

SU. Submersible motor pumps.



SU
Design: 56

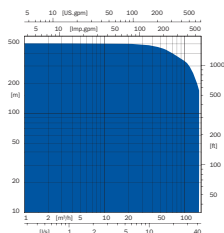
Well Ø 4" and up
Q up to 150 m³/h
H up to 500 m
p up to 50 bar
t up to +40 °C
n up to 3600 rpm

Type: Multi-stage, single-suction submersible motor pumps with integrated check valve.

Areas of use: Water supply, mining and industry.

Media: Pure, slightly polluted and aggressive clean, service and cooling water.

Materials: stainless steel
Shaft seal: for 4": shaft sealing ring, 6" and up: mechanical seal
Impeller design: radial impeller, semi-axial impeller
Types of installation: U (vertical, horizontal)



SU
Design: 62 | U8

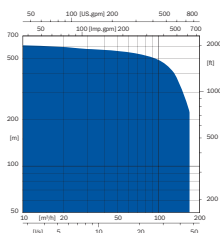
Well Ø 8" and up
Q up to 145 m³/h
H up to 650 m
p up to 63 bar
t up to +75 °C
n up to 3600 rpm

Type: Multi-stage, single-suction submersible motor pumps with integrated check valve.

Areas of use: Water supply, mining and industry.

Media: Pure, slightly polluted and abrasive raw water, pure water, mineral water, seawater, service water, mine water and cooling water.

Materials: grey cast iron, aluminium bronze
Shaft seal: mechanical seal, shaft sealing ring
Impeller design: semi-axial impeller
Types of installation: U (vertical, horizontal)



SU
Design: 63 | 64 | 66

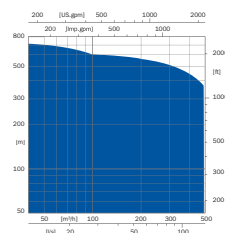
Well Ø 10" and up
Q up to 500 m³/h
H up to 700 m
p up to 100 bar
t up to +75 °C
n up to 3600 rpm

Type: Multi-stage, single-suction submersible motor pumps.

Areas of use: Water supply, mining and industry.

Media: Pure, slightly polluted and abrasive raw water, pure water, mineral water, seawater, service water, mine water and cooling water.

Materials: grey cast iron, aluminium bronze
Shaft seal: mechanical seal, shaft sealing ring
Impeller design: semi-axial impeller
Types of installation: U (vertical, horizontal)



MS-T. Designed to save costs.

The challenge.

More and more, the cost-effectiveness of an application is becoming the decisive criteria for any investment. This raises the question as to whether the concept of the continuous shaft is still up to date. For example, assembly and disassembly of a pump with a continuous shaft requires a large number of individual steps – time-consuming work by an expert! Logistics and warehousing for numerous different component parts is also associated with high costs. Adaptation to changing heads is generally only possible by replacing the pump – a cost-intensive procedure. The problem is obvious. But so is the solution!

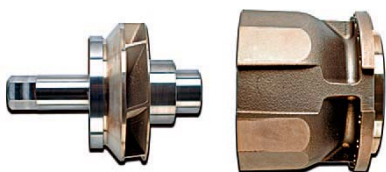
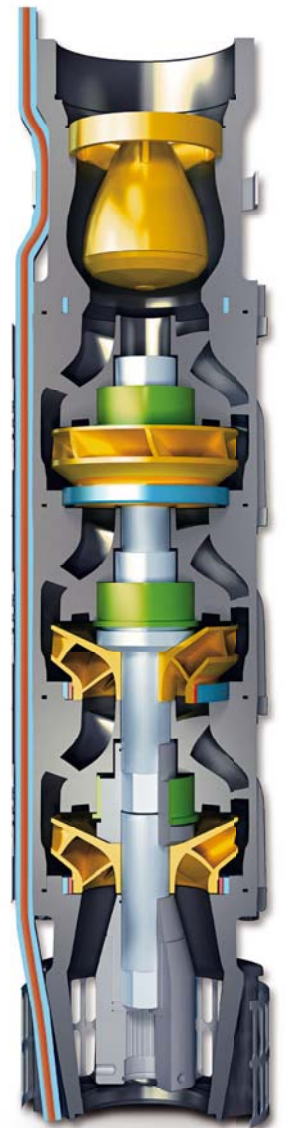
The solution.

MS-T – Modular Shaft Technology is not only a technological evolution, but also a revolution when it comes to costs.

MS-T is designed according to the modular principle – with all of its technical and economic advantages.

- Flexible adaptation to changing pumping conditions – quick and easy by increasing or reducing the number of stages.
- Simple, time-saving and targeted installation and removal of individual stages, horizontal or vertical as desired.
- A small number of highly-standardised components guarantees high availability and short delivery times, as well as low warehousing costs on the part of the user.

That is why pumps with MS-T are the perfect solution wherever extremely high demands are placed with regard to operational reliability, freedom from maintenance, service life, efficiency and flexible heads. In all sectors of water supply, mining and industry.



Complete information is available in our brochure “MS-T – Modular Shaft Technology”, which we would be happy to send you on request. Telephone +49 (0) 71 71/60 90 or under www.ritz.de

HDM. Double-suction submersible motor pumps.



HDM
Design 61 | 67 | 68

Well Ø 20" and up
Q up to 2,000 m³/h
H up to 1,500 m
p up to 150 bar
t up to +75°C
n up to 3600 rpm

Type: Multi-stage, double-suction submersible motor pumps.

