DIESEL EXHAUST FLUID

DEF PUMPS | DEF TANKS | DEF ACCESSORIES









EPA 2010

EPA 2010 is the final phase of the Environmental Protection Agency's (EPA) plan to assure that diesel engines run cleaner. In fact, EPA 2010 standards require that NOx levels from new trucks be reduced to almost zero.

The leading technology to meet EPA 2010 is Selective Catalytic Reduction (SCR) technology – an emissions reduction system requiring the use of Diesel Exhaust Fluid (DEF).

What is NOx?

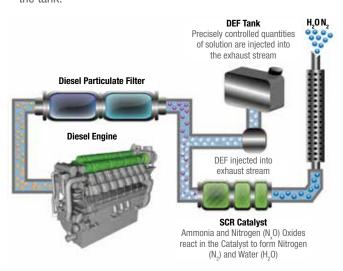
Oxides of Nitrogen (NOx) are exhaust elements that contribute to acid rain, smog and greenhouse gas levels.

Selective Catalytic Reduction (SCR) Technology

Selective Catalytic Reduction (SCR) Technology reduces NOx emissions to near zero levels, while at the same time delivering improved fuel economy and reliability. SCR technology does not change the design or operation of the basic engine.

SCR works by injecting DEF Diesel Exhaust Fluid into the exhaust stream only as required. DEF works with the heat of the exhaust and the catalyst to convert NOx into nitrogen and water vapor two harmless and natural components of the air we breathe.

DEF is stored in a dedicated tank next to the fuel tank on the driver's side. The DEF tank fill opening is designed to accommodate a DEF fill nozzle to ensure only DEF is put into the tank.





What is DEF?

DEF is a nontoxic solution of 67.5% purified water and 32.5% ultra pure automotive grade urea. DEF is not a fuel or fuel additive.

DEF meets ISO Standards 22241 and is an American Petroleum Institute (API) certified diesel exhaust fluid. These are the highest quality and safety standards in place, which ensure optimum SCR performance.

Delivery

ISO standard 22241 was created to provide direction for the handling, transportation and storage of diesel exhaust fluid.

Handling and Storage

The shelf life of DEF is directly related to the temperature at which it is stored. Storage temperatures between 12° and 86° F are recommended to maintain optimal shelf life of up to two years. If DEF freezes, its efficacy will not be affected upon thawing. To maintain the purity of DEF and not harm the SCR Catalyst System, care must be taken regarding the material of construction for all items that come in contact with the DEF solution, ISO-2224-1 standards list both recommended and not recommended materials for contact with DEF.

DEF Usage

The type of storage and dispensing equipment a customer needs depends on how many vehicles are in their fleet. Use the simple chart below to determine the ideal system for each customer.

RECOMMENDED SYSTEM STORAGE/DISPENSING SIZE*			
	DRUM SYSTEM	TOTE SYSTEM	PLUG N' PUMP STATIONARY SYSTEM
# OF SCR UNITS	1-5	8-13	13+
DIESEL FUEL GAL. PER WK.	500-2,000	3,000-5,000	5,000+
PER WEEK	30-120	180-300	300+
PER MONTH	120-480	720-1,200	1,200+
PER YEAR	1,440-5,670	8,640-14,400	14,400+

^{*} DEF Solution usage in gallons



CNH Industrial storage tanks and dispensing systems offer several tank sizes, state-of-the-art filtration units and all other necessary DEF compatible components. All dispensing systems come standard with fittings and venting components needed to maintain DEF purity.

DRUM PUMP SYSTEMS





120V Drum Pump System

Part No. DEFDP120 (120V Poly Nozzle)

- Drum Pump System includes 120V axial gear pump, discharge hose, suction hose, drum adapter coupling and poly manual nozzle
- Can be manually operated in case of electrical power outage
- · Designed exclusively for use as a drum pump
- · 1-Year limited liability warranty



12V Drum Pump System

Part No. DEFDP12V (12V Poly Nozzle)

- Drum Pump System includes 12V axial gear pump, discharge hose, suction hose, drum adapter coupling and poly manual nozzle
- Can be manually operated in case of electrical power outage
- · Designed exclusively for use as a drum pump
- · 1-Year limited liability warranty



Hand Pump System

Part No. DEFDPHP (Manual Poly Nozzle)

- Drum Hand Pump System includes expandable downtube, drum adapter and poly manual nozzle with lock pin feature
- Drum adapter allows precise connection of pump on the drum
- · Efficient DEF delivery rate, per manual pump stroke

TOTE PUMP SYSTEMS





12V Tote Pump System with Poly Nozzle

Part No. DEFTP12VMN (12V Poly Nozzle)

