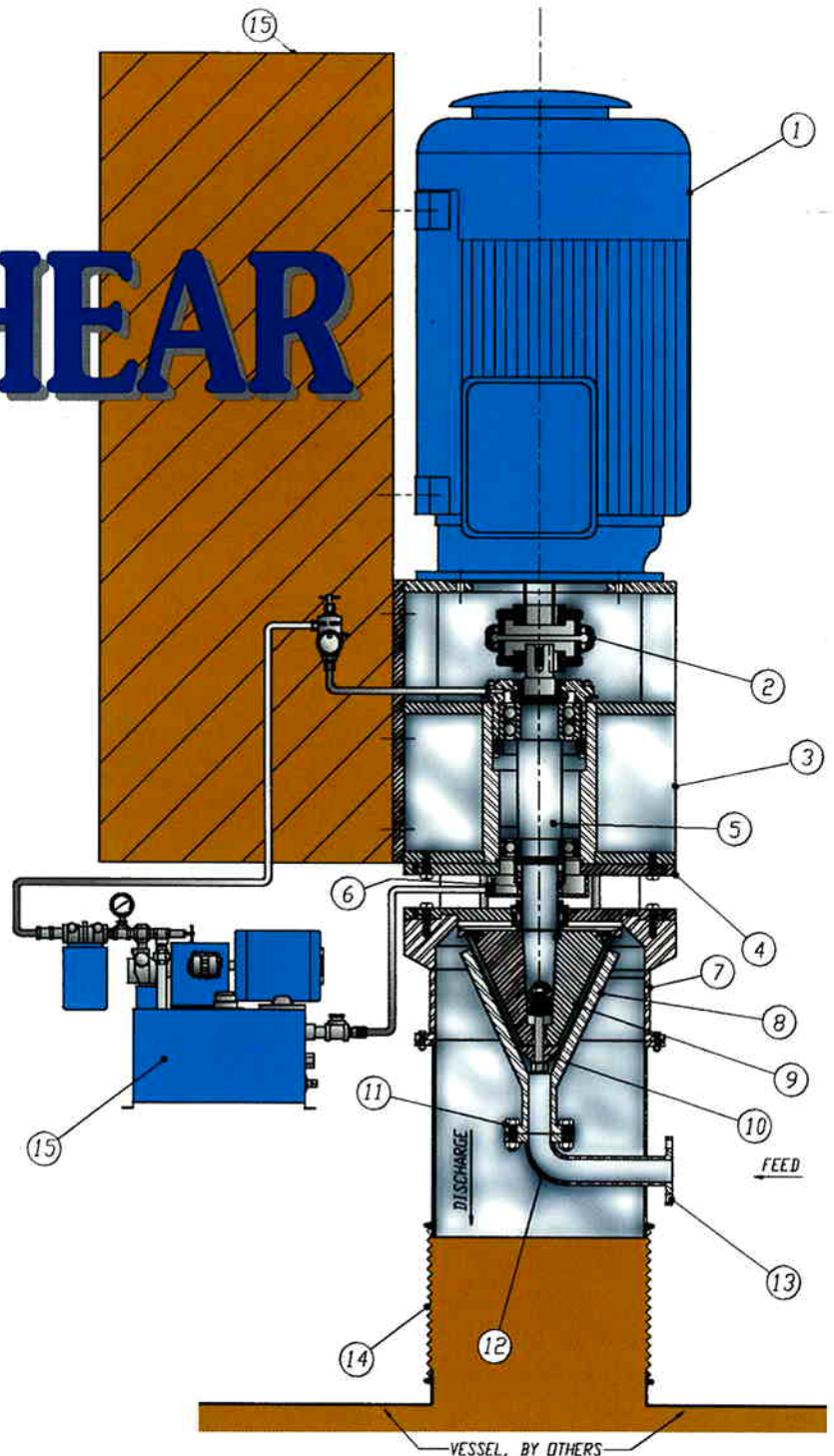


IMPEX[®] HIGH-SHEAR MILL

The **IMPEX High-Shear Mill** was developed after over 25 years experience of intensive use in the kaolin clay industry in Georgia. The mill has specifically been designed to control Hercules and Brookfield viscosities of dilatant clays. Also the mill is suitable for dispersion of clays and pigments, delamination and conditioning of clays in preparation for flotation.



