12″ Hydraulic Submersible Trash Pump
120HST

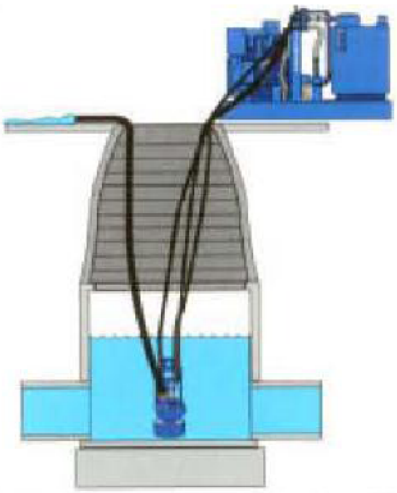
Thompson hydraulic submersible pumps provide a powerful answer when high heads or high lifts become a factor on job sites. These unique variable speed and variable flow hydraulically driven submersible pumps and power units are manufactured from heavy-duty cast iron and steel for high reliability. The Thompson design allows for maximum versatility in dewatering applications and pumping materials.

Features

- Ability to place pump end in the pumping source
- Automatic priming
- Eliminates suction lift limitations
- Pumps efficiently at heads up to 100 feet
- Variable speed and flow
- Solids Handling to 4.25″
- 7,300-gpm capacity
- Optional biodegradable lubricants for environmentally sensitive areas

Applications

- Open pit and trench dewatering
- Pipeline dewatering
- Rim ditches
- Manholes
- Sewer lines
- By-pass applications
- Floodwater control
- Drainage and irrigation
- Dewatering of gravel pits, mines, quarries



Typical manhole-sewer line dewatering application

Working Principle

Thompson's hydraulically driven submersible pumps enable the power unit to remain high and dry while the pump head is submerged into the liquid being pumped. Therefore, there is no need to worry about suction lift limitations or priming problems.

These pumps are designed to run dry without damage to the components and are engineered to handle liquids from muddy, trash-laden water to sewage and sludge.

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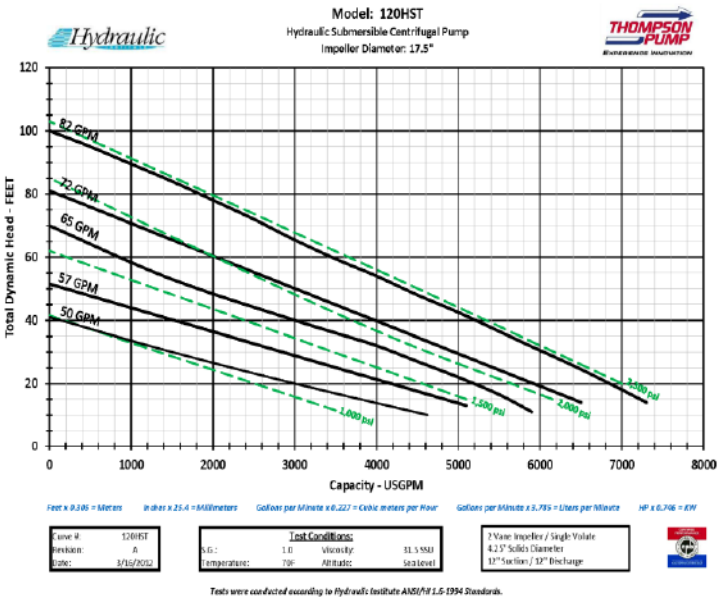
120HST Performance Curve



120HST Materials of Construction

Volute: Heavy-duty 65-45-12 ductile iron
Shaft: 17-4 pH stainless steel, fitted with a renewable 416 stainless steel sleeve
Impeller: Dynamically balanced, non-clogging, enclosed, heat treated 65-45-12 ductile iron standard, with rear-equalizing vanes to reduce axial loading and prolong seal and bearing life; diameter 17.5″
Wear Plate: Heat treated steel standard
Hydraulic Motor: High efficiency, rotary vane type, 16 cubic inch displacement with SAE D splined output
Hydraulic Couplings: Delivery: 1.25″ male Snap -Tite75 series quick disconnect, with dust cap; Return: 1.5″ male Snap-Tite 75 series quick disconnect, with dust cap; Bypass: .75″ male Snap -Tite 75 series quick disconnect, with dust cap
Mechanical Seal: 65mm type AR3 oil lubricated with Tungsten Carbide rotating and stationary seal faces.
Bearings: Heavy-duty, oil lubricated to carry both axial and radial loads
Bearing Housing: Heavy-duty AISI 1040 steel
Strainer: Large, round hole, A36 steel
Discharge Fitting: 10″ ANSI 125 -lb flange
Oil Cooler: Tubular steel, air to oil