

# Darley HE500K Pump Brochure



## Darley HE500K Pump

**Pump:** Darley HE 500 GPM pump

**Engine:** Kubota 84.5HP (Deutz, John Deere and Cummins engines are available for additional charge)

**Option Trailer:** Johnson Dual Axel Trailer

## PUMP:

**Darley HE 500 Kubota Single-Stage Engine-Driven Fire pump 500 GPM Rating**

## **Performance**

The pump shall be an NFPA rated 500 GPM single-stage, engine driven of centrifugal design built to meet the following performance:

- 100 percent of the rated capacity at 150 PSI
- 70 percent of the rated capacity at 200 PSI
- 50 percent of the rated capacity at 250 PSI
- 100 percent of the rated capacity at 165 PSI

The pump primer shall be U. L. approved and capable of pulling a vacuum through 20 ft. of hard suction hose with lifts up to 10 ft. per requirements of NFPA 1901. A single push-pull priming control knob shall be located on operator's panel. Primer shall be rotary vane-type complete with valve switch and oil reservoir. Priming pump to be constructed of heat-treated aluminum and hard coated anodized.

## **Pump Design**

Impellers to be high-strength bronze alloy, accurately balanced for precision fit and durability. Impellers to feature a double seal ring design to minimize end thrust.

Renewable bronze, double-labyrinth, wrap-around seal rings are to be furnished in the pump.

Pump shaft to be precision ground 416 stainless steel with mechanical seal. Pump shaft is to be splined to receive broached impeller hub.

Bearings are to be heavy duty, deep groove, and radial type ball bearings, oversized for long life. Bearings to be protected at all openings from road dirt and water splash with oil seals and water slingers.

An integral check valve is to be provided in the discharge head assembly of the pump to enable priming with the discharge valves open.

## **Pump Casing and Gear Box**

Transmission case to be alloy cast iron of heavy-duty design with adequate oil reserve capacity to maintain low operating temperature. Magnetic drain plug to be provided.

Pump casing shall be of anodized aluminum and vertically split, with a minimum tensile strength of 65,000 PSI - bronze-fitted. Pump drive shaft shall be precision-ground, heat-treated alloy steel - minimum 1-1/2" x 10-spline ends.

Pump ratio to be selected by the manufacturer's Engineering Department. Gears are to be helical in design and precision cut for quiet operation and long life. Gears to be cut from high strength alloy steel, heat treated and gas nitrided. Gear face to be a minimum of 3-1/2" Chain drive and/or design requiring extra lubricating pump is not acceptable.