Areas of use: Mining, water supply and industry.

Media: Pure, slightly polluted and abrasive raw water, pure water, mineral water, seawater, service water, mine water and cooling water.

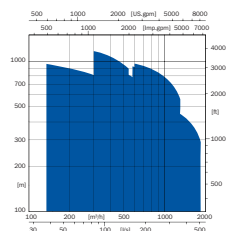
Special feature: Axial thrust free, double-suction design for particularly long service life and high operational reliability.

Materials: grey cast iron, bronze, aluminium bronze, duplex stainless steel

Shaft seal: mechanical seal, shaft sealing ring

Impeller design: radial impeller

Types of installation: U (vertical, horizontal)



Maximum operational reliability. Constant performance – error-free operation: An HDM invented by RITZ guarantees maximum operational reliability with no compromises.



High cost-effectiveness. Extremely high efficiency in operation – up to more than 85 percent for the pump, up to more than 90 percent for the motor – as well as extraordinarily long service life ensure minimum life-cycle costs, which are more decisive than the procurement costs in the long term.

HDM. Designed for a longer life.

The challenge.

The use of submersible motor pumps for large volumes or at very large depths is associated with extreme loads on the unit. The higher the pump capacity, the stronger the axial thrust exerted on the pump, the motor and its thrust bearing. The outcome: Overloading and increased risk of failure.

The solution.

HDM – Heavy Duty Mining. Two pumps are arranged on top of each other rotating in opposite directions and driven by a continuous pump shaft.

The division of work between the two pumps provides complete compensation of axial thrust, thus solving the problems of forces acting on the unit and of the load on the thrust bearing. At the same time, the flow and suction velocity outside the pump is reduced by 50%. This is more gentle on the well walls around the intake openings and minimises the intake of abrasive substances.

The result.

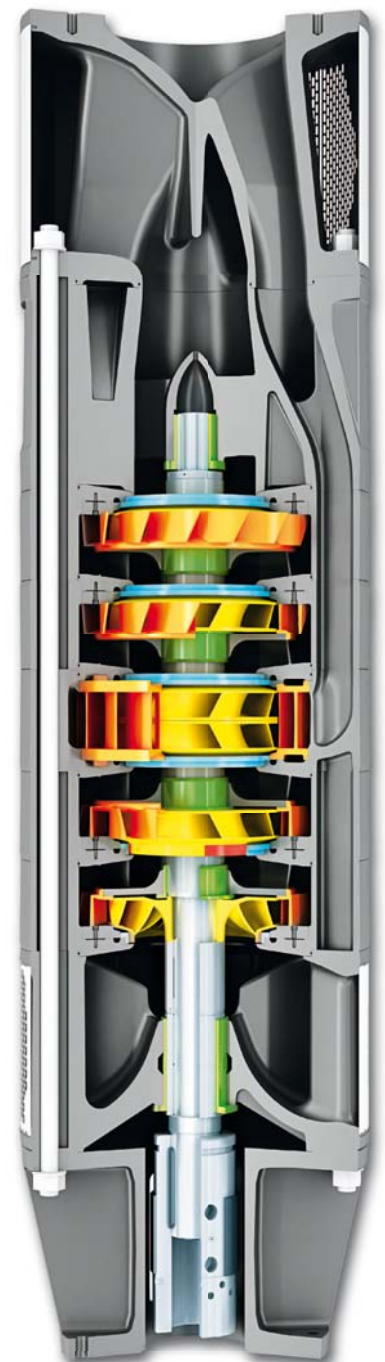
Besides the technical advantages – complete compensation of axial thrust, 50% lower flow velocity and smaller-diameter impellers – HDM also provides economic benefits: maximum operational reliability, minimum wear and extremely long service life, which can quite often exceed 20 years. Paired with the ideal drive – the RITZ high-performance submersible motor – an unbeatable team!

Custom-tailored solutions.

Each RITZ submersible motor pump with HDM technology is a custom-made item. It is individually configured to suit your requirements.

Complete information is available in our brochure “HDM – Heavy Duty Mining”, which we would be happy to send you on request.

Telephone +49 (0) 71 71/60 90 or under www.ritz.de



SM. Submersible motors



SM
Low-voltage motor

Well Ø 8" and up
P up to 700 kW
V up to 1,000 volts
t up to +75 °C
n up to 3600 rpm

Type: Water-filled and cooled three-phase asynchronous motor with squirrel-cage rotors.

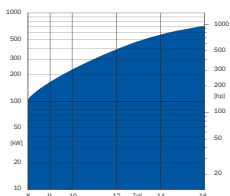
Areas of use: Water supply, mining and industry.

Special feature: With rewindable winding.

Materials: grey cast iron, bronze, stainless steel

Shaft seal: mechanical seal, shaft sealing ring

Types of installation: vertical, in some cases horizontal



SM
High-voltage motor

Well Ø 16" and up
P up to 5,000 kW
V up to 14,000 volts
t up to +75 °C
n up to 3600 rpm

Type: Water-filled and cooled three-phase asynchronous motor with squirrel-cage rotors.

Areas of use: Water supply, mining and industry.

Special feature: With rewindable winding.

Materials: grey cast iron, bronze, stainless steel

Shaft seal: mechanical seal, shaft sealing ring

Types of installation: vertical, in some cases horizontal

