OTTER PUMPING SYSTEM



COMPOSITE ULTRA-LIGHTWEIGHT FLOATING SUBMERSIBLE PUMP SYSTEM

The Otter™ is a hydraulically powered ultra-lightweight, high-volume, composite floating submersible pumping system used for remote water supply sourcing and emergency dewatering operations.

The power unit can be mounted on a vehicle or trailer with a minimum 3600 lb (1633 kg) payload and a 6.5 ft (2.0 m) or longer bed. With its standard 100 ft (30 m) hydraulic umbilical, the Otter has considerable versatility to access open water sources that a typical fire pumper or draft pump cannot reach.

The Otter system's SP2 floating submersible pump uses the latest advancements in structural composite technology to achieve an ultra-lightweight design that is physically manageable by one or two emergency responders. The Otter is well suited in supplying pressurized water to downstream apparatus, dewatering flooded infrastructure and pumping brine solutions and contaminated fluids such as chemical and oil spills.

10 FEATURES AND BENEFITS OF THE OTTER PUMP

- 1. Portable "floating hydrant" providing reliable high-volume positive pressure water supply
- Superior corrosion-proof composite casing and impeller construction for saltwater applications
- 3. No priming or drafting required
- 4. Increases access to more open water sources
- 5. Physically manageable by one or two emergency personnel
- 6. Deployment flexibility over a wide variety of terrain
- 7. Improved water shuttle operations by eliminating stationary draft engine, decreasing tanker/tender fill times
- 8. Easily refueled while operating
- 9. Power unit skid air-liftable and can be located remotely away from water source
- 10. Uses non-toxic biodegradable hydraulic fluid





OTTER PUMP SPECIFICATIONS



SP2 Submersible Pump

The Otter Standard uses the SP2 submersible pump, a carbon fiber-reinforced polymer composite pump. With strength comparable to steel, the SP2 casing and impeller are corrosion-proof in saltwater and provide an ultra- lightweight design.

- 6" Outlet
- Weight (63cc motor): 120 lbs (54 kg), w/o coupling
- Formed fiberglass or aluminum suction screen/base
- Foam-filled pontoon flotation
- 4-wheel rolling chassis

POWER UNIT

- Tier 3: 140 HP (104 kW) FPT
- Tier 4/EuroV: 135 HP (101 kW) Hyundai
- Diesel Cap.: 30 Gal (114 L) stainless steel tank
- 4-Hour run-time at 100% load

ENCLOSURE SKID

- Dimensions
 - o Length: 80" (2032 mm)
 - o Width: 50" (1270 mm)
 - Height: 66" (1676 mm)
- Structural Steel skid and lifting bail
- Aluminum panels
- Transverse and Longitudinal forklift pockets
- Total system weight: ~3600 lbs (1633 kg)
- Interior and Exterior LED lighting

HYDRAULIC POWER SYSTEM

- Closed loop system with variable displacement hydraulic pump
- Eco-friendly biodegradable hydraulic fluid
- 13 gallon (50 L) stainless steel hydraulic tank

HYDRAULIC HOSE REEL

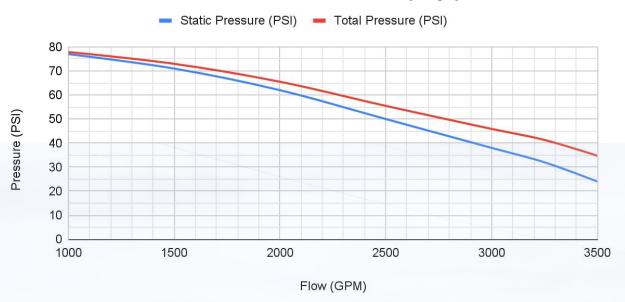
- Standard 100 ft (30 m, 60 m optional) hydraulic umbilical
- Nylon abrasive sleeve wrapped hydraulic line
- Quick connect hydraulic fittings for submersible pump

CONTROL SYSTEM

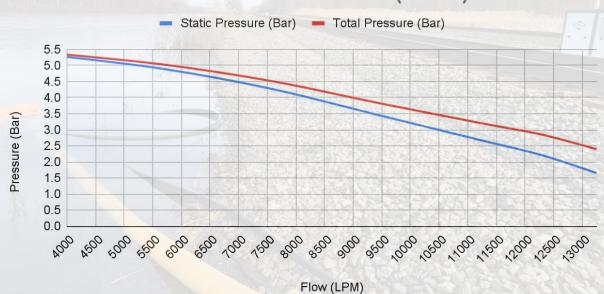
- Rugged Plus+1 Control screen
 - IP67 sealed physical buttons
 - Monitor and control engine and hydraulic power systems
- Emergency Stop
- IP65 Enclosure Rating
- "Smart Charger" Technology

OTTER PUMP PERFORMANCE

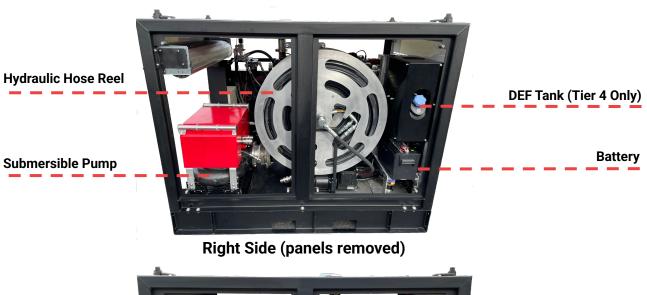
SP2: Standard T3/T4 Otter (Imp.)



