



GM1 & GR1 GEN3

Reaching New Height
www.kbebl.com

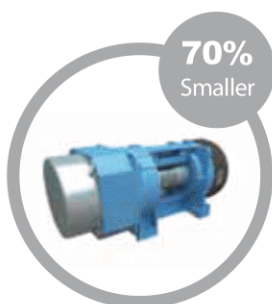




40%
Lighter

1 Flexible Steel Belts

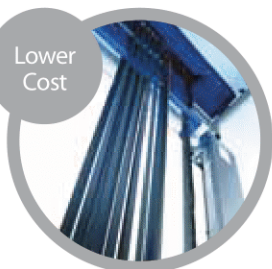
The polyurethane-coated flat steel belt is up to 40% lighter and lasts up to 3 times longer than conventional ropes. Its flexibility results in a much smaller bending radius.



70%
Smaller

2 Compact Gearless Machine

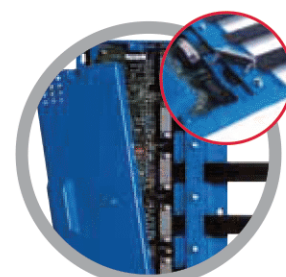
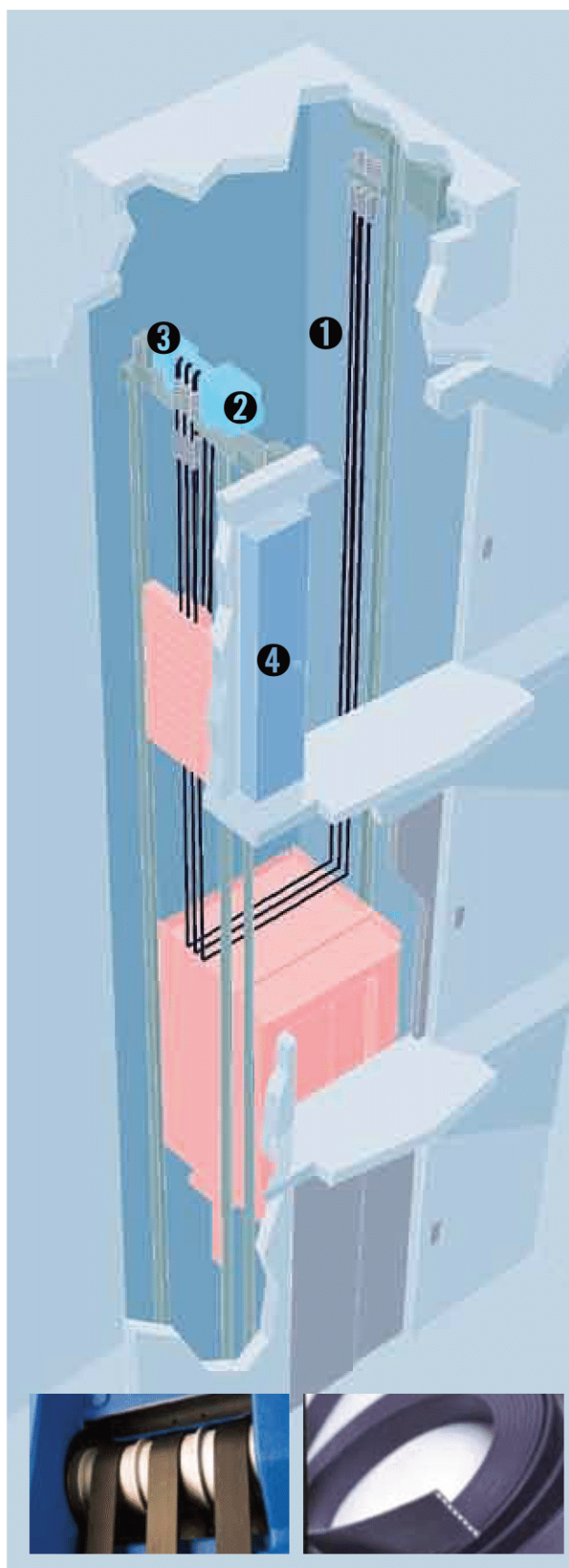
A sheave has allowed SIGMA to design a machine that is up to 70% smaller than conventional ones.



