

FEATURED ALUM-A-LIFT

DUAL-AXIS SATELLITE HANDLING LIFT FOR ISO CLASS 6 CLEANROOMS



PROJECT 36145

Satellite assembly and test in high-reliability space programs demand precise positioning, cleanroom compatibility, and robust safety margins when handling heavy, high value hardware. This custom Alum-a-Lift dual-axis work positioner is engineered to handle a 1,323 lbs. (600 kg.) satellite in an ISO Class 6, ESD safe cleanroom. The lift provides controlled motion for payload integration, inspection, and testing. The end-effector rotates about both the Y and Z axes, allowing engineers and technicians to orient the satellite for access while avoiding collisions with the cleanroom ceiling and floor when the payload is mounted on the lift.



To support demanding space missions such as space domain awareness, proliferated LEO constellations, and missile warning and tracking, the integrator required a work positioner that could safely manage off-center masses and shifting centers of gravity. Alum-a-Lift provided a custom base with extended legs and a widened stance to improve floor loading and reduce front caster loading, helping ensure that uneven weight distribution does not compromise stability during satellite handling. This geometry, combined with precise dual-axis rotation, enables repeatable positioning and safe, ergonomic access to satellite surfaces for instrument installation, cabling, and final verification.

By combining controlled lift, dual-axis rotation, and a stability optimized chassis, this satellite handling lift improves safety, consistency, and throughput in cleanroom spacecraft integration work cells. The ISO Class 6 and ESD safe design makes it well-suited for handling sensitive space payloads, AI/edge compute equipment, autonomy hardware, and command and control electronics in modern defense and space manufacturing environments.

Model

A3500CSLRPD-78

Handling

Up to 1323 LB [600 KG]
Satellites

Featuring

Dual-Axis Rotation, Self Propelled,
Side-to-Side and Forward Shuttle

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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