# **DANKO XL SKID UNIT**

**UPF** Defender Poly Tank

## **FIRE PUMP**

A Waterous 2515LE pump shall be provided and bolted directly to the specified engine and capable of the following performance:

Max Pressure - 75 GPM	@	135 PSI
Max Flow - 150 GPM	@	90 PSI

NOTE: The above manufacturer performance rating is based on maximum full throttle with a flooded suction prior to the installation of associated piping.

The impeller shall be high strength corrosion resistant bronze, fully enclosed, double hubbed to balance hydraulic thrust, and mechanically balanced to eliminate vibration. The volute shall be constructed of high strength aluminum alloy, anodized for superior corrosion resistance. A drain valve shall be located on bottom of the pump volute.

The pump shall have a two (2) year warranty covering material and workmanship. Normal wear items (packing, anodes, mechanical seals, etc.) are not covered by this warranty.

The pump shall be firmly mounted to the skid frame or platform behind the water tank.

#### **PUMP ENGINE**

A Honda GX390 11.7 HP engine shall be supplied and mounted to the pump. This engine is an air cooled 4-stroke OHV with an electric starter and manual recoil pull starter featuring a dual element air filter and dual oil drains and fill.

The engine shall have an onboard fuel tank with a capacity of 1.6 US gallons.

Displacement- 389 cc; Bore x Stroke- 88x64 mm; Compression ratio- 8.2:1; Digital CDI ignition with variable timing; Net Torque- 19.5 lb-ft @ 2,500 rpm; Net Power Output- 11.7HP @ 3,600 rpm

The engine controls shall be mounted directly on the engine and consist of an electronic start/stop ignition, manual choke, and throttle control.

#### **DISCHARGE PRESSURE GAUGE**

There shall be one (1), discharge pressure gauge installed in line with the plumbing. The gauge shall be a minimum of 2-1/2" in diameter with a white face and black text.

#### NO PUMP PRIMER

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No pump primer shall be provided.

### **PUMP SYSTEM CERTIFICATION**

The pump shall be tested after the pump and all its associated piping and equipment have been installed on the skid unit by the apparatus manufacturer.

### **XL PLUMBING**

Plumbing shall be a combination of heavy duty stainless steel pipe and fittings, and high pressure rubber hose.

A Danko XL stainless steel manifold shall be used for all discharge's. The Danko XL manifold is engineered to allow adding a foam system or additional discharge's easy and fast.

The high pressure rubber hose is designed to handle air, mild chemicals and water and is resistant to abrasion and UV protected.

The stainless steel pipe and fittings shall have a polished natural mill finish.

# **DISCHARGE MANIFOLD**

A stainless steel welded pipe manifold shall be attached to the pump discharge with four (4) 1/4" bolts to facilitate all outlets and reduce friction loss. The manifold assembly shall be constructed of 2" round tubing and capable of accommodating up to two (2) 1" discharges and three (3) 1-1/2" discharge outlets.

#### **SUCTION MANIFOLD**

A stainless steel welded pipe manifold shall be attached to the suction side of the pump with a Victaulic clamp for easy removal for service and maintenance. The manifold shall have a tee to facilitate a 2" tank to pump and 2-1/2" intake.

#### **VALVES**

All valves, unless otherwise specified, shall be brass Watts full flow quarter-turn valves.

# TANK TO PUMP

The tank to pump shall be equipped with a 2" Watts full flow, quarter turn ball valve with a flexible hose to reduce vibration of the pump engine.

#### PUMP TO TANK/RECIRCULATE VALVE

One (1) 1" tank fill/recirculate line with a 1" Watts full flow, quarter turn ball valve shall be plumbed directly from the pump discharge to the tank with a flexible hose to reduce vibration of the pump engine.

# <u>INTAKE</u>

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One (1) 2-1/2" male intake shall be mounted to the pump inlet. The intake shall terminate with a chrome plated 2-1/2" NPT female x 2-1/2" NH male bushing. A zinc screen will be provided to prevent foreign objects from entering the pump.

# **CAP WITH CHAIN**

One (1) 2-1/2" NH vented chrome plated cap with chain shall be supplied for the intake.

# 1-1/2" DISCHARGE

One (1) 1-1/2" NH discharge shall be provided with a 1-1/2" Watts full flow, quarter-turn valve. The discharge shall terminate with a chrome 1-1/2" NPT male x 1-1/2" NH male fitting and be directed to the rear.

# **CAP WITH CHAIN**

One (1), 1-1/2" NH vented chrome cap with chain shall be supplied for the discharge.

# **BOOSTER REEL**

One (1), Hannay model EF4040-17-18 steel electric booster reel(s), with a capacity of 150' of 1" booster hose shall be supplied. The reel(s) shall be painted graphite in color. A 1" Watts full flow, quarter turn valve shall be plumbed from the pump discharge and connected to the booster reel with a flexible hose to reduce vibration from the pump engine.

