

APPLICATIONS PUMPS



OPERATION:

O'Conner Engineering Company created this ship as a scale model of the historic Pacific Northwest Tug "Tattose". This tug was christened "Well Stacked" and was designed and used by O'Conner Engineering to demonstrate the feasibility of steam powered craft for a variety of uses.

This tug has a Model 623 CAT PUMP in the hull of the tug that is direct coupled to the engine with a Paraflex coupling. It is operating at 350 RPM, 350 PSI and delivering 900 pounds of steam per hour. The engine is a two piston, double-acting flow-through type with a variable cut-off valve gear and reverse. The condensers are located on the bottom of the hull next to the keel.

The ship is also equipped with a 3000 watt steam powered turbo generator to supply electric power to the ship while steam is up, as well as to recharge the storage batteries so electrical equipment can still function when there is no steam.

A great deal of precision and energy went into the creation of this scale model tug. Virtually everything on the ship is one-of-a-kind, hand built, top quality.

To maintain the quality of this project and offer the dependability and performance in the system to power this craft, they selected the CAT PUMP.



STEAM POWER BOILER FEED

File No. 142

Section 3

PROBLEM:

To power a 38 foot, 24 ton scale model of the famous "Pacific Northwest" tug "Tattose".

SOLUTION:

To install a high pressure boiler to drive a two piston steam engine coupled to the propeller shaft to turn a 36" x 36" propeller and a 3000 watt stem powered turbo generator.

SPECIFICATIONS:

CAT PUMPS Model	623
Pressure	350 PSI
Flow	2.5 GPM
Temperature	160°F
Fluid	Boiler Water
Duty Cycle	Continuous
Drive	Direct Coupled to Tug Engine

BENEFITS:

- The light weight and compact size of the CAT PUMP makes it ideal for aboard ship.
- Dependability and precise flow are primary reasons for the selection of a CAT PUMP.
- Use of steam power eliminates noxious fumes from internal combustion engines.
- The boiler provides enough power to drive both the main engine and the generator set.

"Customer confidence is our greatest asset"

Products described hereon are covered by one or more of the following U.S. patents 3558244, 3652188, 3809508, 3920356, 3930756 and 5035580

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