



## DIESEL EXHAUST FLUID, STORAGE & DISPENSING EQUIPMENT



Your **FIRST CHOICE** for DEF

# DEF PUMPS & PUMP SYSTEMS



Storage tanks and dispensing systems offer several size options, state-of-the-art filtration units and all other necessary DEF compatible components. All dispensing systems come standard with fittings and venting systems needed to maintain your DEF purity.



## » PUMPS ONLY



### 120V DRUM PUMP

- > 120V axial gear pump (120V 60HZ)
- > Self resetting thermal protection motor
- > Flow Rate: 7-10 GPM
- > Drum thread adapter included

FLTDEFDP120P



### 120V TOTE PUMP

- > Tote Pump has a suction height of 9.8 feet
- > Die-cast aluminum motor and switch case make the pump more shock resistant
- > Operability when temperature fluctuations occur and areas where wide temperature ranges are common
- > 3 Year Limited Liability Warranty

FLTDEFTP120P



### 12V DRUM PUMP

- > 12V axial gear pump
- > Self resetting thermal protection motor
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FLTDEFDP12VP



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FLTDEFTP12P

## » DRUM & TOTE PUMP SYSTEMS



### Drum Hand Pump System

- > Manual lever hand pump
- > Manual poly nozzle with lock pin feature
- > 20' DEF hose
- > Expandable downtube
- > Drum thread adapter included

FLTDEFDPHP (Manual Poly Nozzle)



### Drum Pump Systems

- > 120V axial gear pump (120v 60HZ)
- > Self resetting thermal protection motor
- > Manual poly nozzle/20' DEF hose
- > Flow Rate: 7-10 GPM
- > Drum thread adapter included

FLTDEFDP120 (120V Poly Nozzle)

FLTDEFDP12V (12V Poly Nozzle)



### 120V Premium Tote Pump System

- > Self-priming diaphragm pump with integrated bypass
- > Mounting bracket with DEF filter and meter
- > Protective steel exterior housing
- > Stainless steel automatic shut-off nozzle
- > 20' DEF hose
- > Flow Rate: 8-10 GPM
- > Pre-installed hose fittings

FLTDEFTPP120 (120V SS Nozzle)



### 120V Tote Pump Systems

- > Stainless steel automatic shut-off nozzle
- > 20' DEF hose
- > Self-priming diaphragm pump with integrated bypass
- > Mounting bracket
- > Flow Rate: 8-10 GPM
- > Pre-installed hose fittings

FLTDEFTP120SN (120V SS Nozzle)

FLTDEFTP120MN (120V Poly Nozzle)



### 12V Tote Pump System

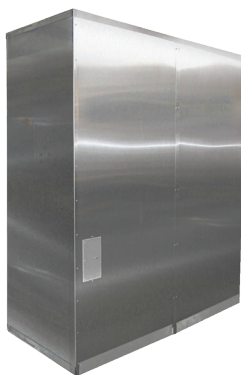
- > Self-priming diaphragm pump with integrated bypass
- > Mounting bracket
- > Manual poly nozzle
- > 20' DEF hose
- > Flow Rate: 7-10 GPM
- > 10' power cable with battery terminal clips

FLTDEFTP12VMN (12V Poly Nozzle)

DEF USAGE IN GALLONS	RECOMMENDED SYSTEM <small>Storage / Dispensing Size</small>		
	DRUM SYSTEM	TOTE SYSTEM	BULK SYSTEM
# OF SCR UNITS	1-5	8-13	26-160+
DIESEL FUEL GAL PER WK.	500-2,000	3,000-5,000	10,000-60,000+
PER WEEK	30-120	180-300	200-1200+
PER MONTH	120-480	720-1,200	800-4800+
PER YEAR	1,440-5,670	8,640-14,400	12,800-176,800+

# BULK STORAGE SOLUTIONS & ACCESSORIES

## » MINI BULK SYSTEM



### SYSTEM CONTAINS

- > Pre-wired with electrical components
- > Ability to expand tank in field
- > 120V design standard
- > High level indicator with overflow protection valve
- > Heated and insulated options available
- > 2" Dixon Dry break fill adapter
- > Forklift pockets with ability to be relocated
- > Weather tight control panel
- > ½ HP submersible DEF pump
- > Automatic low lever shut down protection

### OPTIONS

- > Heat assembly
- > 230V option
- > Digital fluid level monitor
- > Ability to connect to any 3rd party dispenser

FLTFLTDEFKMB500

FLTFLTDEFKMB1000

TANK SIZE* (Gallons)	LxWxH (Inches)	WEIGHT (Pounds)
500	48"x36"x107"	~800 lbs
1000	96"x36"x107"	~1600 lbs

\* Ability to expand to 2,000 gallons

## » INDOOR STORAGE TANK



### SYSTEM CONTAINS

- > 2" Stainless steel threaded bulk head fitting - sidewall
- > 1" stainless steel threaded bulk head fitting - sidewall
- > (2) 2" Polypropylene threaded top mount fittings
- > Non-vented manway
- > 1" x 12" siphon tube
- > 2" stainless steel inlet for fill port and cap
- > (2) stainless steel ball valves and nipples
- > Duplex vent package (rated for 225 gpm)
- > Duplex vent filtration sock
- > DEF pip sealant

TANK SIZE* (Gallons)	WxH (Tip-up Height (Inches))	WEIGHT (Pounds)
500	48" x 73" (80")	180 lbs
1000	65" x 81" (103")	275 lbs
2000	87" x 89" (125")	400 lbs
3000	95" x 109" (145")	600 lbs
6500	119" x 150" (192")	1515 lbs
8400	119" x 188" (223")	2135 lbs