- 12V Tote Pump System includes diaphragm tote pump, discharge hose, suction hose, poly nozzle and connection cable with battery terminal clips and fuse holder
- Die-cast aluminum motor and switch case make the pump shock resistant
- Operable when temperature fluctuations occur and in areas where wide temperature ranges are common
- 3-Year limited liability warranty
- · Optional Flow Meter Kit available



120V Tote Pump System with Poly Nozzle

Part No. DEFTP120MN (120V Poly Nozzle)

- Pro Series Tote Pump System includes 120V diaphragm tote pump. discharge hose, suction hose and poly manual nozzle
- Die-cast aluminum motor housing and switch case make the pump more durable
- · Double gasket, leak-free fitting design
- · 3-Year limited liability warranty
- · Optional Flow Meter Kit available



120V Tote Pump System with Stainless Steel Nozzle

Part No. DEFTP120SN (120V SS Nozzle)

- Pro Series Tote Pump System includes 120V diaphragm tote pump, discharge hose, suction hose and stainless steel automatic shut-off nozzle
- Die-cast aluminum motor and switch case make the pump more durable
- · Double gasket, leak-free fitting design
- 3-Year limited liability warranty
- Optional Flow Meter Kit available

PREMIUM TOTE PUMP SYSTEM



120V Premium Tote Pump System

Part No. DEFTPP120 (120V SS Nozzle)

- Super Pro Series Tote Pump System includes 120V diaphragm tote pump, discharge hose, suction hose, in-line digital meter, stainless steel automatic shut-off nozzle and filter assembly
- · Offers easily accessible and replaceable filter cartridge
- Operable when temperature fluctuations occur and in areas where wide temperature ranges are common
- 3-Year limited liability warranty



PUMPS ONLY



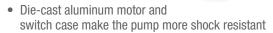
120V Tote Pump Only

Part No. DEFTP120VP

- Tote Pump has a suction height of 9.8 feet
- Die-cast aluminum motor and switch case make the pump more shock resistant
- · Operable when temperature fluctuations occur and in areas where wide temperature ranges are common
- · 3-Year limited liability warranty

12V Tote Pump Only Part No. DEFTP12VP





- Operable when temperature fluctuations occur and in areas where wide temperature ranges are common
- · 3-Year limited liability warranty

120V Drum Pump Only

Part No. DEFDP120P

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



12V Drum Pump Only

Part No. DEFDP12VP

- 12V axial gear pump
- Self resetting thermal protection motor
- Flow Rate: 7-10 GPM
- · Drum thread adapter included



MOBILE TRUCK TANKS



Mobile Truck Tanks

Part No. DEFTT66 (66 Gallons) Part No. DEFTT115 (115 Gallons)

- HDPE UV resistant molded tank
- · Available in 66 or 115 gallon sizes
- · Lockable protection lid
- Molded forklift pockets
- 12V Self priming diaphragm pump
- 20' DEF hose
- Manual poly nozzle





TANK SIZE	L×W×H
66 Gallons	48" × 36" × 107"
115 Gallons	96" × 36" × 107"

PLUG N' PUMP STATIONARY TANKS



This DEF station offers everything required to ensure your operation has the capability to store and pump the DEF you need. Although not designed as a mobile unit, the quality station can be relocated to another stationary location when empty, and ships effortlessly.

Plug N' Pump Stationary Tanks

Part No. DEFPNP396 (396 Gallons)

Part No. DEFPNP660 (660 Gallons)

Part No. DEFPNP1320 (1,320 Gallons)

- Double wall HDPE tanks with UV resistant material
- · Pre-wired and ready for operation
- · Tank fluid level indicator by percentage
- 120V Diaphragm pump
- · Optical and visual leak alarm
- · Lockable fill door
- 3-Year warranty pump system
- 20' DEF hose
- · Stainless in-line digital meter
- · Stainless automatic DEF nozzle
- Insulated/heated options also available



Part No. DEFPNP1320 (1,320 Gallons)



Part No. DEFPNP396 (396 Gallons)



Part No. DEFPNP660 (660 Gallons)

MINI BULK SYSTEMS



Mini Bulk Systems

Part No. DEFTKMB500 (500 Gallons) Part No. DEFTKMB1000 (1,000 Gallons)

- Unit fits on all standard width fuel islands
- Keeps fluid safe from environmental hazards
- Easily relocatable
- · Integrates with any brand commercial, fleet or retail dispenser

System Contains:

- · Modular design allows the equipment to grow with increasing DEF demand
- · Polished stainless steel outer panels and roof
- · High density polyethylene tank with no bottom or side-wall penetrations
- 120V design standard with a 1/2 HP submersible DEF pump
- · Pre-wired electrical components
- · Installation anchor kit
- · Lockable fill-port
- High level indicator with overfill protection valve
- Automatic low lever shut down protection

Options / Add-Ons:

- Level display
- · Heat package
- Dispensing cabinet with filter
- Remote inventory management
- Advertising rails
- 3/4 HP or 1 HP submersible pump



TANK SIZE*	L×W×H	WEIGHT
500 Gallons	48" × 36" × 107"	~800 lbs.
1,000 Gallons	96" × 36" × 107"	~1,600 lbs.

