

Customer: **Elevator Equipment Corporation**

Application: **Home Elevators**

Products Used: **SCM Inverter, GKR Gear Motor**

### Its A Smooth Ride with the SCM & GKR...

The **SCM** Inverter and **GKR** Gear Motor from **Lenze-AC Tech** lift ADVANTAGE home elevators way above the competition. Faced with space limitations, energy consumption and varying load requirements, the design team at ADVANTAGE Home Elevator (a part of Elevator Equipment Corporation, EECO) found the solution to their motion management needs with **Lenze-AC Tech**.

Designed for travel to a height of 50 feet including a maximum of four stops and the standard load rating of 950 pounds, the ADVANTAGE Home Elevator requires a motor that can operate at a lower torque. The inverter that drives the motor must not only meet the load requirements but the space requirements as well. The minimal footprint of the **SCM** inverter and **GKR** gear motor allows the drive system of the ADVANTAGE Machine Room Less (MRL) model to be located in the elevator shaft.

Acquisition cost was key in order for ADVANTAGE engineers to keep the end product price attractive to the consumer. "But equally important was product support", says Don Brown, EECO Director of Engineering, "and we were impressed with the attitude of the people at **Lenze-AC Tech**; how easy they were to access and how proactive and creative they were in coming up with different ways to meet our challenges".

The **EPM** – the electronic programming module unique to **Lenze-AC Tech** sub-micro inverters – is the sort of feature that will make an architect or a designer spec the ADVANTAGE Home Elevator with confidence, knowing the technician's job will be greatly simplified. "Having the **EPM** on the **SCM** inverter allows us to provide even more ease of installation and product customization," explains Brown. The **EPM** saves the inverter's configuration in two memory locations, one that can be changed by the user from the front panel, and a second one that serves as ADVANTAGE's default setting. The OEM default setting provides a safety net with quick reset capability in the case of accidental programming errors. Using the **EPM** programmer, ADVANTAGE can program the inverters of dozens of elevators in a matter of minutes.



At the core of the elevator's drive system is the **GKR** bevel gear motor chosen by the ADVANTAGE engineers for its reliable, smooth and quiet operation. A right-angle motor with water-resistant bevel toothings, the **GKR** is a low-maintenance gear motor with cool running gears, especially appropriate for lower torque applications. "The **GKR's** high performance and efficiency level impressed our engineers and provided our end-user with very attractive energy savings" relates Brown. The compact, "bundled" option featuring a small gear box and motor complete in one unit, plus integral brake, hand release and hand wheel, all in one package was particularly appreciated by the ADVANTAGE team.

### SCM Inverter Benefits:

- Micro Size
- Low Acquisition Cost
- EPM memory chip

### GKR Gear Motor Benefits:

- Quiet, Smooth Operation
- Small Footprint of Gearbox and Motor Unit
- Integral Brake, Hand Release & Hand Wheel
- Energy Efficient

SCM