INDUSTRIAL MINERALS PROCESS EQUIPMENT CORPORATION **IMPEX CORPORATION**

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FEATURES OF IMPEX HIGH-SHEAR MILL

HIGH SPEED ROTOR

The heart of the High-Shear mill is the unique cone shaped alloy rotor with replaceable tungsten carbide inserts designed for peripheral speeds in excess of 61 MPS (200 FPS). The rotor has a feed accelerator to bring the feed up to the speed of the rotor. The shear rate increases as the feed moves to the 360 degree discharge.

FIXED STATOR

The precision built stainless alloy stator is designed for true alignment and close clearance with the high speed rotor.

PRECISION BEARING HOUSING

The heavy duty bearing housing, high speed shaft, bearings and seals are designed for heavy continuous high torque duty. The housing also supports the motor and high-shear mill.

ADJUSTABLE SHEAR CLEARANCE

The shaft and bearing assembly is adjustable within the bearing housing so that clearances between the rotor and stator may be adjusted and fixed between 0.0254mm (0.001") and 1.524mm (0.060").

SELF LUBRICATING SYSTEM

The mill includes a complete oil lubricating pumping system with oil filter, flow control switch, and sight gauge. The pump is direct coupled to a 1/3 HP motor.

STAINLESS ALLOY HOUSING

All wetted parts of the housing are constructed of stainless alloy with special hard facing on the deflector to resist abrasion.

SPECIAL SALES AND SLINGER

The mill and bearing housing have special oil and labyrinth seals to contain the lubricating oil and processing slurry.

FEED CONTROL SYSTEM

The feed is regulated to the mill through an automatic feed valve that is controlled and set by the motor load.

DIRECT DRIVE MOTOR

The mill is designed for motor loads up to 200 HP. Motor is either 150 or 200 HP, 3600 RPM, 3 Ph., 480/380 v, 50/60 Hz, TEFC, Wye/Delta with 1.15 SF.

FEED AND DISCHARGE PORTS

The feed port is a standard 50mm (2") 150 psi stainless flanged inlet. The discharge outlet is 479mm (18-7/8") OD with ring for clamping flexible connection to customer vessel.

MAINTENANCE

The mill has specifically been designed for high efficiency and low maintenance. Long life bearing are easily replaced. The rotor has been designed for quick replacement of the tungsten carbide inserts without the necessity of re-balancing the rotor.

SHOP RUNNING AND TESTING

All mills are pre-tested and operated in the shop before crating and shipping. Owners manuals with operating and maintenance instructions are included with each order.