## **Suction**

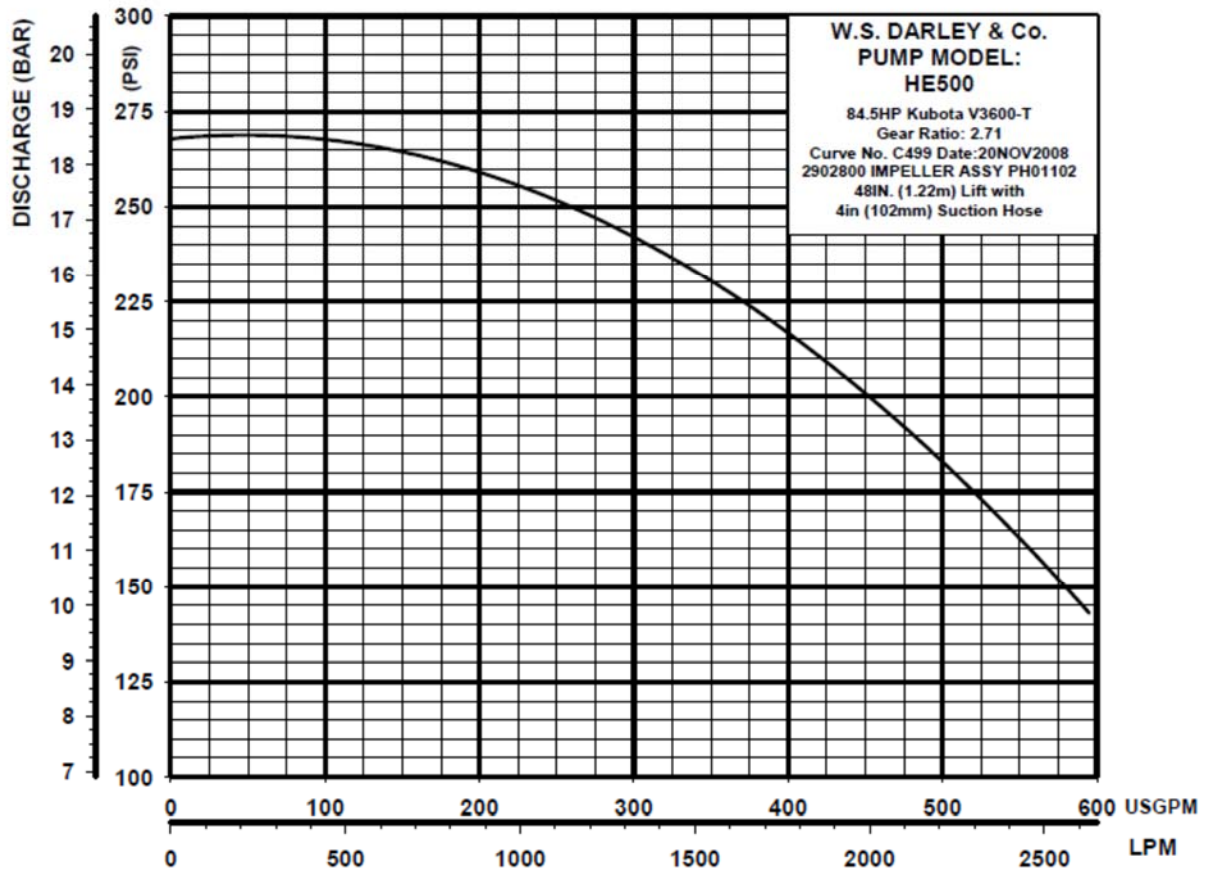
The pump shall come complete with (1) 4" NPT suction inlet with removable, recessed screen and brass, chrome-plated, long-handled cap.

