



# VERTICAL TURBINE FIRE PUMP

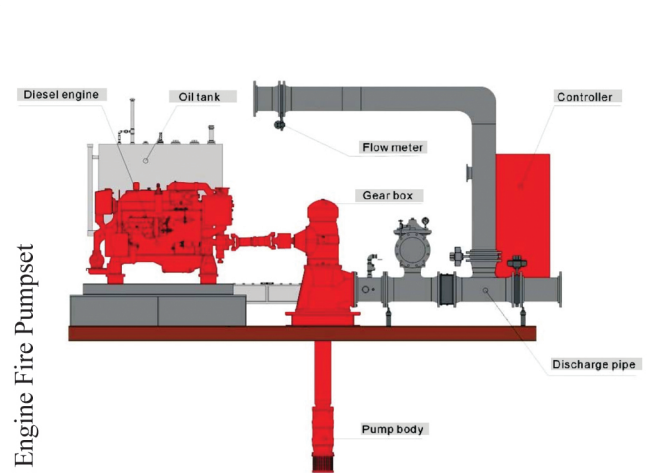
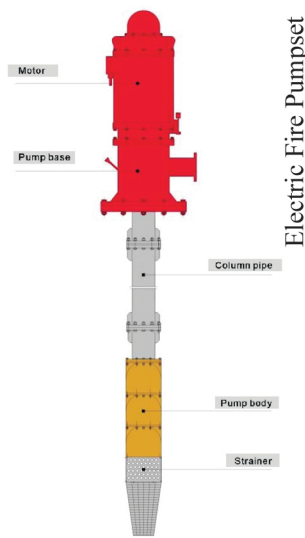
## ANI PUMP

P/N : AP-VTP

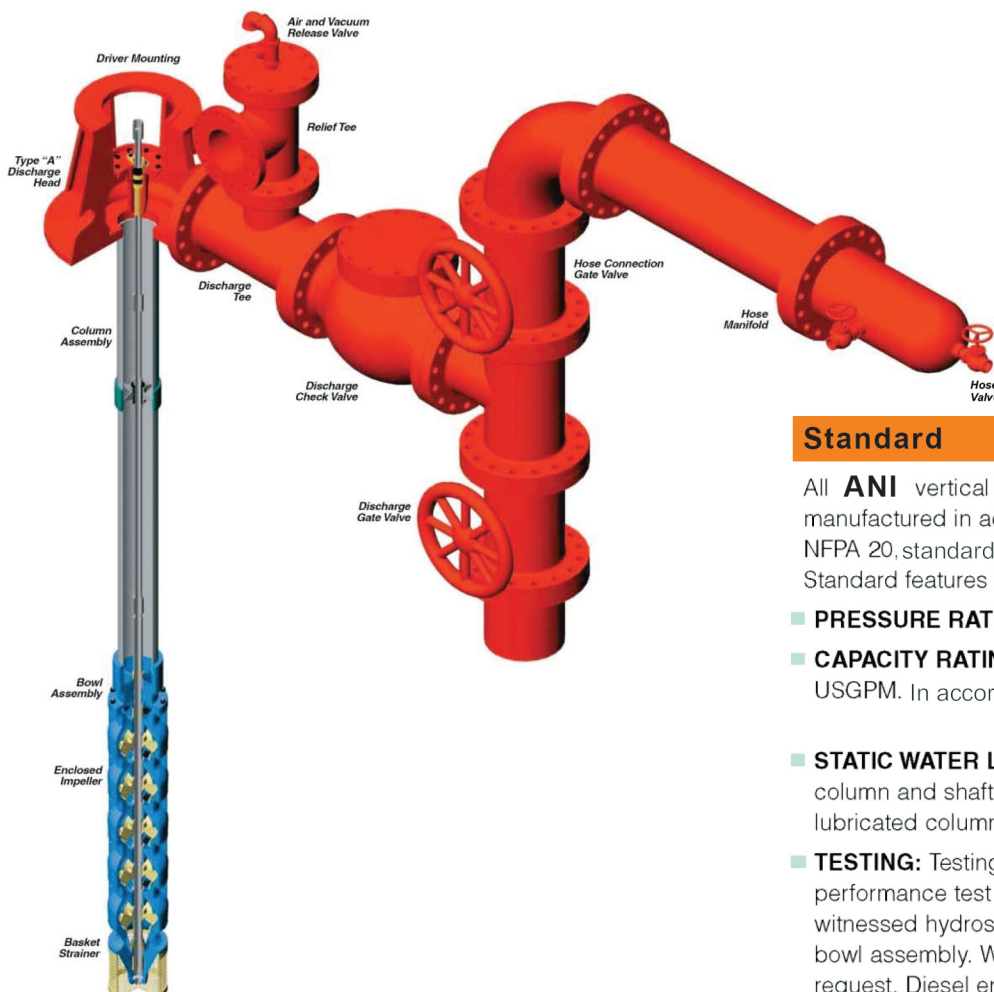
### Vertical Turbin / Vertical Shaft FIRE PUMP

