

Comprehensive Solutions with Industrial Gas SpringsTM

When a high-end, sustainable-focused outdoor furniture manufacturer noticed a potential liability with their reclining lounge chairs, they knew they needed to act before any serious injury occurred. Independent research led them to discover they needed Dampers to slow the speed of the backrest as it reclined; otherwise, customers risked injury when attempting to recline while using the chair.

More issues for the manufacturer arose as they tried to find a supplier who could meet their demands. Some trial and error and more research led them to Industrial Gas SpringsTM (IGS), where they received more than just a product for their application.

The problem was not sustainable-centric, but more functionality and finding a supplier who could meet their production demands. However, the team at IGS recognized the importance of sustainability with the company and the desire to reduce plastic waste. This prompted them to investigate how they could support that mission while also providing the Damper needed for the application.

Partnering with IGS allowed the manufacturer to have a hands-on approach to the design process to ensure their end-customer received the high-quality product they expected. Together, IGS and the manufacturer were able to align on the goals and expectations of the end-product and develop a solution that maintained their mission statement while simultaneously resolving a safety risk.

The result is that the manufacturer built a better-quality lounge chair for their customers, and IGS provided the necessary supply for the next generation.

Through discussions with the manufacturer's engineers, IGS's dedicated team designed and provided a Damper with the appropriate specifications for the application. When shipped, each Damper comes in a plastic sleeve. Given the eco-friendly, sustainable mission of the customer, the team at IGS offered an additional solution to remove the plastic sleeves and replace them with recyclable foam inserts between the nested layers of the solution.

The final product was a completely corrosion-resistant Damper with some customization to meet the required damping effect and fit the dimensions of the next generation of lounge chairs. Additionally, IGS provided quick attachment end fittings for easier installation to streamline assembly. This end-fitting, made of composite material, contributed to the corrosion-resistant construction.

Working with IGS means partnering with a trusted name for quality counterbalance and motion control products with years of experience developing solutions. With that comes the ability to provide a plethora of products to meet the demands of customers' applications. Durability, precision, and longevity are of utmost importance to IGS, and customers can trust that they receive a suitable, quality component for their application.

Together, IGS and the manufacturer were able to align on the goals and expectations of the end-product. The manufacturer played an active role in designing and prototyping the part for their application.

Problem

Safety hazard with consumers attempting to adjust the chair while seated

- The chair was reclining too quickly
- Pinch and other injury risks
- Negative impact on perceived product quality

Solution

Partnership to create a comprehensive solution

- Hands-on co-creation of the final product
- Capacity to provide complete stock for product launch
- Eco-friendly custom shipping with reduced plastic use
- Completely corrosion-resistant Damper with quick attach end-fittings
- Development of controlled recline on the next generation of lounge chairs



PRODUCT FEATURE

Dampers are a motion control devices that use oil to transfer kinetic energy to thermal energy and reduce speed in moving parts. They do not provide force and are available in compression and extension.