## Discharge

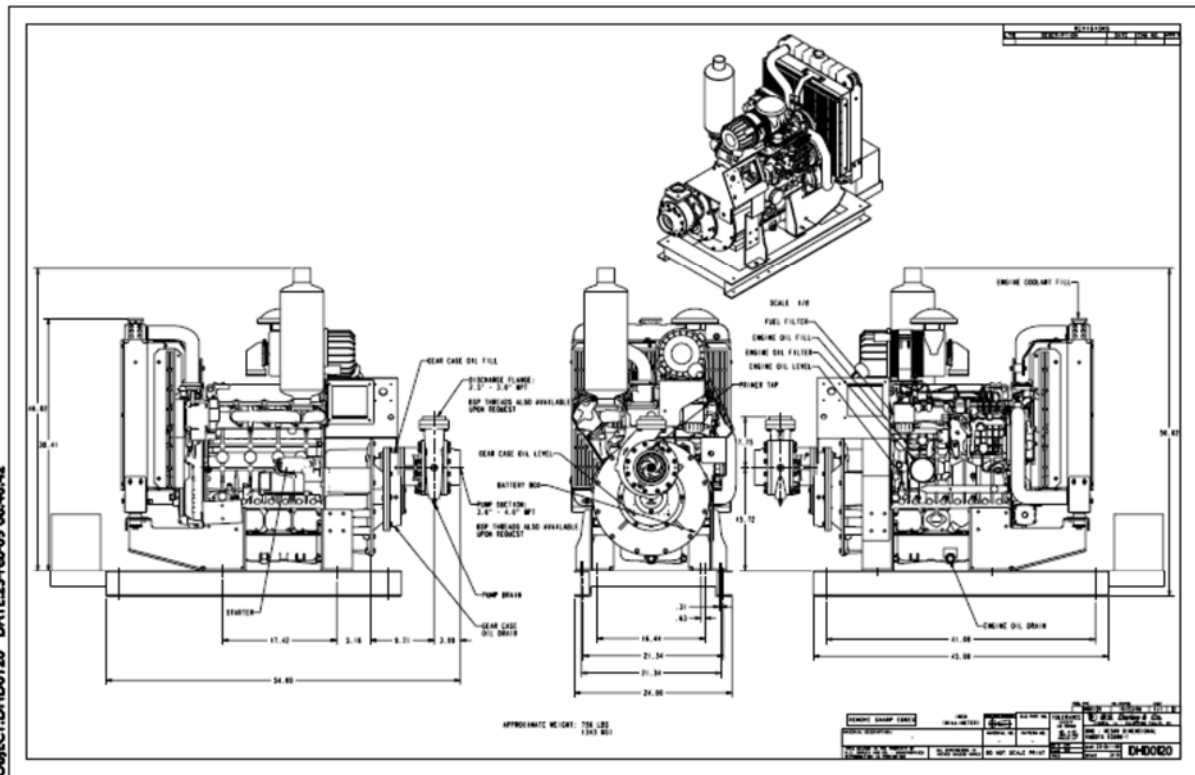
One 3" NPT

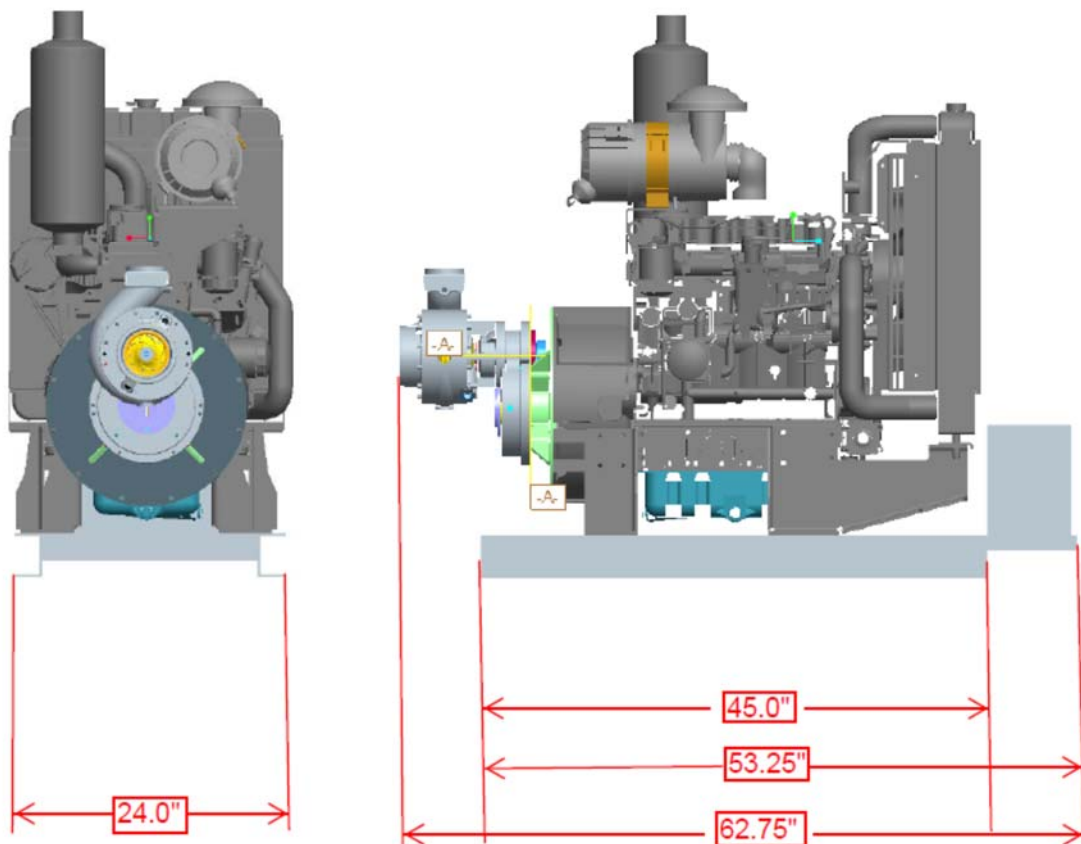
## Documentation

Pump Warranty/Guarantee to be included with each proposal. Pump warranty shall be for three (3) years.



