

## DAY TANKS

Model DT and CDT

- Complete tank, rupture basin and instrumentation package
- Rectangular Day Tank and rupture basin assemblies of 290 gallons or less are doorway accessible
- UL Approved
- With its high strength & round construction, Series CDT Day Tanks cut manufacturing time and cost while maintaining Preferred's quality and customer service

Preferred Day Tanks provide a local supply of distillate or diesel fuel for boilers, emergency generators or other stationary engine driven or oil fired equipment. Available from 20 to 620 gallon capacities, a properly sized tank may be selected per individual job. For maximum fuel capacity in a minimum space, Preferred Day Tanks are rectangular in shape. Each Day Tank unit includes all necessary pipe connections, inspection port, manual fill port, and tank gauge, along with a variety of optional accessories.

### Standard Equipment (DT & CDT)

- "UL" Day tank assembly
- "UL" Rupture basin assembly
- Tank gauge (top mounted & float operated)
- Three Drop tubes (one each for external device supply & return and day tank fill)
- Leak detector switch, Model RBS
- Containment – 160% of Day Tank capacity
- Plugged drain tapping
- Exterior chemical resistant finish (gray enamel over rust-resistant primer)
- Structural steel channel mounting base

### Tank Specifications (DT and CDT)

**Mounting Base:** Structural Steel Channel

**Metal Thickness:** 10 gauge; All DT's and up to CDT-100  
7 gauge for CDT-160  
3/16" plate for CDT 220 & 275

**Exterior Finish:** Chemical resistant gray enamel over rust resistant primer

**Manual Fill Port:** 2" NPT

**Inspection Port:** 6" square gasketed plate

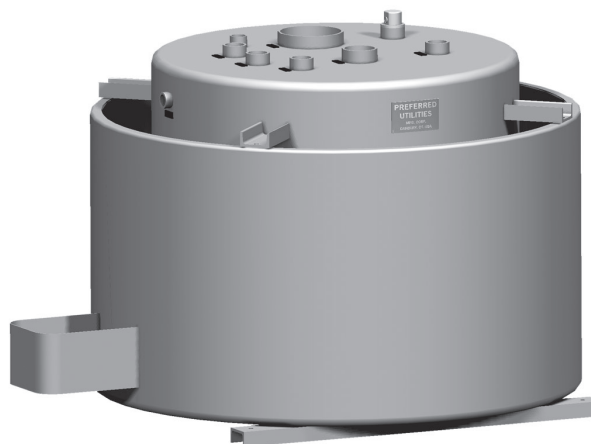
**1" NPT Pipe Connections:** Tank Fill, Engine Fuel Return, Overflow to Storage Tank, Engine Fuel Supply, plugged Drain

**Vent Connections:** Top Mounted  
2" -- 20-60 Gallon  
3" -- 80-190 Gallons  
4" -- 220 Gallons and over

**Approvals / Compliance:** UL Approved, NFPA 30 compliant



DT tank, rupture basin, level controller and gauge, inspection port and connections shown



CDT tank, rupture basin, gauge, inspection port and connections shown

### Rupture Basin Specifications (DT and CDT)

**Mounting Base:** Structural Steel Channel

**Containment:** 160% of tank capacity standard (other capacities available, consult factory)

**Leak Detector:** Preferred RBS Float Switch (see page 57)

**Metal Thickness:** same as companion tank

### Turned Edge Reinforcement

**Finish:** Chemical resistant gray enamel finish over rust resistant primer.

**Drain:** plugged 1" NPT coupling

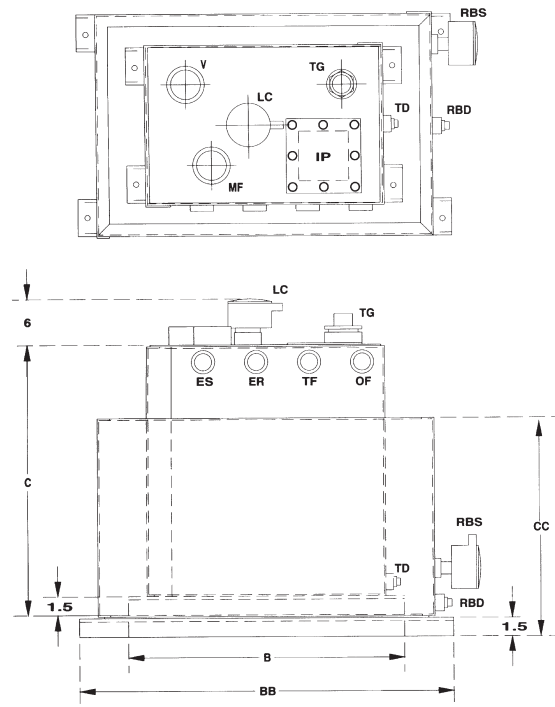
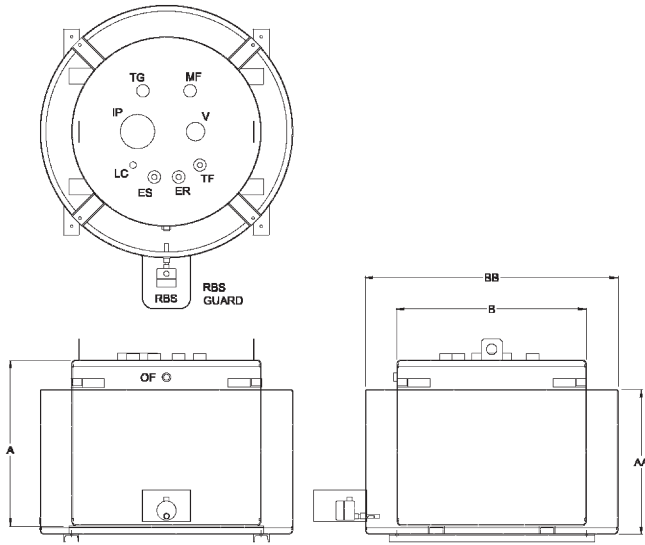
**Approvals / Compliance:** UL Approved,

