

# RoMotor Pumping Unit

## What is RoMotor?

RoMotor is a new type pumping unit—driven directly by permanent magnet motor.

## Main RoMotor Components:

- Dynamic System
- Top Base
- Frame
- Belt
- Counterbalance
- Base
- Control Cabinet



Main RoMotor Components

The whole pumping unit is mainly composed of three parts: frame, dynamic system and intelligent control system (control cabinet).

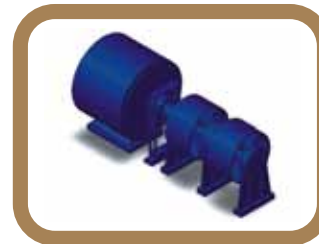
## Frame

- Includes base, main support frame, top-base, counterbalance, ladder and so on
- Connect base and top-base to main support frame with screw flange



## Dynamic System

- Located on the top of the pumping unit
- Includes permanent magnet motor, shaft coupling, magnetic brake, sheave, belt and bearing
- Easy for positive and negative rotation control with low speed and high torque multipole permanent magnet synchronous AC servo motor
- No gearbox, friction between belt and sheave drive the belt to move



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## Intelligent Control System (Control Cabinet)

- Auto adjustment of working frequency according to the well condition
- Achieve positive and negative rotation control
- Check the performance with pressure sensor

## Special Features & Benefits

**Simplest mechanism, lighter weigh, smaller floor area, less consumable spare parts**

- Simplest driving mechanism
- Less component parts
- No gearbox

**Greatest efficiency without gearbox and obvious electric energy saving**

- Electric energy saving typically 50 percent
- Higher transmission efficiency and system efficiency
- Higher power factor

**Apply frequency conversion technique**

**Achieve soft start**

**Achieve the motor's non-impact reversing**

**Cancel the complex reversing structure**

- Converter technique
- Non-impact reversing

**Lower maintenance cost**

- Less consumable parts
- Easy installation
- Self diagnosis program
- Easy of service, installation and shipment
- Longer service life

**Long stroke, slow speed**

**Stroke and speed adjustable at no stage**

- Alarm and shutdown: over-current, over-load, phrase absence, Abnormal load, over-temperature and failure
- Long stroke and slow speed required available
- Stroke and speed adjustable at no stage
- Intelligent control

## RoMotor Parameters

**Lifting capacity is from 8 ton to 24 ton and stroke is also optional from 5m to 15m.**

- Take RoMotor 14-8-35 for example, with its typical parameters as follows:

Typical Parameters of RoMotor 14-8-35

Lifting Capacity	30,000lb (14ton)
Stroke	26ft (8m)
Rated Power	35kW
Rated Output Torque	11,000Nm
Rated Current	66A

**Remark: Please contact us if you need the parameters of other RoMotor pumping unit.**