



### **HIGHLIGHTS**

- Double reduction
- 600:1 ratio
- 5,900 lb.in. rated output torque
- Cast iron housing
- High-strength bronze worm gear
- · Large oil reservoir



Photo courtesy of Jim Ewing/ShooFlyFarmBlog

# 700 Series Double Reduction Gearbox

## **Amusement Ride Conveyor**

### **PROBLEM**

A major amusement park located in Orlando, Florida, needed a replacement drive for use on one of its attractions. The ride features boats that transport passengers through a series of greenhouses and gardens where many of the plants are grown hydroponically. The plants are suspended from a slow overhead looped conveyor system that operates 24/7. The conveyor moves the plants through the skylighted exhibit spaces where they are sprayed every few feet with water and nutrients. The conveyor's original reducer was showing signs of wear and needed to be replaced.

#### **SOLUTION**

While competitor reducer manufacturers declined the challenge, Boston Gear, working closely with a distribution partner, was able to provide a custom solution.

With limited upfront information, the Boston Gear support team met on-site during the ride's early AM downtime hours to diagnose the situation and extract the necessary data for product selection. Ultimately, the Boston engineering team recommended a Series 700 double reduction speed reducer to provide long life in the tough 24/7 operational environment.

The compact, non-flanged Model 738 unit supplied features a 600:1 ratio and a rated output torque of 5,900 lb.in. All 700 Series units feature high-strength bronze worm gears mounted between heavy-duty, tapered roller bearings. Large oil reservoirs provide efficient heat dissipation for a low operating temperature, which combined with a highly effective sealing system, yield a long operating life despite the 24/7 operating conditions. The modular worm gear construction of Boston Gear 700 Series speed reducers is the standard in the industry.

US (Application Assistance)

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