



# UniSelf

Ebara and Thebe, committed to providing customized and integrated solutions according to customer needs, present the Self Prime System to the market.

A vacuum-assisted system developed for high-performance dewatering systems, designed to catch and remove water from unwanted areas in mining, such as construction sites, mines, or flooded areas.

The equipment is extensively used in the entire mining area, quarries, heavy industries, irrigation, among other applications.

Main applications in:

- Dewatering of tailings dams
- Dewatering of open pit mines
- Dewatering of underground mines
- Water collection in dams
- Sand and gravel plants
- Municipal applications
- Industrial plants
- Lowering of the water table
- Power generation stations
- Civil works
- Irrigation systems

## Set Features

- Electronic control of the pump and system.
- Operation via local and/or remote panel, with continuous operation and assisted control.
- High pumping efficiency.
- Easy to move frequently.
- Versatile and easy maintenance.
- Complete set of operational and safety signaling, industry standard applied to the equipment.
- Standard or customized pump sets.
- Pipes, connections and suction and discharge accessories.
- Metal base in structural carbon steel.
- Installation, operation and maintenance manual.
- Spare parts tracked by the equipment's serial number.
- OEM parts suppliers with high technology for all components.
- Service and support to customers throughout the national territory.

## Standard Scope of Supply

- Self-priming control panel.
- Isolation swing-check valve on the discharge to ensure priming.
- Vacuum pump with adequate capacity for the project.
- Total protection for engine and pump.
- Pressure transducers.
- Flow loss indicator.
- Engine temperature protection.
- Remote monitoring availability.
- Telemetry availability.
- Priming tank with level control.
- Available for movement with "push bar" system.
- Built according to standards and norms adopted in the mineral market.
- Powered by latest technology electronic diesel engine, with electric motor as option.
- Vibration isolators for combustion engine use.
- Exhaust system built for specific purposes with thermal protection.
- External button for emergency stop.
- Battery with isolated system.
- Special protective paint.
- Standard configuration of the pump and drive assembly customized upon request.



## STANDARD EQUIPAMENT SUMMARY

- Control panel
- Vacuum pump
- Priming tank
- Swing-check valve
- Fire extinguisher
- Lifting lugs
- Secondary emergency stop button
- LED light
- Pressure gauge
- Fuel gauge
- Built-in fuel tank

## CONTROL

### DATA

- Operation: Automatic and/or manual
- Protection: Shutdown.

## OPTIONAL (ON REQUEST)

- Structure with winch on the suction side
- Flow meter
- On/off valve
- Check valve
- Fairing on the engine
- Suction and discharge piping
- Strainer on the suction side

## STRUCTURAL

### DADOS

- Base: Carbon steel structure
- Estimated weight: On request
- Tank capacity: On request
- Suction piping: ANSI flange
- Discharge piping: ANSI flange
- Estimated dimensions: L x W x H On request

## PUMP

### FEATURES

- Suction: ANSI Flange , optional DIN.
- Discharge: ANSI, Flange optional DIN.
- Impeller: Closed type
- Assembly position: Horizontal, back-pull-out.
- Transmission: Flexible coupling
- Maximum pressure: 24 bar.
- Maximum speed: 1.800 rpm.

### CONSTRUCTION

- Casing: Gray cast iron, with optional other alloys and/or resin coating
- Impeller: Gray cast iron with optional other alloys
- Wear rings: Bronze or optional other alloy
- Shaft sleeve: Treated carbon steel or optional hardened stainless steel
- Shaft: Carbon steel
- Shaft seal: Gland Packing or mechanical seal
- Support: Bearings.

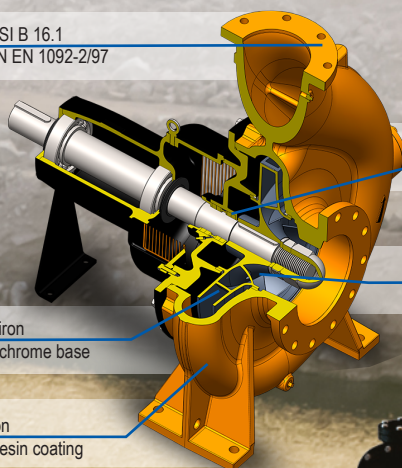
### PERFORMANCE

- Qmax: 1.500 m³/h.
- Hmax: 150 m.

### PUMP MODELS AVAILABLE FOR THIS SYSTEM

- TH Mining
- GS
- Other models on request

Flanges: ANSI B 16.1  
Optional: DIN EN 1092-2/97



Sealing: Gland Packing  
Optional: Mechanical seal

New hydraulic design  
ERP Directive compliant

Standard impeller: Gray cast iron  
Optional: Other alloys and/or chrome base

Standard casing: Gray cast iron  
Optional: Other alloys and/or resin coating

For alternative configurations such as trailers and floating platforms, please consult us.

Visit our  
social media!



For more information, please contact:

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