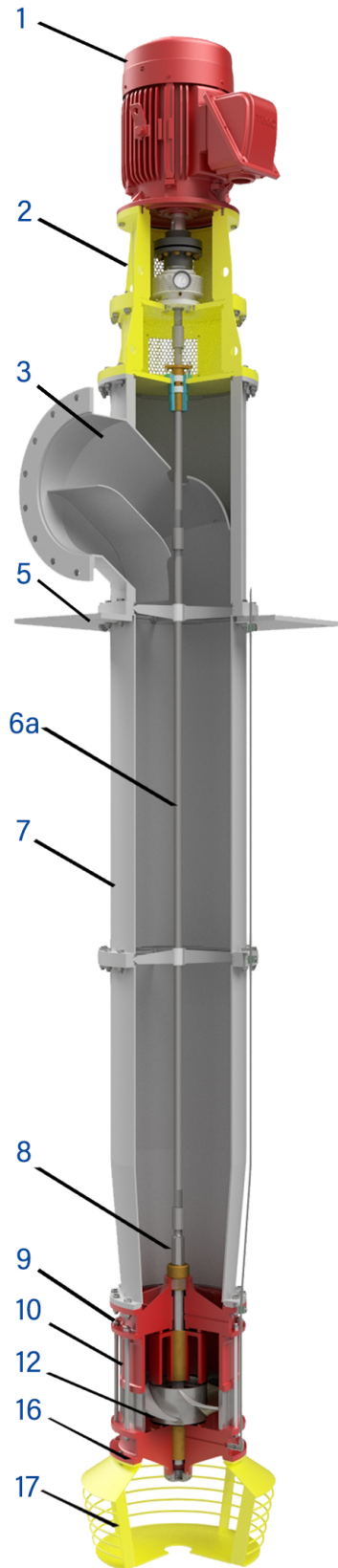


# PUMP FEATURES

## ORNEL AXIAL FLOW PUMPS



1. **DRIVE:** Amarillo Gear Company right angle gear drives or vertically mounted electric motor with heavy duty thrust assembly to accommodate pump thrust.
2. **DRIVE STOOL:** The discharge head is equipped with a drive stool to accommodate either gearbox for diesel drive or motor stool and thrust bearing assembly for electric drive.
3. **SURFACE TREATMENT:** All ferrous elements internally and externally plastic coated.
4. **DISCHARGE HEAD:** Heavy duty fabricated mild steel with 90°, 45° or 30° flanged or plain outlet suitable for gibbault joint connection. Manufactured with turn vanes to reduce friction loss.
5. **SPLIT BASE PLATES:** Discharge outlet either above or below base plate for vertical installation. Only one half split base is required, together with base frame and pivot bracket, for inclined installation.
6. **ENCLOSED SHAFT – OIL LUBRICATION:** Grade C1040 – C1045 high tensile stainless steel shaft running in AS 1565 / ASTM B62-C83600 / BS 1400-LG2 bronze bearings. Left hand threaded, solid drawn steel enclosing tubes with 1500 mm bearing centres accurately located by spigoted internal column spiders.
- 6a. **OPEN SHAFT – WATER LUBRICATED (Alternative):** Precision ground 431 high tensile stainless steel line shaft, manufactured in standard lengths of 3000 or 1500 mm and supported by water lubricated precision machined D-glide FC bearings.
7. **COLUMN SECTIONS:** Manufactured with 10 mm thick, cold rolled GR250 mild steel. Flanged and spigoted column sections of custom lengths to suit specific applications. 316 stainless steel fasteners.
8. **BOWL SHAFTS:** Manufactured as standard from 431 high tensile stainless steel with option for SAF 2205 duplex stainless steel. Bowl shaft to line shaft connection can be made with either screwed or sleeve keyed line shaft couplings.
9. **DISCHARGE CASE:** Cast from heavy duty, close grained cast iron with outlet guide vanes supporting the bearing housing. Robust structural connection for oil tube adaptor bearings.
10. **BOWL:** Captivated spigoted precision cast, close grained cast iron. Optional materials include Ni-Resist irons.
11. **BOWL BEARINGS:** AS 1565 / ASTM B62-C83600 / BS 1400-LG2 bronze as standard. Phosphor bronze or D-glide FC materials available upon request.
12. **PROPELLERS:** Precision investment cast blades welded to a fully machined and balanced hub. The key driven propeller is secured using taper locked collet, locking plate and 316 stainless steel bolts. Propeller blades, hub, collet and locking plate are all manufactured from 316L stainless steel.
13. **WEAR RINGS:** Precision machined from 316L stainless steel plate as standard with thicknesses between 25 and 38 mm.
14. **LUBRICATION:** Grease lubrication is provided for suction bearings on all axial flow configurations via full stainless steel grease line and connections.
15. **BEARING SEALS:** Fully covered Neoprene dual lip shaft seals. Externally captivated with stainless steel circlips to prevent movement.
16. **SUCTION CASE:** Cast from heavy duty, close grained cast iron with inlet guide vanes supporting the bearing housing. Includes a flanged and spigoted wear ring adaptor for accurate assembly alignment.
17. **STRAINERS:** Flange mounted strainers, both basket and fishtail configurations are provided to suit vertical or inclined applications, available in plastic coated mild steel or stainless construction.

