

SPECIFICATIONS FOR MANUAL DUMP TARPING SYSTEM

Model 450 with The Claw, Double-Arm, and 85" Mesh Tarp

Manual dump body covering system, Aero Industries Easy Cover Model 450 or approved equal, with a ground level manual crank assembly. Length to be adequate to properly cover the dump body.

The arms are powered by two (2) chromium vanadium torsion springs mounted underneath the dump body. The spring wire diameter is to be 5/8" and the springs must have the ability to be pre-loaded with tension and must not require welding for installation. The total thickness of the spring/arm assembly when installed is not to exceed 3" when installed to the dump body.

The arm assembly shall consist of four (4) pieces of high strength 6061 T6 aluminum extrusions with at least a minimum wall thickness of .188 for the ends of the tube for strength purposes. All arm components must be polished. The arm sections shall telescope to allow for length and width adjustment, and must be easily replaceable. Arms should be angled at approximately 26 degrees to allow the arms to be recessed in the open position. To minimize friction and wear within the tarp pocket, the rear cross tube shall be round.

The roll-up tube assembly is to be a 6061 T6 aluminum extrusion with zinc plated steel machined end shafts. It shall be a telescoping design so the width can be adjusted without cutting the roll-up tube. The roll-up tube shall be designed so the tarp can easily be attached without drilling any holes. The roller assembly mounting plates shall be polished aluminum with high-speed flanged, pre-lubricated bearings. A one-pieced polished aluminum wind deflector is to be secured to the roller assembly mounting plates. To minimize installation, the wind deflector must be designed so no cutting (to length) or drilling is required.

The crank assembly must utilize a ratchet and pawl as a positive locking device, as well as a friction brake to control the arm speed while covering the load. The function of disengaging the lock and applying the friction brake, must occur simultaneously by operating one lever. The lock must automatically re-engage if the operator's hand is removed from the crank handle or brake lever. The crank handle must be removable for safety, as well as to prevent unauthorized use of the unit when left unattended. The total thickness of the crank assembly when installed is not to exceed 3-3/4" when installed to the dump body. The chain cover is to be polished aluminum.

The systems shall include a Double-Arm that is attached to the primary swing arms. The second arm shall pivot freely on the primary swing arm and be orientated opposite the rear cross tube to provide gravity assisted downward force to hold the tarp behind the cab shield and minimize tarp lifting or sailing.

To prevent the rear swing arms from lifting or bouncing when the tarp in the closed position, the system shall be equipped with locks near the rear cross tube that automatically engage when the tarp is fully closed, and immediately automatically unlock when the process to open the tarp is initiated. The lock and unlock processes must be accomplished through the normal course of operating the rocker switch in the cab- no additional steps by the operator are permitted to secure the rear cross tube and swing arms to the tailgate.

The tarp material shall be vinyl coated nylon or polyester mesh, suitable for covering aggregates. The tarp is to finish 85 inches wide. All sewing is to be lock-stitched; chain stitching is not acceptable. A minimum of two (2) polyester web reinforcements is to be sewn or welded to the tarp longitudinally for stability.