^{*} Ability to expand to 2,000 gallons

Self-priming

DISPENSING CABINET



Dispensing Cabinet

Part No. DEFFD

System Contains:

- · Insulation with heating system
- . K-23 inline DEF flow meter
- 25' DEF hose reel with spring recoil
- 20" micron filter
- · Filter housing and cartridge assembly
- Nozzle dock
- · Ball stop with four-way roller assembly
- Stainless steel automatic shut-off nozzle with swivel
- Hose clamps
- Anchor tabs



STORAGE TANKS



Indoor Storage Tanks

Part No. DEFTNK500 (500 Gallons)

Part No. DEFTNK1000 (1,000 Gallons)

Part No. DEFTNK2000 (2,000 Gallons)

Part No. DEFTNK3000 (3,000 Gallons)

Part No. DEFTNK6500 (6,500 Gallons)

Part No. DEFTNK8400 (8,400 Gallons)

System Contains:

- 2" stainless steel threaded bulk head fitting in the sidewall
- 1" stainless steel threaded bulk head fitting in the sidewall
- 1" × 3/4" stainless steel, barbed nipple and ball valve
- 2" polypropylene threaded top mount fittings (2)
- Non-vented manway
- 1" × 12" siphon tube
- 2" stainless steel inlet for fill port with cap
- Stainless steel ball valves and nipples (2)
- · Venting package
- Duplex vent package Rated for 225 GPM
- Duplex vent filtration cover
- · DEF pipe sealant

Outdoor Storage Tanks

Part No. DEFTNK500H (500 Gallons)

Part No. DEFTNK1000H (1,000 Gallons)

Part No. DEFTNK2000H (2,000 Gallons)

Part No. DEFTNK3000H (3,000 Gallons)

Part No. DEFTNK6500H (6,500 Gallons)

Part No. DEFTNK8400H (8,400 Gallons)

System Contains:

- 2" stainless steel threaded bulk head fitting sidewall
- 1" stainless steel threaded bulk head fitting sidewall
- 2" polypropylene threaded top mount fittings (2)
- Non-vented manway
- 1" × 12" siphon tube
- 2" stainless steel inlet for fill port with cap
- Insulation heat package
- Heat trace package
- Submersible DEF pump
- DEF fitting package

Options / Add-Ons:

Dispensing cabinet

Options / Add-Ons:

- Horizontal tank
- Insulation and heat packages
- 120V Wall Mount Pump System*
- 25' Hose Reel
- Dispensing Cabinet



TANK SIZE*	W × H (TIP-UP HEIGHT INCHES)	WEIGHT
500 Gallons	48" × 73"	180 lbs.
1,000 Gallons	65" × 81"	275 lbs.
2,000 Gallons	87" × 89"	400 lbs.
3,000 Gallons	95" × 109"	600 lbs.
6,500 Gallons	119" × 150"	1,515 lbs.
8,400 Gallons	119" × 188"	2,135 lbs.

^{*} Must be within 10 ft. of tank when using external pump



TANK SIZE*	W × H (TIP-UP HEIGHT INCHES)	WEIGHT
500 Gallons	48" × 75"	115 lbs.
1,000 Gallons	64" × 90"	300 lbs.
2,000 Gallons	92" × 90"	800 lbs.
3,000 Gallons	90" × 127"	950 lbs.
6,500 Gallons	120" × 153"	3,550 lbs.
8,400 Gallons	120" × 186"	4,350 lbs.

