Gala Systems, a world leader of understage equipment and flexible venue solutions, needed reliable speed reducers for use in the transformational seating system installed at the 1759-seat, world-class Tobin Center for the Performing Arts in San Antonio, Texas.

The seating system lifts, rotates (inverts), and lowers 750 main floor seats one row platform at a time. The automated system can transform the main floor area into a range of configurations, including traditional raked seating, tiered floor, tiered cabaret or a large flat floor space. Since the transformation takes only 10 to 30 minutes, several different configurations can be set up in a single day. This almost limitless flexibility allows the multi-purpose facility to host a wide variety of events throughout the year.

Due to their exceptional performance on previous Gala seating system installations, Boston Gear 700 Series speed reducers were selected for this application. Each seat row platform is powered by a series of Gala-patented Spiralift actuators. A 700 Series speed reducer is linked to each actuator. All reducers within a row platform are connected (in series) by driveshafts and driven by an electric motor. The 700 Series models supplied feature custom-made, double extended input shafts that allow for in series connectivity. The result is a reliable and fully-synchronized drive system.

The 700 Series is the industry standard for modular worm gear construction. Units feature a rugged fine grained cast iron housing for maximum strength and durability. Enhanced rigidity and one-piece construction ensures precise alignment of the worm and gear. The high-strength steel output shaft allows for high torque capacity and overhung loads. The internal worm is specially-ground for enhanced efficiency, quiet operation and lower heat generation leading to prolonged product life. All models are self-contained and lubed-for-life.