

Theater and Arena Seating



Situation

A sports stadium needed a way to quickly and easily reconfigure its four grandstand sections to accommodate the viewing of different sports like football and baseball. Each grandstand section holds 7,000 seats and weighs approximately 3.5 million pounds.

Solution

Airfloat designed a custom air-film transporter system. The transporters are located under the stands and travel on concrete runways. They are supplied with compressed air at approximately 13 psi and literally lift the stand section a few millimeters off the concrete runway. This minimizes friction and permits the section to be moved by a simple hydraulic system guided by a fixed rail.

Result

Each grandstand section can be moved from one position to another in only 20 minutes. The sections travel along a 40 degree arc and move up to 200 feet.

Furthermore, even though the stands are moveable, they have self-contained snack bars, restrooms and other facilities. All of these smaller rooms move when the stands move. The stadium was the first to utilize this mobile grandstand concept.