^{*} Must be within 10 ft. of tank when using external pump

ACCESSORIES





Heavy-Duty Mobile Drum Cart

Part No. DEFDR-C

- Strong materials and rigid construction combine to make this high-quality cart
- · Easy to handle and maneuver in tight spaces



Stainless Steel Auto Shut-Off Nozzle

Part No. DEF-SN

 Compatible with all CNH Industrial pumps and systems



DEF Filter Unit - 92mm

Part No. DEFTBL92

- No tools required to replace filters
- · Easy to disassemble and clean as needed



Dispense Coupler

Part No. DEF5702

- · 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



Manual Poly Nozzle

Part No. DEF-MN

- Compatible with all CNH Industrial pumps and systems
- Lock pin feature



Drum Dispense Coupler

Part No. DEF756-008B

- · 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



Pulse Meter

Part No. DEFPLSMTR

 Stainless steel meter housing for compatibility in all environments



DEF Hose

Part No. DEF510COM-HOSE1 $(10' \times 3/4")$ Part No. DEF510C0M-H0SE2 $(20' \times 3/4")$

- 20' × 1" DEF compatible hose
- · Stainless steel 2" camlock
- Truck fitting
- · Stainless steel micro matic
- Valve fitting



Heated Insulated Tote Blanket

Part No. DEFTH275BD-A (275 Gal) Part No. DEFTH330BD-A (330 Gal)

- 120V/12 Amps
- Internal present
- 70° F (+/- 10° F)
- Front access

ACCESSORIES



CONTINUED



In-Line Digital Flow Meter

Part No. DEFMTR

- · Ability to display four different measured units: liters, gallons, pints and quarts
- Display can be adapted to the direction of the flow in 90° steps



Heated Insulated 55 Gallon Drum Blanket

Part No. DEFDH55BD-A

- Internal preset
- Protection down to -10° F
- UL listed product
- 8' cord length
- · Complete 55 gallon drum wrap

Note: drum blanket does not protect drum pumping system as on tote models



Hose Reel

Part No. DEFHR25

- Material combination axis/ bearing and the spring unit are maintenance free
- · Easily mounted to wall or floor to ensure optimal placement



DEF Filter Candle Unit - 92 mm

Part No. DEFBFLC92

• Fits securely in the DEF Filter Unit - 92 mm



Tote Valve Seal (50/case)

Part No. ZTFSEAL

• DEF CAP tamper evident seal for DEF totes

RSV Downtube

Part No. DEF5698-960 (275 Gal) Part No. DEF5698-1135 (330 Gal)

- Downtube for DEF tote
- · Valve not included

BULK TRANSFER SYSTEMS



30 GPM DEF Bulk Transfer System

Meter and Register

- Positive displacement meter
- · Mechanical register
- Mechanical printer
- Air eliminator
- · Weights and measures approved

Pump and Motor

- Stainless steel self-priming pump
- 120V Motor single phase motor
- 25' Electrical cord with 15 Amp plug

2-Wheel Dolly

- · Pump protectors
- · Meter guard
- Filter guard
- Stainless steel fitting tray
- Pneumatic tires

Hose Assembly

- 1" × 10' suction hose with SS MNPT ends
- 1" × 20' discharge hose with SS MNPT ends
- · Hose hangers for both suction and discharge lengths

Options / Add-Ons

- 30 GPM Rated filter housing with 1 micron filter
- Poly spit tank for air eliminator
- Higher flow self-priming pump
- · Quick connect package for tanks and totes (tote to tote/bulk to tote)



45 GPM DEF Bulk Transfer System

Meter and Register

- SS positive displacement meter
- · Welded inlet and outlet connections
- Mechanical resettable register with mechanical printer
- · Aftermarket SS strainer
- Aftermarket SS air eliminator
- Spit tank plumbed to air eliminator
- · Meter weights and measures approved

Filter Assembly

- SS filter housing
- · Pressure gauges
- Drain valves
- 1-micro melt blown filters
- Carbon steel reinforced base frame
- 4' W × 4' L × 6" H platform
- · Forklift and pallet jack accessible
- Painted with 2-part polyurethane

Hose Assembly

- 1.5" × 50' capacity hose reel
- Spring rewind hose reel
- Includes SS waterway and 4-way roller assembly
- 1.5" × 50' reinforced DEF discharge hose with SS MNPT ends
- 1.5" × 20' reinforced DEF suction hose with SS MNPT ends
- · Hose hanger for suction hose

Pump and Motor

- Polypropylene Mag-Drive pump
- Self-priming operation to lift product
- Flange inlet and outlet
- 5-Year warranty
- Single phase 120V/230V AC/60 Hz electric motor
- Manual motor starter and overload protection
- 12/3 × 25' electrical cord with plug