Lower
Cost

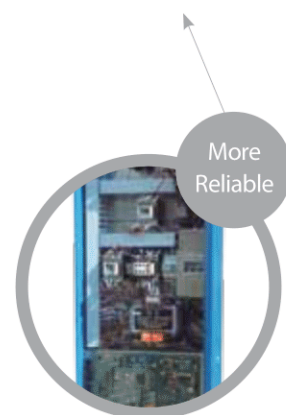
Machine Roomless System

The compact MUSE NV gearless machine does not require a machine room and can be easily positioned on the guide rails. This means all bearing loads can be transferred to the pit, thus reducing structural building costs.



3 PULSE System

The PULSE electronic system continually monitors the status of the belts' steel cords. In contrast to visual inspections of conventional steel ropes, the PULSE system automatically detects and informs technicians of the quality of the belt cord, thus eliminating downtime and greatly enhancing the reliability of the inspection.



More
Reliable

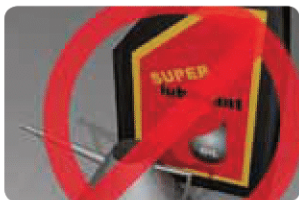
4 Reliable Controller

Designed for groups of up to four cars, the modular controller incorporates a new generation of printed circuits and software to provide optimal response time. The digital closed-loop variable frequency (VF) drive, with vector control technology, further increases efficiency and accuracy, and a digital speed encoder ensures correct car speed and positioning. The result is a system of exceptional reliability.

Leading to a Green Future

MUSE NV makes our world better.

MUSE NV realizes sustainable growth, with low cost and high energy efficiency, by applying an environmentally friendly and energy efficient system. And, MUSE NV also provides a comfortable ride that no other system can offer.



Lubrication-Free

Neither the belts nor the gearless machine with sealed-for-life bearings require any form of polluting lubricants. The need for oil in the machine is eliminated by the absence of a gear box. Unlike steel cables, the belts require no lubrication.



Soft and Quiet Ride

VVVF digital closed-loop drive minimizes internal vibration and the flat belts eliminate the metallic rubbing noise that comes from the steel ropes and sheaves found in other elevators.

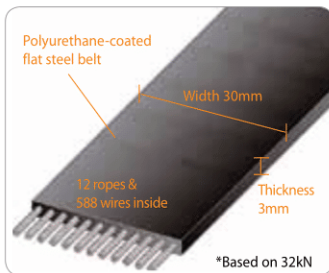


30% Energy Saving System

The low-inertia gearless machine with a permanent magnet (PM) synchronous motor means energy savings and reduced operating costs.

MUSE NV reduces the energy consumption **up to 30%**

Category	Conventional Elevator	MUSE NV
Machine	Geared Machine	PM (Permanent Magnet) Gearless Machine
Energy Efficiency	Geared (80%)	Gearless (90%)
Power Consumption (For 17-Passengers)	47.7 kwh	34.3 kwh

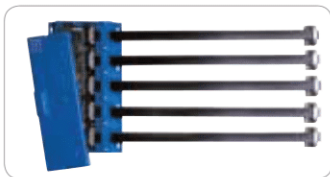


Excellent Traction Power

One flat belt can lift up elevator weighing up to 3,600kg with its excellent traction power.

Semi-permanent Life Cycle

The life cycle of polyurethane coated belts with a thickness of 3mm, a width of 30mm, and 588 wires is three times longer than the ropes used in existing systems which require periodic replacement every 3 - 5 years.



PULSE System

The PULSE System electrically checks the abrasion status and operating conditions in real-time to make maintenance more efficient and easier.



40% Lighter Belt

Weighing 40% less than the steel ropes used in other elevators, the flat belt significantly reduces energy consumption.

MUSE NV's flat belt system ensures your safety.