SPECIAL ALLOY CASTINGS



ABRASION RESISTANT ROTOR



ADJUSTABLE BEARING HOUSINGS

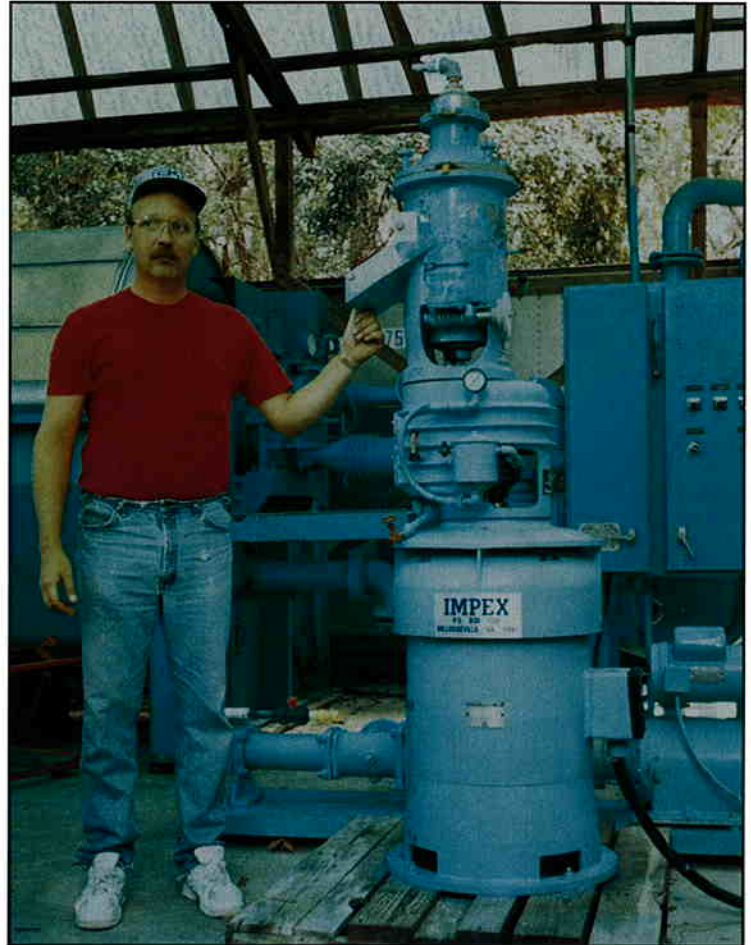
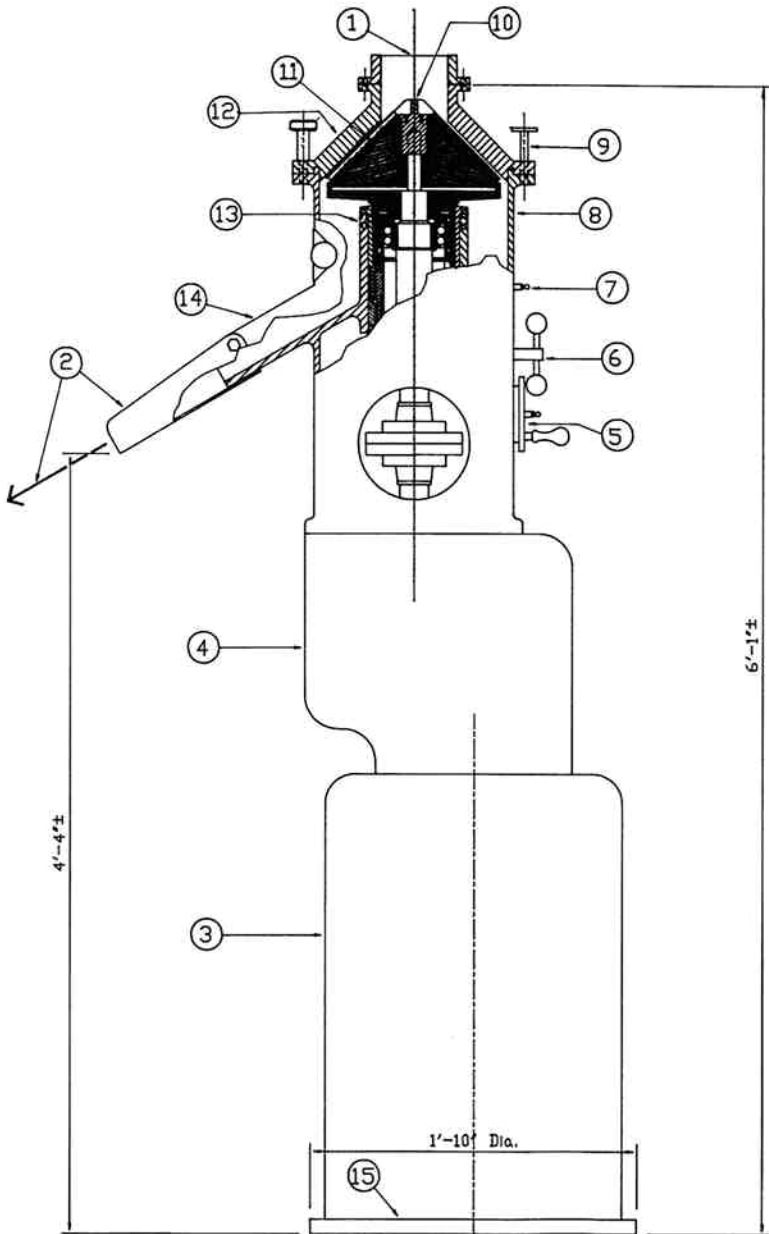


LUBRICATION SYSTEMS



SHOP RUNNING AND TESTING

IMPEX Maintains a Pilot Plant 50 HP High-Shear Mill for Testing and Evaluation of Customer Requirements.



IMPEX 50 HP High-Shear Mill pilot plant model with variable speed gearbox and adjustable clearance between rotor and stator of 0.0254mm (0.001") and 1.524mm (0.060").

In addition to the IMPEX High-Shear Mill, IMPEX offers the following product lines plus maintaining laboratory and pilot plant equipment for test work.

Primary Two Cell Blungers
 Drag Classifiers
 Screens
 Secondary Blungers
 Conditioners

Delaminators
 Centrifuges
 Rotary Vacuum Filters
 Drum/Press Cake Repulpers
 Filter Blungers

Mine Blungers
 High Shear Blungers
 Make Down Blungers
 Calciners
 Pin Mill Pelletizers

For Further Information Contact:

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