Specifications subject to change without notice.

# DAY TANKS

## Specifications

Fuel Specialties



**CDT Dimension Table**

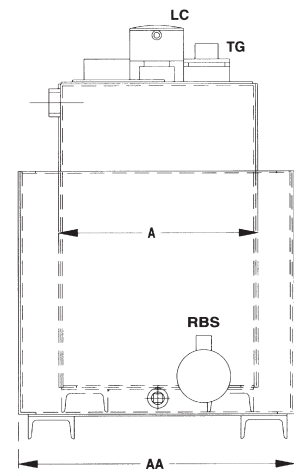
Catalog Number	Tank Dimensions			Vent	Companion Rupture Basin		
	A	B	WGT		AA	BB	WGT
CDT-060	26"	26"	156	2"	22 3/8"	36"	185
CDT-080	35.5"	26"	186	3"	19 7/8"	36"	217
CDT-100	44.5"	26"	214	3"	37 3/8"	36"	250
CDT-160	37"	36"	372	3"	33 3/8"	48"	404
CDT-220	28"	48"	491	4"	25 7/8"	64"	545
CDT-275	35.3	48"	551	4"	32 3/8"	64"	645

*Weights listed are approximate dry weights*

**DT Dimension Table**

Catalog Number	Tank Dimensions				Vent	Companion Rupture Basin			
	A	B	C	WGT		AA	BB	CC	WGT
DT-020	13"	22"	21.5"	79	2"	18"	30"	17.5"	85
DT-030	13"	31"	21.5"	136	2"	18"	41"	17.5"	130
DT-040	13"	26"	33.5"	166	2"	18"	34"	29.5"	159
DT-060	13"	37"	33.5"	245	2"	18"	47"	29.5"	205
DT-080	24"	22"	45.5"	317	3"	29.5"	30"	41.5"	276
DT-100	24"	27"	45.5"	366	3"	29.5"	35"	41.5"	343
DT-130	24"	33"	45.5"	361	3"	29.5"	45"	41.5"	420
DT-160	24"	40"	45.5"	405	3"	29.5"	53"	41.5"	415
DT-190	24"	47"	45.5"	483	4"	29.5"	63"	41.5"	466
DT-220	24"	53"	45.5"	524	4"	29.5"	72"	41.5"	557
DT-260	24"	61"	45.5"	584	4"	29.5"	85"	41.5"	674
DT-275	24"	67"	45.5"	640	4"	29.5"	83"	41.5"	670
DT-290	24"	68"	45.5"	656	4"	29.5"	94"	41.5"	661
DT-360	45"	45"	45.5"	689	4"	50"	73"	41.5"	676
DT-460	45"	57"	45.5"	805	4"	51"	87"	41.5"	784
DT-560	45"	69"	45.5"	964	4"	57"	94"	41.5"	880
DT-620	45"	76"	45.5"	1041	4"	60"	99"	41.5"	932

*Weights listed are approximate dry weights*



- |     |                        |                               |
|-----|------------------------|-------------------------------|
| ES  | Engine Supply 1"       | (capped)                      |
| ER  | Engine Return 1"       | V Vent Tapping                |
| TF  | Tank Fill 1"           | IP Inspection Port 6"x6"      |
| OF  | Overflow 1"            | LC Level Controller Switch    |
| TD  | Tank Drain 1"          | RBS Rupture Basin Leak Switch |
| RBD | Rupture Basin Drain 1" |                               |
| MF  | Manual Fill Port 2"    | TG Tank Gauge                 |

# DAY TANKS

## Suggested Specifications

### 1. Day Tank System Construction

Provide one (1) \_\_\_ gallon, UL 142 labeled Day Tank constructed of reinforced 10 gauge steel with channel side supports, 1" drain, removable gasketed 6" square inspection plate, fuel level gauge, level control probe, vent cap (shipped loose), and a 2" gasketed manual fill cap. Exterior shall be finished in an oil resistant textured gray enamel. Day Tank(s) shall be as supplied and coordinated by the Pump Set manufacturer. The Fuel Oil Day Tank shall be manufactured by Preferred Utilities Mfg. Corp. Danbury, CT, Model CDT-S-R-UL.