The booster reel(s) is equipped with a standard 1" 90 degree ball bearing swivel joint with 1" female NPT threads and a standard outlet with 1" male NST threads.

The reel(s) shall be capable of withstanding pressures to 1000 psi and temperature ranges from -60° F to 250° F.

One (1), set of chrome guide rollers shall be mounted high on the left side of the hose reel. The rollers shall provide assistance in pulling the hose off from the reel and guiding it on after use.

One (1), booster reel rewind switch shall be located on the left side of the skid unit.

One (1), 1" x 150' section(s) of 300 lb. working pressure rubber booster hose coupled with 1" NH couplings shall be supplied for the booster reel(s).

The booster reel shall be mounted lengthwise above the water tank and deploy to the side(s) of the apparatus.

#### WATER TANK

The water tank shall be a UPF Danko Defender XL Series tank with a capacity of 200 US gallons. (Approximate tank dimensions: 42L x 46W x 29H)

The tank shall have a LIFETIME WARRANTY as supplied by the tank manufacturer.

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The tank shall be constructed of 1/2" thick UPF PT-2E polypropylene sheet stock with AccTuff resin. The material shall be of a certified, high quality, noncorrosive, stress relieved thermo plastic, black in color, and UV stabilized for maximum protection.

The exterior of the tank shall be textured poly.

All joints and seams are to be fully nitrogen welded and electronically tested for maximum strength. The unit shall incorporate transverse partitions manufactured of 3/8" UPF PT2E polypropylene (natural in color) which shall interlock with a series of longitudinal partitions constructed of 1/2" PT2E polypropylene (black in color). All swash partitions shall be so designed to allow for maximum water and air flow between compartments and are fully welded to each other as well as to the inside of the tank.

The tank shall be equipped with a combination vent/overflow and manual fill tower. The fill tower shall be 8" round with a blue, molded cover. The cover shall be fastened to the tower with a tether to prevent loss. The tower shall be located in the rear passenger's side corner. There shall be a vent/overflow installed inside and to the extreme rear of the fill tower approximately 2" down from the top. This vent/overflow shall be schedule 40 polypropylene pipe with minimum ID of 3" and piped internally to exit out the right side tank wall.

The tank cover shall be constructed of 1/2" thick PT2E polypropylene, black in color, UV stabilized, and flush mounted. The cover shall incorporate as standard two (2) mounting blocks that shall be to accommodate two (2) each sliding nut fasteners. These mounting blocks shall be welded to the cover running crosswise.

The sump shall be milled into the tank floor and measure approximately 8" diameter and 1/2" deep. The sump shall not be visible from or protrude through the bottom of the tank.

There shall be three (3), standard tank connections located in the rear wall of the tank. One (1), 2" NPT female tank to pump suction fitting, one (1), 1" NPT female tank fill/recirculate fitting with flow deflector, and one (1), 3/4" NPT female drain opening.

#### TANK FLOOR PLATFORM BASE

There shall be a full-width skid base manufactured of 3/4" PT2E polypropylene welded to the bottom of the tank. This base shall be 48" wide by 75" long.

The pump mounting area shall be supported by 1/2" PT2E polypropylene gussets. The base shall have a mounted tab at the front and two (2)  $\frac{1}{2}$ " drilled holes at the rear of the platform to secure directly to a truck bed without the need for any skid framework underneath.

# **TANK DRAIN**

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There shall be a 3/4" FNPT female tank drain located on the rear tank wall with a 3/4" stainless steel plug.

# **VISUAL WATER TANK SIGHT LEVEL GAUGE**

There shall be an external visual sight gauge located on the rear wall of the tank.

# **OPEN STORAGE COMPARTMENT**

There shall be an internal storage compartment built integral with the water tank and located on the left rear side of the tank. The compartment shall be open from the top of the water tank and be approximately 29" long x 11" wide x 9" deep with two (2) 1/2" drain holes.

NOTE: This compartment may be converted to a 12-gallon foam cell.

# 12-VOLT ELECTRICAL

All electrical components of the unit shall be wired to a terminal stud block with high temperature, copper, multi-strand, crosslink-coated wire enclosed in a protective loom.

# **WORK LIGHT**

One (1), 12-Volt LED work light shall be mounted on the tank to light up the work area. An ON/OFF switch shall be located at the rear of the skid unit.

#### **BASIC LIMITED WARRANTY**

Danko Emergency Equipment Company shall warrant to each original purchaser that the apparatus is free of defects in material and workmanship for a period of one (1) year.

#### STAINLESS STEEL PLUMBING WARRANTY

Danko Emergency Equipment Company shall warrant to each original purchaser that the apparatus stainless steel plumbing shall be free of defects for a period of ten (10) years.

### **NO DELIVERY**

The unit shall be picked-up by the purchaser at the factory FOB Snyder, NE unless other arrangements are made.

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