

Diesel Engine Pump

Characteristics and Overview of HMV 150-800 Machine Set

150HMV150-800 machine set is a mechanical-electrical integration product, which is designed and developed by our company, especially used for mine drainage. This machine set is driven by diesel engine, guarantee the machine can still work under the lack of electricity circumstance. The whole machine set can be skid mounted, also can be placed on a floating body. This machine set is characterized by excellent mud pump design, high efficiency, 150 meters single stage head and long discharge distance. It is equipped with automatic vacuum suction device, which is controlled by electric, can make the start and stop much easier. The modular design, which makes the machine set could be configured with multiple brands, multiple emission standard diesel engines according to the requirements of users.

Characteristics of Machine Set

150HX Discharge Pump: It has excellent hydraulic performance, the maximum suction depth is 8 meters, the maximum head is 150 meters, the maximum speed is 1400r/min. The wet end parts are made of anti-wear white cast iron according to slurry pump standard, which can transport high concentration slurry.

- Strong flow capacity, can continuously pump gravel, high plastic clay blocks, etc.

The flow capacity mainly depends on the width of the impeller channel. The impeller with four vanes has a flow width of 55mm between each blade. The gravel and high plastic clay blocks with a diameter of 50mm can pass through.

- Strong compatibility, wide range of performance, strong applicability and can be applied to all kinds of soil.

High pressure discharge pump is usually equipped with four vanes impeller, but also can be equipped with impeller of various diameters and vane types according to the requirements of users, to suit different kinds of working duty and condition.

- Low hydraulic loss, high efficiency, low fuel consumption

The impeller is closed type. The impeller vane profile adopts a variety of uniform change curves. The front and rear cover plate inserts of the impeller and the front and rear plates are with machined surfaces. The hydraulic pressure chamber of the pump body is designed by helix and equal velocity moment method, which can effectively reduce the hydraulic loss and improve efficiency, thus reducing fuel consumption and improving economic benefits.

Characteristics of Structure

- Small Size and Light Weight

The pump and every part are designed without redundancy. The unnecessary auxiliary structure and process structure are minimized under the premise of ensuring performance and use requirements. Such design reduces the weight of whole pump greatly.

- Good working stability, low vibration, low noise

The static balance of the impeller is designed in accordance with G6.3, while reducing the rated speed of pump operation, and keeping the pump operate steadily by setting a support plate structure in the front of the pump head.

- Simple and reliable structure, Easy to disassemble and maintain.

The pump set adopts the single-stage single-suction cantilever centrifugal structure, and front disassembly structure. Simple to disassemble, easy to maintain. All the coordination points are equipped with lid screws to facilitate disassemble. At the same time, according to the structural characteristics of each component, special

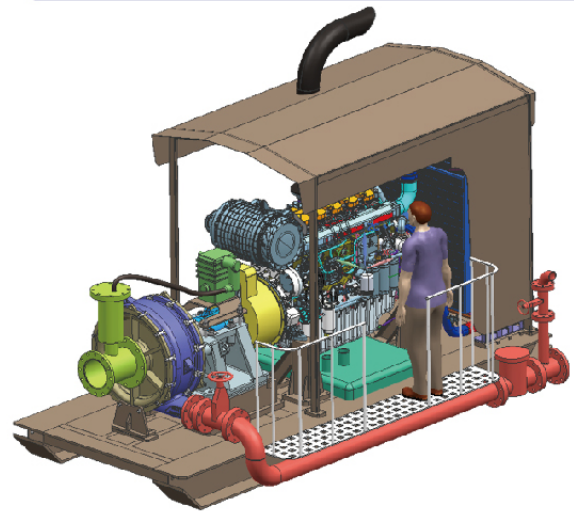
Meaning of Model

HMV 150-800

150m Head, 800m³/h Flow

High Pressure drainage Unit

Unit Appearance And Structure



disassembly tools are designed to facilitate disassembly.

The impeller and the shaft are connected with threads, which can not only transmit strong torque, but facilitate disassemble and installation; At the same time, the release collar is designed between the shaft sleeve and the labyrinth to prepare for the auxiliary disassemble of the impeller when it is difficult to disassemble.