SP2: Standard T3/T4 Otter (Metric)



OTTER PUMP SPECIFICATIONS



Oil Filter

Fuel Filter



Fire Extinguisher

Hydraulic Cooler

Left Side (panels removed)



Trickle charging port and "jumpstart mounts"



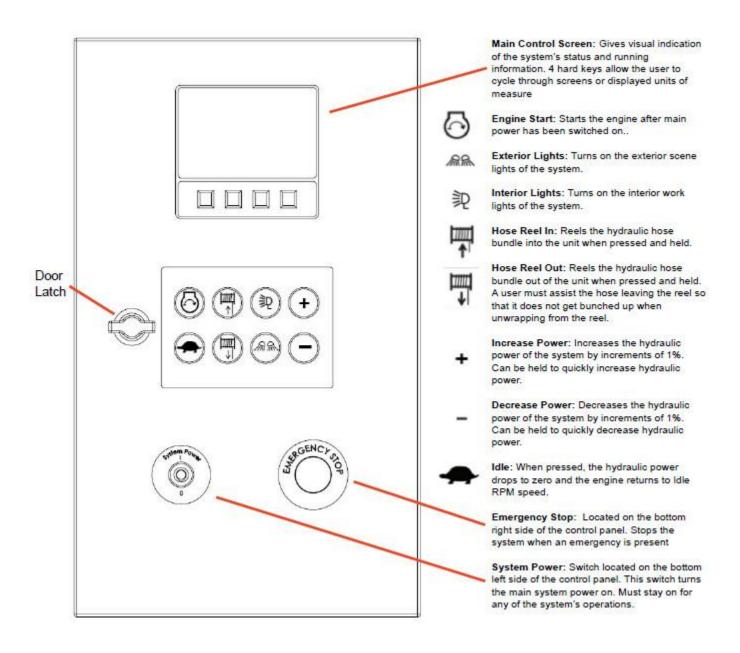
DEF fill port (Tier 4/Euro V only)

OTTER CONTROL SYSTEM

SIMPLE TO DEPLOY & SIMPLE TO OPERATE

The Otter uses a modern rugged control system with simple up/down operation. The operator only needs to set the desired power level the control system handles the rest.

• IP65 Sealed Control Enclosure • Day/Night High Visibility • Single Button Operation



OTTER CONTROL SYSTEM

MAIN SCREEN DISPLAY

Main Screen

Dowon	0	RPH: 0
Power:		Eng. Temp(F): -40
		011 P (PSI): 0
		Eng. Load(%): 0
		Battery (V): 0.0
		Fuel Level(%): 100
		Hyd. Level(%): 100
		DEF Level (%): 0
		DEF Temp (F): -40
Main	Data	Units

Data Screen

Eng. Load(%): Battery (V):	0.0	Hyd. Pressures
Eng. Hours:	0	Power(PSI): 0
Fuel Rt(G/H):	0.0	Charge(PSI): 0
Oil P (PSI):	0	
Target RPM:	0	
RPM:	0	
Power:	0	
Hyd. Power:	0	
		DEF Level (%): 0
		DEF Temp (F): -40
Main	Data	Units

Power: Indicates the current power level of the combined hydraulic and engine subsystem. 0-100

RPM: Keeps the user updated on the live RPM of the system.

Temp: Gives the user a live readout of the temperature of the engine.

Oil: Keeps the user updated on the psi of the Engine Oil

Fuel level: Keeps a live update on the fuel level of the system. This will blink red when the level falls below 25 percent

Hyd. Level: Keeps a live update on the Hydraulic fluid level of the system. This will blink red when the level falls below 70 percent as a warning to fill the tank when possible.

Eng. Load: Current engine load of the system.

DEF Level: Current level of Def Fluid (For Tier 4 Units Only)

DEF Temp: Current value of Def Temperature (For Tier 4 Units Only)

Battery (V): Battery voltage of the system.

Engine Hours: Accumulated hours of the system.

Fuel Rate: Fuel rate that the system is consuming.

Oil Pressure: Oil pressure of the system.

Hyd. Pressures:

- Power: Indicates the hydraulic pressure of the power loop of the system
- Charge: Indicates the hydraulic pressure of the charge loop of the system