#### Application

- Commercial Building
- Onshore / Offshore Refineries
- General Industries
- Power Plant
- Municipal



#### CONSTRUCTION



#### Standard

All **ANI** vertical fire pumps are manufactured in accordance with NFPA 20, standard  
Standard features include:

- **PRESSURE RATINGS** from 26 to 1740 Psi
- **CAPACITY RATINGS** labeled from 200 through 10,000 USGPM. In accordance with NFPA-20
- **STATIC WATER LEVEL** 0-50ft. product lubricated column and shaft assembly. Greater than 50 feet oil lubricated column & shaft assembly.
- **TESTING:** Testing includes a non-witnessed performance test with a laboratory driver and a non-witnessed hydrostatic test of the discharge head and bowl assembly. Witness testing is available upon request. Diesel engine drivers and pump controllers receive non-witness tests per NFPA-20 at their points of manufacture.





### Strong Point

#### No Priming Required

Impellers remain submerged in the water supply at all times. Start-up is instantaneous and requires no supervision.

#### Full Range of Drivers

*Hose  
Valve*

ANI offers a full line of electric motor, diesel engine and steam turbine drivers.

#### Space Saving Design

When equipped with a vertical electric motor, our vertical pump saves up to 75% in floor space over a comparable horizontal unit.

#### Steep Pump Performance Curves

Vertical pump performance curves are steeper than those of horizontal pumps. This results in smaller changes in capacity during pressure changes.

#### Adaptable to Different Water Levels

Because the column length may be varied to fit the application, a vertical fire pump can be tailored to meet virtually any water level situation. This is important when the pump support floor or foundation is above the suction lift of a horizontal fire pump. A vertical fire pump can be installed in wells, offshore platforms, rivers, or wherever a fluctuating water level exists.

#### Adaptable to a Wide Range of Water Supplies

Approved water supplies range from municipal water systems to sea water ... including wells, underground and above ground reservoirs, open ponds, streams, and above and below ground storage tanks.

#### Available to Meet a Wide Range of Capacity and Pressure Requirements

By varying the number of stages and sizes of bowls and impellers, a full range of system pressures and capacities can be obtained from virtually any water level. This allows the system designer maximum flexibility in designing the most effective and reliable fire protection system.

Fire pumps designed and manufactured in accordance with NFPA 20, UL/FM standards must satisfy specific pressure/capacity requirements. These guidelines insure that adequate pressure is provided over a wide capacity range and that maximum pressure at shut-off does not exceed the limits of the system.