### 2. Tank Connections

Tank connections shall include fuel inlet, required vent openings, manual fill, overflow to main tank, engine supply, and engine return. All piped with reinforced, welded pipe adapters. Fuel fill, inlet and return must be supplied with factory installed drop tubes to prevent surging and foaming in the day tank.

### 3. Rupture Basin

Rupture Basin (indoor applications only): The Rupture Basin shall consist of an open-top, welded heavy gauge steel structure sized a minimum of 160% capacity of tank capacity. Rupture Basin (outdoor applications): The Rupture Basin shall consist of a welded steel top, welded heavy gauge steel structure sized a minimum of 160% capacity of tank capacity. Exterior shall be finished in an oil resistant, textured gray enamel. Provide and factory install a rupture basin leak detector for alarming and fuel supply pump shut down. Electrical connections shall be contained in a weatherproof junction box. Switch shall be a Preferred Model RBS.

### 4. Level controls

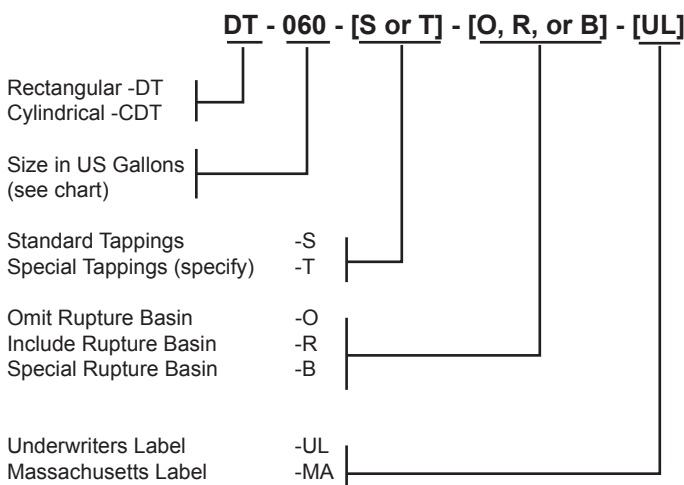
Level Controls shall have four (4) float operated switches rated at 100 watts and factory installed in the day tank. Levels of control: emergency high-level alarm and total pump shutdown (90% capacity), pump off (80% capacity), pump on (50% capacity), and emergency low-level secondary pump on and annunciation (40% capacity). Unit shall be suitable for pressures to 150 psi, and shall be made entirely of non-ferrous material. Electrical connections shall be contained in a weatherproof junction box. Level Control shall be Preferred Model PLS-xx-4.

### 5. Factory Testing

Fuel oil storage tank and day tank hydrostatic testing is required to ensure tightness prior to shipment. The minimum pressure for testing the tank shall be five (5) psi. The hydrostatic pressure shall be maintained until all joints and connections have been visually inspected for leaks, but in no case for less than one-half hour. The tank shall not show any permanent deformation as a result of the test. The Rupture basin (open top) shall be hydrostatic tested prior to shipment. The basin shall maintain a full water level while all joints and connections are visually inspected for leaks. The test shall be run for no less than one-half hour. A copy of the test procedures shall be sent to the consulting engineer and owner. The owners and or the consulting engineer, at their discretion, shall observe this and all other tests.

### Ordering Information

Specify the Day Tank Catalog Number as follows:



Optional Features	Catalog Number
50 PSI Test	add "-EQ" suffix
NYC Certified	add "-NY" suffix
Other Specs.	add "-XX" suffix

Consult factory for other special requirements

### Optional Accessories (DT & CDT)

#### Custom Arrangements

Non-standard shapes, sizes, metal gauges, connections, level detectors etc. are available. Please consult factory for details.

#### Preferred Fusomatic Fire-Safety Valve:

Thermally actuated, 1" gate valve. Automatically shuts off engine fuel supply when ambient temperature rises to 165° F (See Page 71).

#### Preferred Fusomatic Electric Cut-Off Switch:

Automatically stops remote transfer pump operation when ambient temperature rises to 165° F (See Page 71).

#### Solenoid Operated Valves:

One per tank required on fill line for multiple tank systems. Consult Factory

#### Flow Control Manifolds:

Includes solenoid valves, filters, flow indicators etc. as required. Consult Factory.

#### Preferred Liquid Level Switch:

It is used to control the addition or removal of oil from remote pumps, and to alarm high and low levels. (See Page 58)

#### Preferred Vent Protector:

It is made of cast aluminum and is threaded for standard pipe. (See Page 68)

#### Preferred Fill Caps:

Prevent unauthorized fuel storage tank access to day tanks. (See Page 65)