

INDUSTRY ELEVATOR

APPLICATION HOME LIFT

PRODUCT

MEGALINEAR P2 WITH HP CORD







SITUATION/APPLICATION

Residential elevators are becoming more popular in private homes thanks to industry innovations that have contributed to making them a practical addition. Homeowners are installing elevators to aid them in maintaining a level of comfort and mobility by avoiding the necessity to climb up and down stairs. Elevators allow people to remain in their homes as they reach an advanced age. They are also beneficial for anyone with limited mobility such as children or handicapped individuals.

THE PROBLEM

A manufacturer of commercial elevators contacted Megadyne for assistance with the design of a drive system for a new residential elevator product. Years of collaboration working with Megadyne on their commercial elevator applications led them to seek our expertise. The challenge was to design a system that was affordable for residential use but still maintained the reliability, performance and most importantly, safety that is expected from a commercial elevator system. Because it was for home use, space constraints dictated that the elevator be small. A compact, lightweight drive system was required. It was also a necessity that the drive system operate at a low noise level and provide years of trouble-free low maintenance service.

THE SOLUTION

Megadyne provided MEGALINEAR P2 polyurethane flat belts with HP (high power) extra strength zinc-coated steel cord to achieve maximum traction load and breaking strength with minimum elongation. The S+Z twist construction of the steel high power cords ensures that the belts track straight while The 92 Shore A hardness thermoplastic polyurethane lightweight belt body provides exceptional wear resistance and durability with excellent flexibility.

THE RESULT

Megalinear P2 with HP cord belts working in pairs permitted this residential elevator application to achieve high safety factors with long life. It ensures quiet, reliable operation in a cost-effective, lightweight and compact drive space that will deliver many years of dependable service.

