# **Oil Lubricated** BYRON JACKSON®

# **Vertical Turbine PUMPS**

#### ■ ESTABLISHED RELIABILITY

Since 1872 Byron Jackson has pioneered the design and manufacture of Centrifugal Pumps. An important development was the first Vertical Turbine Deepwell Pump in 1901.

Through long experience and a continuous research and development program, you are assured of top performance and reliability.

Thousands of satisfied customers are proof of Byron Jackson's outstanding leadership.

#### MAXIMUM PERFORMANCE

Exclusive hydraulic and mechanical features insure efficient low cost operation. Maximum performance and economy by optimum selection from a full range of pumps.

### QUALITY GUARANTEED

Reliable service and long life is guaranteed by exacting quality control in each stage of manufacture.

#### ■ WORLD-WIDE SERVICE

Prompt service available through hundreds of dealers and world-wide manufacturing, sales and service facilities.

Wide choice of impeller designs assures the most efficient pump for every application.

Semi Enclosed — MEDIUM CAPACITY



Semi Enclosed — HIGH CAPACITY



Closed — LOW CAPACITY



Closed — MEDIUM CAPACITY



Closed — HIGH CAPACITY



**EXCLUSIVE TENSION** BEARING ASSEMBLY

Maintains shaft enclosing tube in tension to support all the oil lubricated shaft bearings. Triple length tension bearing assures positive shaft alignment.

- 1. LOCK NUT
- 2. PACKING
- 3. TUBING TENSION NUT
- COPPER GASKET
- BRONZE TENSION



#### DISCHARGE HEAD-

New Byron Jackson exclusive design with circular base, large access openings and internal lifting lugs for easy installation. High strength meehanite casting provides maximum strength and rigidity.

#### **HEAD BASE PLATE**

Contamination-free design complies with sanitary codes (optional feature).



Polished steel shafting (A.I.S.I. C-1045) for maximum strength and reliability.

#### SHAFT COUPLING

 $1\frac{1}{2}$  times greater strength than line shaft—relief hole for correct shaft positioning.

-TUBING SPIDER



IMPELLER **ADJUSTING NUT** 

For exact positioning of impellers to maintain maximum pump efficiency.

Straight threaded standard pipe with butt faces for accurate alignment and water tight joints.

LOCK SCREW

MOTOR COUPLING

LARGE OIL RESERVOIR

erated as optional feature. TWO-PIECE HEADSHAFT

One gallon oil reservoir with re-

movable top for easy filling and cleaning. Automatic solenoid op-

Optional design for easier instal-

## LINE SHAFT BEARING

Byron Jackson exclusive sediment trap design, provides 50% more bearing surface and spiral grooves for positive oil lubrication.

#### SHAFT ENCLOSING TUBE

Extra heavy steel tubing assures rigid bearing alignment.

#### FLANGED COLUMN

Cast steel flange construction available as optional feature.



Heavy duty for longer life and maximum shaft support.

## BYPASS SEAL

Byron Jackson exclusive combination bypass seal and bearing is extra long to maintain high pump efficiency.

## TOP CASE

Designed for efficient flow-perma-ports relieve pressure to protect bear-

## SERIES CASE

Designed for maximum efficiency over a wide range of pumping conditions.

## SERIES CASE

BEARING Heavy duty bearing for maximum shaft support and long pump life. Furnished in either bronze or rubber.

## SAND CAP

Protects bearing from abrasive wear.

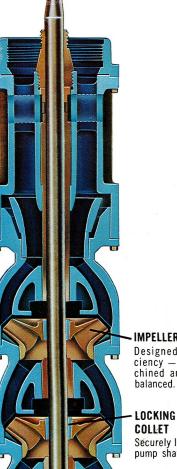
#### **BOTTOM CASE** BEARING

Extra long, grease-packed maintenance-free design. Packed with non-soluble grease.



Pipe furnished to desired length. Strainer protects pump without restricting flow.

Rev. 9/84





Designed for high efficiency — precision machined and dynamically

## COLLET

Securely locks impeller to pump shaft.

## PUMP SHAFT

Large diameter polished high strength stainless steel shaft.

