

Electrical Switchgear Assembly Transporter



The Situation

A maker of high-voltage electrical switchgear in Northeast China needed a way to safely and efficiently move product around its facility, from the assembly area to a testing hall and finally to a packing area. The switchgear are enormous, measuring over 20 feet in length and weighing up to 60 tons.

The Solution

Airfloat designed and built an innovative pallet transporter system for the busy factory. The 8' X 24' transporter is powered by six 36-inch air bearings. Air consumption is 320-410 SCFM at 70 PSI.

Using a handheld control pendant, the operator maneuvers the transporter beneath the switchgear, which rests on a specially designed steel pallet. Then a pair of pneumatic lifting beams raises both the switchgear and pallet off the ground.

Both pallet and load weight are now floating nearly friction-free on a film of compressed air. Using the dual X- and Y-axis drives, the operator can literally drive the transporter in circles, around corners and other complex movement patterns.

The Results

The Airfloat transporter has become a workhorse for the factory, which produces approximately \$800 million worth of electrical equipment annually. It moves virtually every major component produced by company and is in operation nearly 24 hours a day.