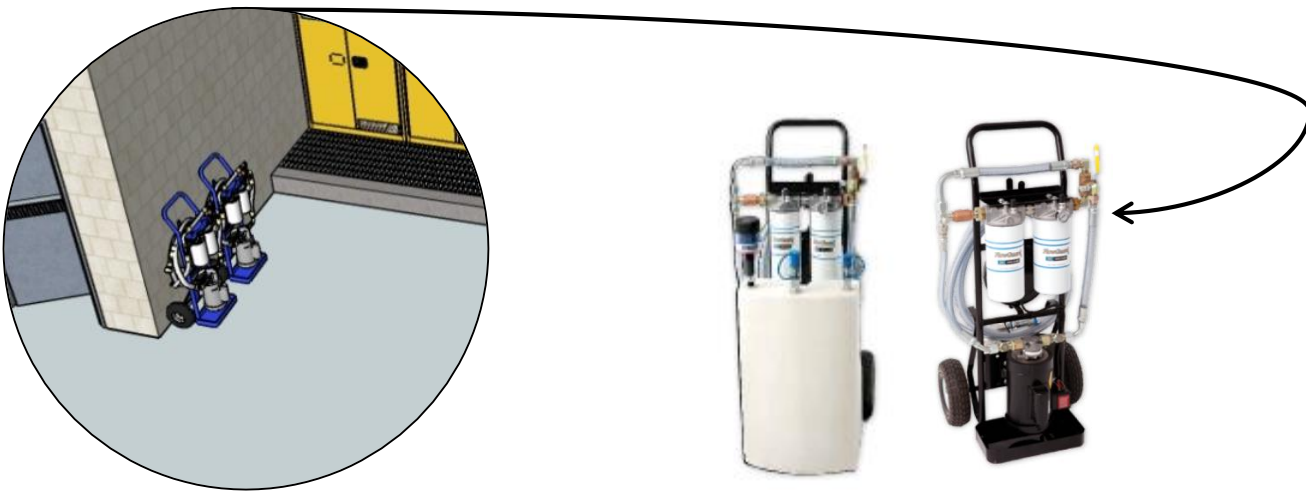


## 5.0 Mobile Filtration Units

Filters 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 employ a minimum of 8 individual filter carts to satisfy the needs of your specialty lubricants to prevent cross contamination, mixing of base oils and additives.

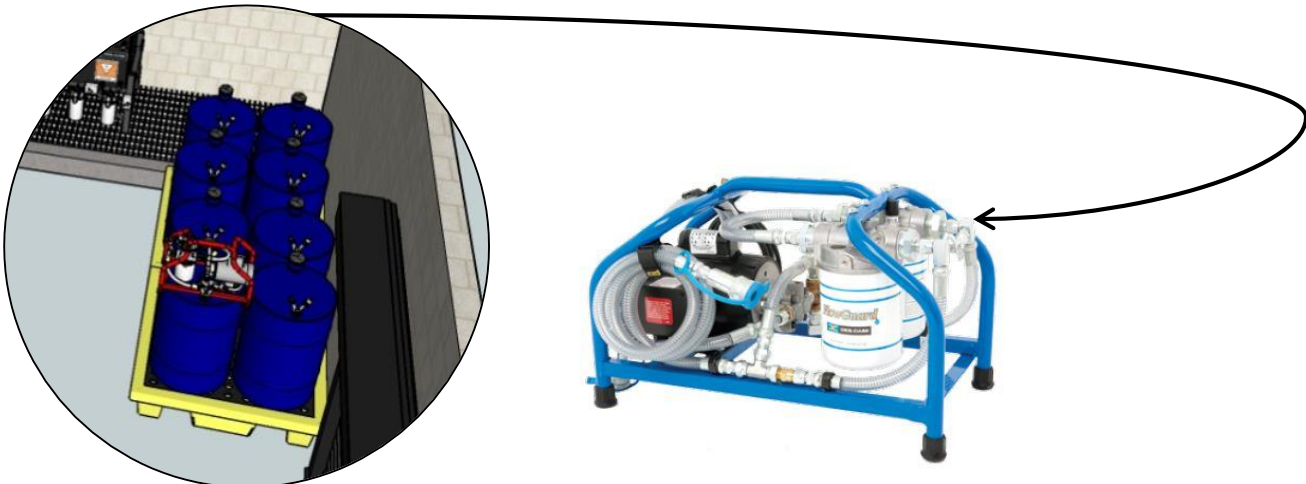
### 5.1 Wheeled FlowGuard™ Filtration Cart

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 Cart

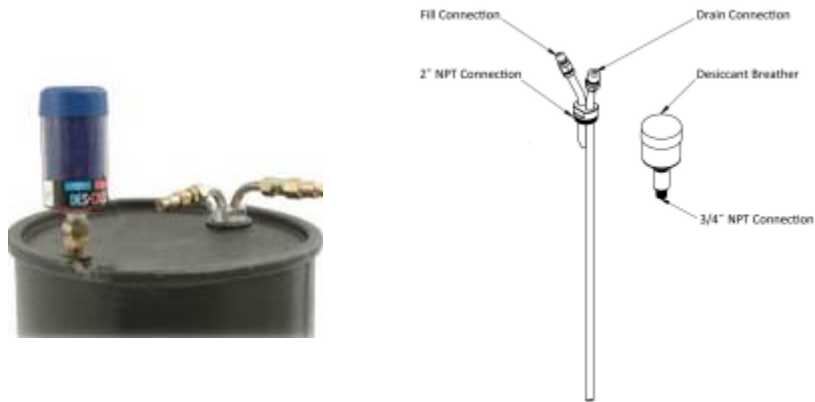
Like larger filters carts, drum toppers allow for filtration and delivery of smaller volumes of oil and are a very important component in any world-class storage and handling facility. Based on the likely lubricant consumption and the types of lubricants used, you may need to employ several drum toppers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





## 6.0 Drum Adapter Kit

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



## 7.0 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.

