

Customer: **Super Sensitive Musical String Co**

Application: **Acoustic Musical String**

Product Used: **PositionServo Drive**

At Super Sensitive, the PositionServo Strikes the Right Chord

A high-end musical string manufacturer, Super Sensitive is preferred internationally by professional players and owners of valuable vintage and antique bowed instruments. Their wide product range requires unique manufacturing flexibility and their clients expect uncompromised excellence.

The string of a musical instrument comprises a core and one or more layers wrapped around that core; the process of combining those layers is called “winding.” Depending on requirements such as tonal quality, tuning stability, feel and price point, the core and the layers will be made of different materials. There are multi-filament synthetic cores, solid carbon steel core string with chromium alloy wrapping, full core steel string with nickel winding, to name just a few.

The Super Sensitive expert team was looking for a “winding” solution that offered easy programmability, assured brilliant performance, and still allowed them to remain competitively priced. With its PLC capabilities and attractive cost of ownership, the **PositionServo** provided the perfect answer.

Using the **PositionServo** for the automated winding of their strings, four drives are tied together and the ratio from each wind head to the master is coordinated. The “master motor” pulls through the first thread. The second motor winds a second thread over the first one. The third motor winds a third thread, and so on. In order to assure the thread is wrapped just right, the speed of all the winding heads needs to be directly proportional to the speed of the motor pulling the thread through.

Once the Super Sensitive manufacturing team has worked out their specific requirements, programming is easy and set up time very quick; the process is all automated to a perfect pitch. The Super Sensitive String team has also added an HMI, thus facilitating the setting of required parameters.



The **PositionServo** is helping Super Sensitive Strings turn out uniformly high quality strings that keep their tune under all circumstances, and the potentially time consuming and delicate task of producing a wide range of top notch products is being performed efficiently and cost-effectively.

PositionServo Benefits

- High Torque Accuracy
- PLC Capability of PositionServo
- Electronic Gearing Capability
- Quick, Intuitive Programming
- Fast Configuration
- Multiple Communication Options
- Competitive Pricing
- Product Availability

PositionServo

