



How to
transform a
heavy
handling into
a light one?

An extreme force and the
best protection merge
together to create a range
dedicated to the mining field
and the steel industry



Since 1987 MecVel designs and manufactures electric linear actuators and screw jacks Made in Italy, constantly updated according to market needs, with the aim to meet every handling request, also thanks to a customization service able to configure complete solutions for different fields and applications.

These electromechanical devices, in fact, convert the rotatory motion of a motor into a linear movement, allowing lifting, adjusting, positioning, pushing or pulling any load up to 400.000 N. Depending on construction and drive systems, they can work as on/off devices, or as servomechanisms.

The electric system has also a lot of benefits:

- Easy and essential connections, power only when required and reliable control (such as arrests in intermediate positions of the stroke)
- Possibility to work with high temperatures, dusts and vibrations with no noise, minimum wear and low maintenance
- No need of pumps, tubes and valves, excluding the risk of contamination due to oil leaks, and no variation in pressure and flow, that affect pneumatic and hydraulic systems instead

MecVel has customized deeply its range, in order to offer products suitable for the heavy industry, maintaining the highest levels in terms of quality and performance for:

- Steel industry
- Mining field
- «Oil & gas» industry

The main kinds of motion performed by electric linear actuators and screw jacks in these fields are:

- Raise/lower sluice gates and walkways, to facilitate the movement from one place to another one for both the staff and the raw/finished material
- Opening/closing of gates, diverters and air valves, for a fast, precise and safe locking of doors even in case of emergency, but also for the control of the flow of fumes, dust and raw/finished material and the ventilation inside the work environment
- Handling of conveyor belts and of equipment used for example for drilling, up to the movement of the whole machine itself, providing an optimization of the duty cycle
- Regulation of fluids inside pipes, to maintain pressure and flow in line with established safety limits, through a fast and precise opening and closing of valves placed inside these pipes

Even IP65, AT-EX and CE certificates ensure to work constantly in safe conditions. Further protections used to avoid damages and preserve the whole application are:

- Larger limit switches box: the use of limit switches increases the level of control, as these devices are dedicated to the monitoring of the position reached along the whole stroke
- Brass gears and cams
- Metal connectors and Viton seals
- Mechanical limiter with warning sensor
- Front end with shock absorber
- Bellows boot as protection of the screw against external agents
- Protective paintings dedicated to prevent the premature corrosion of surfaces and to resist the exposure to aggressive agents

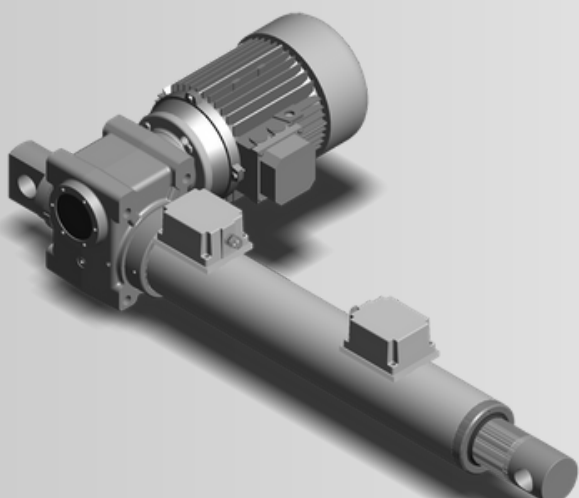
MecVel adds to the classic range, able to move from 1.200 N up to 200.000 N, the new HRS line which combines the load capacity of screw jacks to the high levels in terms of efficiency and safety offered by electric linear actuators.

These products, in fact, are the perfect solution to be used in harsh work environments and in the heavy industry, as they are characterized by strength and hardness, and provide low friction and minimum wear during the handling, for a long life of the whole system. The standard structure of a screw jack is matched with typical linear actuator components, such as a series of mechanisms and internal guides, and an external cover tube made of steel in order to protect the screw from dust, water and other contaminant external agents. This allows also to mount limit switch and anti-rotation devices, and offers a better support in case of buckling. Moreover a great attention for the high quality of the material used allows increasing the performance of the most powerful screw jacks, also thanks to the use of the most efficient gear boxes, maintaining at the same time the best price-quality ratio.

The completeness of MecVel range leads to identify always the most appropriate answer to each application request, offering an unprecedented linear motion.

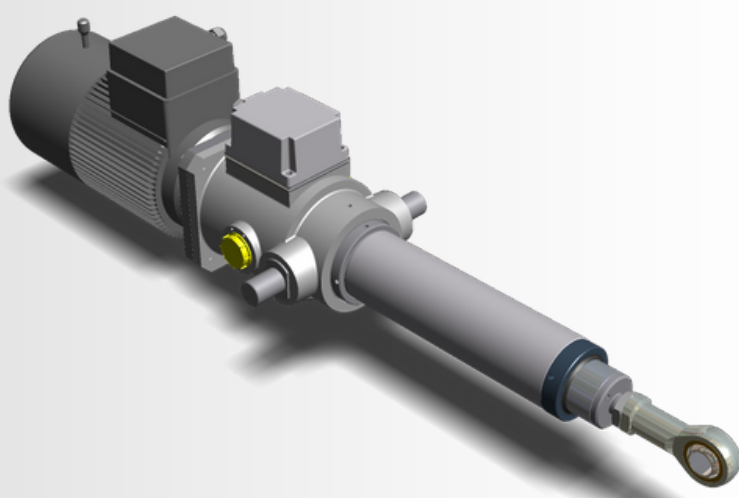
HRS line

Max. load: 400.000 N



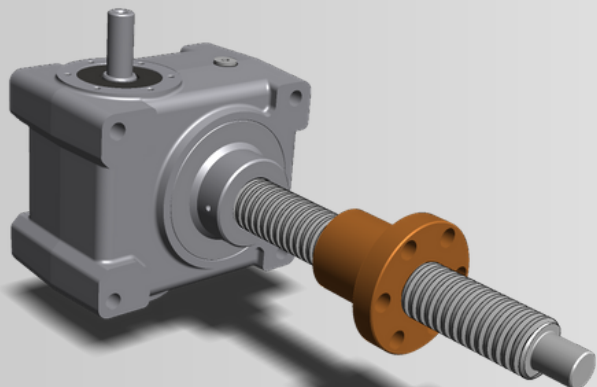
Linear actuator - EC model

Max. load: 50.000 N



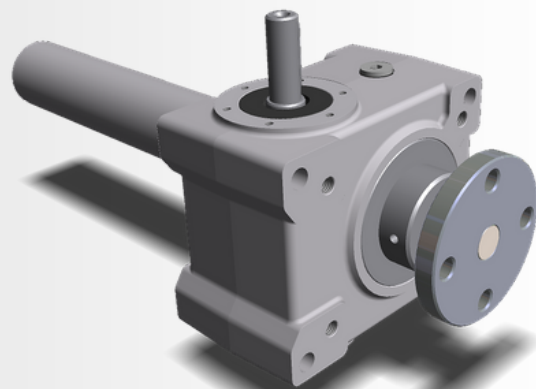
HR screw jack

Max. load: 200.000 N



HT screw jack

Max. load: 200.000 N



For more information or to set up your product dedicated to the mining field or for the steel industry, please contact us at:
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