



# CLEANROOM SPUTTERING TARGET HANDLING LIFT FOR PVD CHAMBERS

## PROJECT 36337

Handling sputtering targets in an optics cleanroom demands precise positioning, particle-minimizing motion, and strict contamination control. This custom Alum-a-Lift (Project 36337) is an ISO 7 cleanroom compatible lift engineered for transporting and positioning 14" diameter sputtering targets with welded flange, weighing 55–70 lb. (25–32 kg), into a physical vapor deposition (PVD) coating chamber. A multi-axis articulating gripper, designed specifically for this application, allows the operator to tilt and rotate the workpiece for accurate alignment while maintaining controlled, repeatable motion.

To protect sensitive optics hardware, the lift incorporates a forward shuttle capability that provides smooth, particle-minimizing motion during insertion and retraction, along with horizontal travel for precise positioning at the chamber interface. The custom gripper is configured to pick each sputtering target from the top (flush) shelf of a pushcart, engaging the component in a way that avoids contact with the face of the target and the face of the flange, helping to prevent contamination and mechanical damage to critical coating surfaces. The system is used for transportation, lifting, and loading of Spector coating targets and is designed to navigate 32" (813 mm) wide aisles and pass through 30" (762 mm) wide, 84" (2,134 mm) tall doorways, supporting efficient movement between storage, preparation, and PVD tools.



Because sputtering targets are key to producing high-performance thin films with defined conductivity, reflectivity, and durability for electronics, optics, and energy applications, the customer required a solution that reduced manual handling while preserving cleanliness and alignment accuracy. The lift is powered by a rechargeable battery for cord-free operation in the cleanroom and sized so that operators no longer need to manually carry or muscle 55–70 lb. targets into position. By combining controlled lifting, multi-axis articulation, forward shuttle motion, and cleanroom-ready construction, this sputtering target handling lift reduces operator workload, improves ergonomics, and supports consistent, repeatable loading into PVD coating chambers.

This cleanroom sputtering target handling lift also translates well to semiconductor wafers, optical components, precision glass, and other thin-film or vacuum-processed parts in electronics, display, and energy manufacturing.

### Model

B350CS-72

### Handling

Up to 75 LB [34 KG]  
Sputtering Targets

### Featuring

Powered 90° Rotation,  
Forward and Lateral Shuttle,  
Class 10,000 (ISO 7) Cleanroom

Alum-a-Lift designs and manufactures turnkey ergonomic lifting solutions for companies around the world. Our proven solutions help manufacturers meet their material handling needs safely and efficiently.

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