Characteristics of Machine Set

Characteristics of Economic Benefit

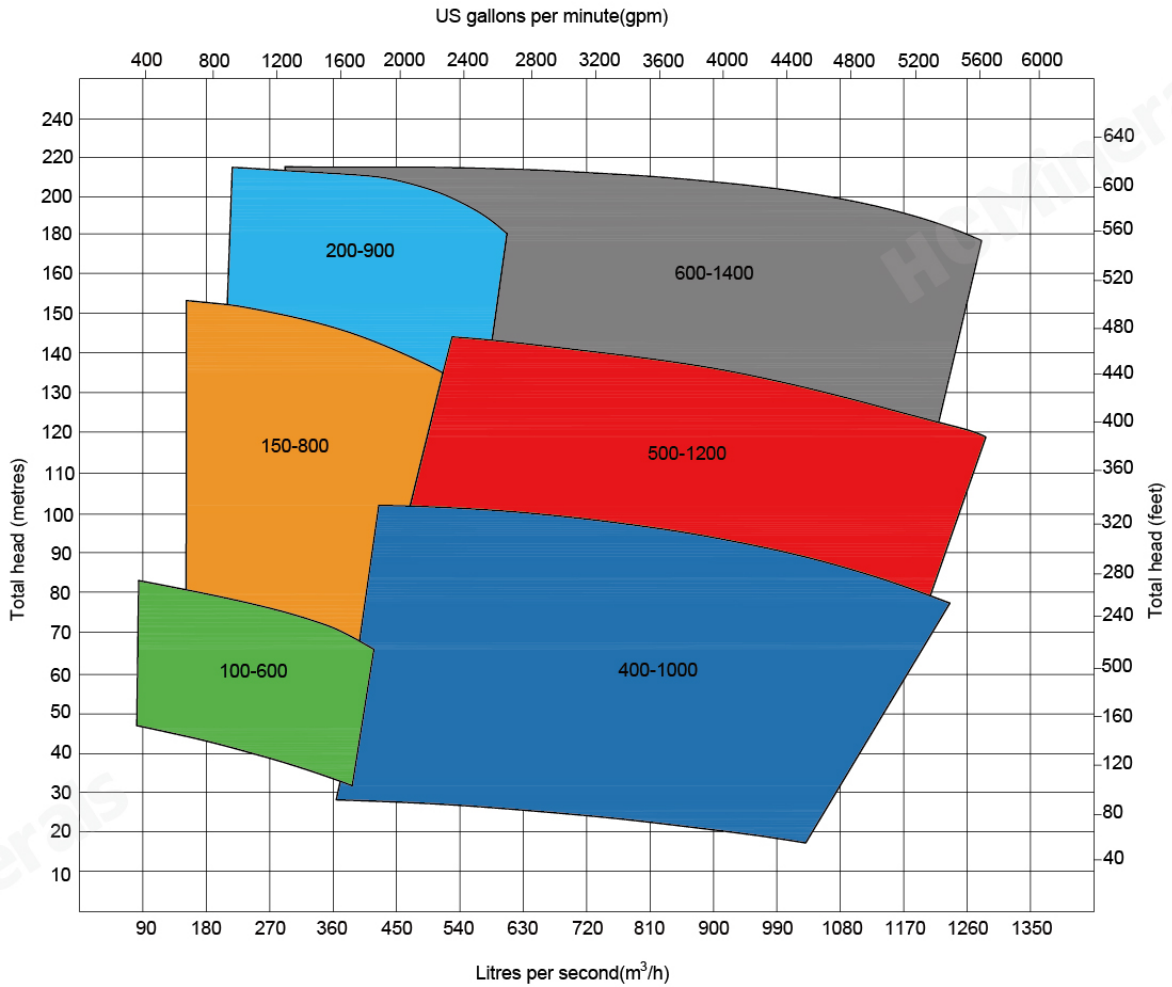
- The parts have a long service life and are well matched with each other

Pump's wet end parts and wear parts are made of our company's wear-resistant series of materials, with excellent anti-wear performance. This kind of material take the leading position in China. Impeller, casing, throat bush and frame plate liner insert are made of MS05 material, which hardness can reach to 57HRC or more, provide a long service life.

- High reliability, No failures and long working hours

- In the whole design process of the machine, we fully considered the part which are prone to failure, then improve the design of those parts, try to improve the trouble-free working time of the whole machine as far as possible.

Diesel Engine Pump Selection Chart



Outline Dimensions Of HMV150-800