## » ACCESSORIES



### Mobile Drum Transfer Cart

- > Robust, heavy duty steel 3 wheel drum cart
- > Quality hard based rubber wheels
- > Option to add any drum dispense system

FLTDEFDR-C



### Drum Dispense Coupler

- > Heavy duty glass reinforced nylon/ polypropylene construction for durability and long life
- > Integrated one-way check valve
- > Compatible with poly and stainless steel 4-pin valve system

FLTFLTDEF756-008B



### Dispense Coupler

- > Heavy duty glass reinforced nylon/polypropylene construction for durability and long life
- > Integrated one-way check valve
- > Compatible with poly and stainless steel 4-pin valve system

FLTFLTDEF5702



### Stainless Steel Auto Shut-Off Nozzle

- > Compatible with all FMT pumps and systems

FLTFLTDEF-SN



### Manual Poly Nozzle

- > Compatible with all FMT pumps and systems
- > Lock pin feature

FLTFLTDEF-MN



### In-line Digital Flow Meter

- > In line digital meter
- > Stainless steel meter housing
- > Turbine measuring system
- > Adjustable unit output

FLTFLTDEFMTR



### DEF Hose

10' x 3/4"

FLTFLTDEF510COM-HOSE1

20' x 3/4"

FLTFLTDEF510COM-HOSE2



### Heated Insulated Tote Blanket

275 Gal

FLTFLTDEFTH275BD-A

330 Gal

FLTFLTDEFTH330BD-A



### RSV Downtube

275 Gal

FLTFLTDEF5698-960

330 Gal

FLTFLTDEF5698-1135



### Tote Valve Seal (50/case)

FLTFLTDEF510COM-HOSE2

PLACE ORDERS THROUGH  
PARTS ONLINE

# DIESEL EXHAUST FLUID | FAQ'S



DEF ISO 22241

## » WHAT IS DEF?

DEF is the fluid that is used in Selective Catalytic Reduction(SCR) systems on diesel engines to reduce NOx.

### What is Selective Catalytic Reduction (SCR)?

SCR is an acronym for Selective Catalytic Reduction. SCR is a technology that uses a urea based diesel exhaust fluid (DEF) and a catalytic converter to significantly reduce oxides of nitrogen (NOx) emissions. SCR is being used by almost all OEM manufacturers.

### How does an SCR System work?

The purpose of the SCR system is to reduce levels of NOx (oxides of nitrogen emitted from engines) that are harmful to our health and the environment. SCR is the after-treatment technology that treats exhaust gas downstream of the engine. Small quantities of diesel exhaust fluid (DEF) are injected into the exhaust upstream of a catalyst, where it vaporizes and decomposes to form ammonia and carbon dioxide. The ammonia (NH3) is the desired product which, in conjunction to the SCR catalyst, converts the NOx to harmless nitrogen (N2) and water (H2O).

### What is DEF for?

When used in an SCR system, DEF will reduce the levels of NOx emissions of those engines.

### What is DEF made of?

DEF is a high-purity, 32.5% strength urea solution and deionized water.

### What is Urea?

Urea is a compound of nitrogen that turns to ammonia when heated. It is used in a variety of industries, including as a fertilizer in agriculture.

### Where is FLEETRITE DEF available?

It is available at International truck dealerships.

### Why use a 32.5% Urea Solution?

The 32.5% urea concentration is the ideal solution as it provides the lowest freeze point. Also, SCR systems will be calibrated to the 32.5% solution, so that optimum NOx will be reduced during operation.

### What is the freeze point of DEF?

A 32.5% solution of DEF will begin to crystallize and freeze at 12 deg F (-11 deg C). At 32.5%, both the urea and water will freeze at the same rate, ensuring that as it thaws, the fluid does not become diluted, or over concentrated.

### Does DEF expand when frozen?

Yes, DEF expands by approximately 7% when frozen. DEF packaging and tanks are designed to allow for expansion.

### How do I keep DEF from freezing? What happens if the DEF freezes in the tank on the vehicle?

During vehicle operation, SCR systems are designed to provide heating for the DEF tank and supply lines. If DEF freezes when the vehicle is shut down, start up and normal operation of the vehicle will not be inhibited. The SCR heating system is designed to quickly return the DEF to liquid form and the operation of the vehicle will not be affected.

### Does it need to meet any quality standards?

Yes, it needs to meet the ISO 22241 quality standard.

### Is it hazardous, toxic or flammable?

No, DEF is not hazardous, toxic or flammable.

### Is DEF corrosive?

DEF is corrosive to copper and brass as well as other materials. Only approved materials as listed in the ISO standard should be used.

### What has happened to make DEF necessary?

The EPA has mandated the reduction of NOx emissions released into the environment.

### How is DEF carried on the vehicle?

DEF is stored in a designated tank on the vehicle. It is then replenished like fuel.

### What happens if the vehicle runs out of DEF?

Many vehicles are equipped with a DEF gauge on the dash to alert the driver on the fluid level. If the level becomes low an alert will let the driver know the DEF level needs to be replenished. If the driver runs out completely, the vehicle power will be reduced to encourage the operator to refill the DEF tank. Once the DEF tank is refilled, normal power levels will be restored on the vehicle.

### Does DEF mix with fuel?

No, it is not an additive. It is sprayed into the exhaust stream where it is hydrogenated before the catalytic converter effects the breakdown into nitrogen and water.

### How much DEF will I need?

DEF is consumed at a rate of approximately 3-5% by volume to diesel consumption.