DEF EQUIPMENT SOLUTIONS



DEI EQUII I	WIENT SOLOTIONS	
PART NO.	DESCRIPTION	
DRUM PUMP SYSTE	MS	
DEFDP120	120V Drum Pump System	
DEFDP12V	12V Drum Pump System	
DEFDPHP	55 Gallon Drum Hand Pump System	
TOTE PUMP SYSTEM	MS	
DEFTP120SN	120V Tote Pump System with Stainless Steel Nozzle	
DEFTP120MN	120V Tote Pump System with Poly Nozzle	
DEFTP12VMN	12V Tote Pump System with Poly Nozzle	
DEFTPP120	120V Premium Tote Pump System	
PUMPS ONLY		
DEFTP120VP	120V Tote Pump Only	
DEFTP12VP	12V Tote Pump Only	
DEFDP120P	120V Drum Pump Only	
DEFDP12VP	12V Drum Pump Only	
MOBILE TRUCK TAN	iks	
DEFTT66	66 Gallon 12V 20' DEF Hose (47.25" × 32" × 25")	
DEFTT115	115 Gallon 12V 20' DEF Hose (47.25" × 32" × 36")	
PLUG N' PUMP STAT	FIONARY TANKS	
DEFPNP396	396 Gallon (68" × 49" × 95")	
DEFPNP396H	396 Gallon Heated (68" \times 49" \times 95")	
DEFPNP660	660 Gallon (74" × 58" × 95")	
DEFPNP660H	660 Gallon Heated (74" × 58" × 95")	
DEFPNP1320	1,320 Gallon (95" × 79" × 95")	
DEFPNP1320H	1,320 Gallon Heated (95" × 79" × 95")	
MINI BULK SYSTEM	S	
DEFTKMB500	500 Gallon Mini Bulk Tank (48" × 36" × 107")	
DEFMBH500	500 Gallon Heated Mini Bulk Tank (48" × 36" × 107")	
DEFPS-34*	3/4 HP Pump Upgrade	
DEFMBVRA*	Veeder Root Probe Adapter	
DEFTKMB1000	1,000 Gallon Mini Bulk Tank (96" × 36" × 107")	
DEFMBH1000	1,000 Gallon Heated Mini Bulk Tank (96" × 36" × 107")	
DEFPS-34**	3/4 HP Pump Upgrade	

^{**} Compatible with 1,000 gallon size mini bulk tank

PART NO.	DESCRIPTION
DISPENSING CABINE	Т
DEFFD	Dispensing Cabinet
DEFFDSP†	Self-Priming Pump
DEFDSPHT†	Heat Package
DEFP19 [†]	Automatic Shut Off
DEFPLSOUT [†]	Pulse Output
DEFCLI†	Cardlock Integration
INDOOR STORAGE TA	NKS
DEFTNK500	500 Gallon (48" × 73") 180 lbs.
DEFTNK1000	1,000 Gallon (65" × 81") 275 lbs.
DEFTNK2000	2,000 Gallon (87" × 89") 400 lbs.
DEFTNK3000	3,000 Gallon (95" × 109") 600 lbs.
DEFTNK6500	6,500 Gallon (119" × 150") 1,515 lbs.
DEFTNK8400	8,400 Gallon (119" × 188") 2,135 lbs.
OUTDOOR STORAGE	TANKS
DEFTNK500H	500 Gallon (48" × 75") 115 lbs.
DEFTNK1000H	1,000 Gallon (64" × 90") 300 lbs.
DEFTNK2000H	2,000 Gallon (92" \times 90") 800 lbs.
DEFTNK3000H	3,000 Gallon (90" × 127") 950 lbs.
DEFTNK6500H	6,500 Gallon (120" × 153") 3,550 lbs.
DEFTNK8400H	8,400 Gallon (120" \times 186") 4,350 lbs.
ACCESSORIES	
DEFDR-C	55 Gallon 3-Wheel Heavy-Duty Mobile Drum Cart
DEF-SN	Stainless Steel Auto Shut-Off Nozzle
DEF756-008B	Drum Dispense Coupler
DEF5702	Dispense Coupler
DEF-MN	Manual Poly Nozzle
DEFPLSMTR	Pulse Meter
DEFTBL92	DEF Filter Unit – 92 mm
DEFDH55BD-A	55 Gallon Heated Insulated Drum Blanket
DEFTH275BD-A	275 Gallon Heated Insulated Tote Blanket
DEFTH330BD-A	330 Gallon Heated Insulated Tote Blanket
DEF510COM-HOSE1	$10' \times 3/4"$ DEF Hose
DEF510COM-HOSE2	$20' \times 3/4"$ DEF Hose
DEFMTR	In-Line Digital Flow Meter
DEFHR25	25' Hose Reel
DEFBFLC92	DEF Filter Candle Unit – 92 mm
DEF5698-960	275 Gallon RSV Downtube
DEF5698-1135	330 Gallon RSV Downtube
ZTFSEAL	Tote Valve Seal (50/case)

[†] Option/Add-on for dispensing cabinet (DEFFD)





