SwapLoader Model SL-330 Hydraulic Hooklift Bid Specifications

Hooklift System:	Minimum of 33,000 pounds lifting and dumping capacity with gross weight evenly distributed in and/or on container/body. Hooklift shall be able to handle skid-mounted containers/bodies with lengths of 14 through 18 feet. Minimum lifting and dumping capacity must be achieved for all stated container/body lengths. Hooklift shall have a minimum of 58 degree dump angle, on a 41" truck frame height chassis. Hooklift not to exceed 5,170 pounds in shipping weight. Skid-mounted containers/bodies shall be supported with a pair of 6-1/4" minimum diameter outside flanged rollers at the rear of the hoist, and be adjustable to accommodate bodies/containers with outside subframe rail widths of 40-1/2" or 41-5/8". The hook to rear roller dimension to be 167.5" in length. Hooklift shall be capable of being mounted to a truck chassis with a 138" cab-to-trunion dimension for optimum weight distribution and stability.
Hooklift Operation:	The hooklift telescopic jib shall be capable of hydraulically sliding the container/body horizontally on the chassis to adjust weight distribution while remaining in the body locks and without lifting the container/body rails off the hoist frame. Tilting or articulating jib designs are not acceptable. Hooklift shall have a dual rear pivot section incorporated into the hoist design to allow for both a true dump truck operation, with the container/body secured to the hooklift via body locks during the entire dump cycle, and increased mounting leverage at the beginning of the container lift cycle. Hooklift jib to reach rearward to the A-frame lifting bar by means of double articulating hinge points (dual rear pivot) incorporated into the hoist mechanism. All lift sections shall lock into a common rigid full-length frame to support the body/container when in a dump mode. This must be accomplished by mechanical operated latches, which lock the mast without relying on gravity or hydraulic operated locks to accomplish. Must have a jib lockout valve to prevent jib operation while in a dump mode. Hooklift shall be designed to function through all modes, load/unload and dump, without the use of breakaway tabs and/or proximity switches.
Hydraulic Cylinders:	Dump/lift cylinders are double acting, twin cylinders, sized for the unit capacity with dual integral counterbalance valves. Dump/lift cylinders to be a minimum 5.5" bore, 2.75" rod diameter and 60" stroke. No external or remote mount (connected by steel lines) counterbalance valve configurations to be accepted. Cylinders must be manufactured in the U.S.A. Telescopic jib cylinder shall be double acting, single cylinder, sized to unit capacity with a single counterbalance valve. Jib cylinder to be a minimum 4" bore, 2-1/2" rod diameter and 38" stroke. No external or remote mount (connected by steel lines) counterbalance valve configurations to be accepted. Cylinder must be manufactured in the U.S.A.

Hydraulic System:	Direct mount gear type pump, 22.3 GPM at 1500 RPM, with a 3,500 PSI maximum system operating pressure. 30 gallon oil reservoir tank (minimum) is to have a sight gauge to indicate fluid level with integral thermometer. Must have a 100 mesh suction strainer with bypass relief. Must contain a return filter assembly; with replaceable 10 micron filter cartridge. Control valve to be stackable type with JIC 37 degree fittings, and contain an integral 3,500 PSI relief valve. High-pressure hoses to be SAE 100R2 type AT, or equivalent, rated for 3,500 PSI (minimum) working pressure with JIC 37 degree swivel fittings. Hydraulic fittings are to be SAE O-ring boss or JIC 37 degree type wherever possible; metric fittings are not acceptable. Dual control levers, cable operated, mounted in truck cab. Controls are to be spring centering type for safe operation. Hooklift hydraulic system shall be designed to allow for ease of integration into a Central Hydraulic package through maximum system operating pressures not exceeding 3,500 PSI.
Mainframe Design:	The mainframe of the hoist is to be constructed of a “Z” rail configuration. The “Z” rail mainframe is to be a maximum of 10.5” in height and constructed of 1/4” thick A572 50 KSI steel. Hoist “Z” frame rails to include a minimum of 8 (or 4 per side) 11-3/4” x 2-3/4” x 1/2" Nylatron wear pads for container/body support. The Nylatron pad will allow the containers/bodies to slide back and forth horizontally on the “Z” rail of the hoist with ease. Metal to metal contact (direct contact of the container/body subframe rail on the hoist mainframe rail) will not be allowed.
Jib Hook Design:	Vertical Jib to be constructed of a 9” x 9” x 1/2" wall square tube of A500 50 KSI steel. Jib hook height shall be 61-3/4” from the bottom of the container/body subframe rails to the bottom of the A-frame lift bar. Hooklift shall be able to pick up a container/body that rests 21” below the grade that the truck chassis is on (assumes a 41” truck frame height). Jib hook to be designed to secure container/body to hoist without the need for a hook latch mechanism to cover the hook opening. Jib hook to be permanently welded to jib. No bolt on jib hook will be allowed.
Pins:	All hooklift pins to be constructed of high-strength CFR steel bar; stainless steel pins are not acceptable. All pinned connections to be greasable to both lubricate the joint and flush out all contaminates.

Body Locks:	Hooklift shall have passive integral slide through body locks to secure the container/body latch plates to the hooklift in dump and transport positions; to accommodate different length bodies and to allow for weight distribution changes while remaining in the body locks when in the transport or in dump cycle. Prong style body locks are not acceptable Hooklift body locks shall be designed to secure the container/body to the hoist during an overturn situation of the truck chassis.
Container/Body Subframe:	The A-frame of the container/body shall be constructed to allow the hooklift operator to approach and load the container/body on the truck chassis frame from an angle. The skid-mounted container/body shall have integral slide through latch plates to secure body to hooklift in dump and transport positions, and to accommodate different length bodies or weight distribution changes while remaining in the body locks. Slide through latch plates to be a minimum of 36” in length to allow the container/body to slide forward and back horizontally a minimum of 24” while remaining fully engaged in the hoist body locks.
Hooklift Options:	An optional Adjustable Jib and Dual Height Body Lock shall be available for purchase from the hooklift OEM. The hooklift must be capable of accommodating an optional Adjustable Jib (gravity operated rotating jib hook type) that can be rigidly locked at both 54” and 61-3/4” container/body A-frame lift bar heights. An optional Container Variability System shall be available for purchase from the hooklift OEM. The C.V.S. allows the hooklift to accommodate containers up to 2’ shorter than recommended minimum length. An optional Rear Stabilizer, with integrated heavy duty bumper, shall be available for purchase from hooklift OEM. A Rear Stabilizer allows the hooklift to achieve maximum load lifting capacities in all conditions by moving the rear pivot point of the truck/hooklift system to the rear most point of the truck chassis from the center of the rear tandem axle, thereby stabilizing the truck/hooklift system by keeping the front axle of the truck chassis in contact with the ground in all load conditions.
Warranty:	The SwapLoader hoist and components as supplied by SwapLoader will be factory warranted free of defects in material and workmanship for a period of forty-eight (48) months on Parts, and twelve (12) months on Labor from the date of installation. Refer to the SwapLoader Limited Warranty Statement located on the SwapLoader website for complete details. www.swaploader.com
Origin of Manufacture:	Hooklift to be designed and manufactured in the U.S.A.