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### **ENGINE:**

Kubota

Model: V3600T

84.5HP @ 2500 RPM

Dimensions:

Weight:

The engine shall be a Kubota V3600-T, which meets all Tier 3 emissions requirements, this engine is a vertical 4 cycle liquid cooled Diesel engine, 4 Cylinder with 3.620 displacement, with IDI combustion system, and a Turbocharged intake system, with a maximum speed of 2600 RPM, electric start, 12 volt electrical system with 60 amp alternator, spin-on oil filter, fuel filter, heavy duty air filter and muffler. The engine shall draw its fuel from the chassis fuel tank. Chassis battery shall be utilized for engine start.

The engine shall be provided in a full power unit including radiator, suction fan, fan guard and fan shroud and mechanical governor. control panel will also be included with gauges including: key-switch, tachometer, hourmeter, water temp, oil pressure and voltmeter gauges, Indicator lamps for glow plugs-shipped loose 6 Foot long throttle cable, Air Filter-mounted, Side mount oil fill, Exhaust pipe and Muffler, SAE 4 Flywheel housing and 10" flywheel.

Accessories: NOT quoted

## **TRAILER:**

**Weight Rating:** 7,000 LBS. GVWR w/evenly distributed load

**Axles:** 2- 3,500# electric brakes, w/ez-lube, safety breakaway w/charger

**Suspension:** 4 leaf double eye springs

**Tires & Wheels:** ST205/75 D15 load range C tires, 5x5 bolt pattern silver mod wheels

**Fenders:** 9"x72" 16 ga. smooth w/stoneguard

**Hitch:** 2" A-frame w/safety chains (w/H.D. package hitch is 2" Bulldog)

**Jack:** 2,000# topwind Rapid Jack

**Structural:** 4" channel full wrapped tongue, 2 X 3 X 3/16 frame & crossmembers (24" centers), 2 X 2 X 1/8 top rail & uprights

**Structural w/H.D. Package:** 5" channel full wrapped tongue, 3 X 4 X 1/4 frame, 2 3/8 top rail, 2 X 3 X 3/16 uprights, 3" channel crossmembers (24" centers)

**Tie Downs:** 4 stake pocket tie downs, tail board brackets

**Electrical:** All required lighting, license bracket w/light, wiring in conduit w/7 way connector

**Floor:** 2X8 treated yellow pine decking

**Paint:** Phenolic epoxy ester primer w/acrylic finish

**Colors Available:** Black, Victory Red, Charcoal Metallic, Silver Metallic, Bright Blue Metallic, Emerald Green Metallic, Federal Yellow, Bright Safety Yellow, Safety Orange, (Some custom colors - please call)

## **Options**

- Spare ST 205/75 D15 LR "C" tire w/silver mod wheel
- Spare silver mod wheel w/o tire
- Second electric brake: N/C (Incl. as standard equipment)
- 1/8" steel treadplate floor
- 5' wide bed (in lieu of 77" or 83"):N/C
- Dove tail:
- 4" drop axles
- 48" standard ramp gate: 5' wide: or 77" wide: or 83" wide
- 5' standard ramp gate
- 48" split tractor ramp gate w/knees & spring
- 5' split tractor ramp gate w/knees & spring
- 5' stand up knee ramps
- 5' slide-in ramps w/storage pockets (formed treadplate)
- 5' slide-in ramps w/storage pockets (angle)
- H.D. Package: 4X3X1/4 Frame, 2" 7,000# Bulldog ball coupler, 5" channel tongue, 2X3X3/16 uprights, 2 3/8 pipe top rail, tear drop fenders