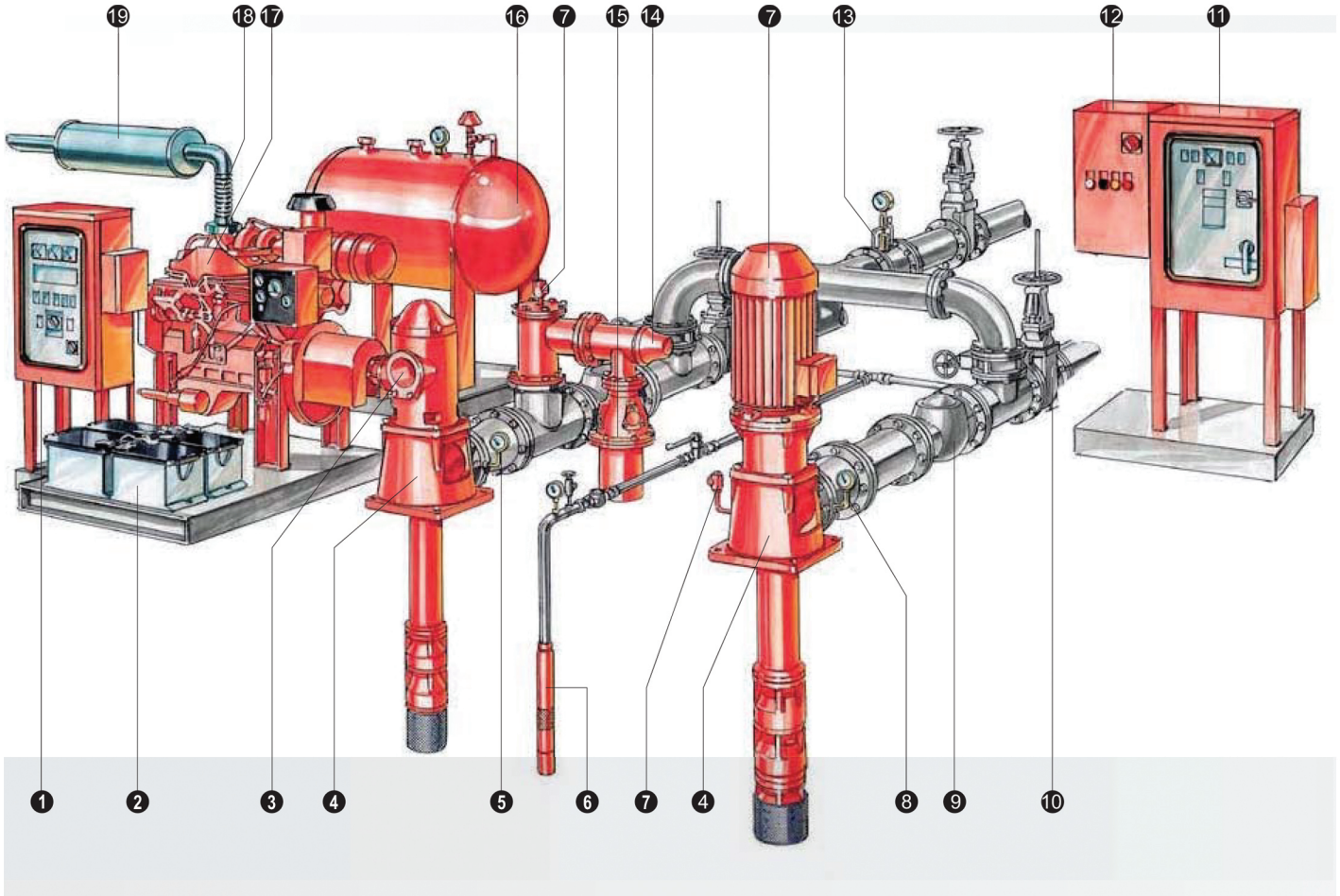
#### Low Maintenance

Our pump designs provide for radial hydraulic balance. The hydraulic forces are equalized by multi-vane bowl diffusers. This reduces sleeve bearing radial loading and provides exceptional bearing life.

The weight of all rotating elements (including axial hydraulic thrust) is supported by a single thrust bearing at the top of the driver. Maintenance is minimal, but when required the bearing is easily accessible.



### TYPICAL INSTALLATION OF VERTICAL TURBINE FIRE PUMP



- 1 Diesel engine fire pump controller
- 2\_Batteries
- 3\_Right angle gear
- 4\_Vertical turbine pump
- 5\_Discharge pressure gauge
- 6\_Jockey pump
- 7\_Automatic air release valve
- 8\_Concentric discharge increaser
- 9\_Check valve
- 10\_OS& Y gate valve
- 11\_Electric motor controller
- 12\_Jockey pump controller
- 13\_Test flow meter
- 14\_Main relief valve
- 15\_Open discharge overflw cone
- 16\_Fuel tank
- 17\_Diesel engine
- 18\_Flexible exhaust connection
- 19\_Exhaust muffle





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### Fire Pump Accessoris - Vertical Turbine Pump

