

General Specifications – Truck Leveler

Scope: The Truck Leveler shall be designed and fabricated to handle a 40,000# gross load with a design criterion of 5-to-1 for all components.

Ramp Platform: The ramp platform assembly shall be ten (10'0") wide by sixteen (16'0") long, designed to carry the load and constructed of formed and/or structural steel members, rigidly welded and reinforced and covered with checkered steel floor plate. Protective steel skirts shall be provided on three (3) sides. A heavy duty bolster assembly shall connect both cylinders. It shall incorporate a swivel thrust yoke to assure smooth operation at all elevations.

Rear Hinge: A continuous type hinge shall be provided. It shall consist of a single continuous support plate assembly arranged to permit anchoring to the pit ledge, and shall securely restrain the platform against the shock loading involved.

Hydraulic Cylinders: The two hydraulic power cylinders shall be of the heavy duty industrial single acting type. Each cylinder shall include a large diameter plunger constructed of heavy seamless steel pipe complete with heavy welded steel heads accurately turned and polished to an extremely smooth finish over its entire length and shall include a welded stop ring to prevent it leaving the casing. The outer casing shall consist of a heavy seamless steel pipe with welded bottom head and shall include wide spaced internal bronze bearings. An automatic air eliminator shall be provided. A manual air bleed may be furnished additionally, but not as a substitute for the automatic type. The packing gland shall be adjustable and shall consist of multiple "Vee " type packing rings which are supported, top and bottom, with metal adaptors for improved sealing and shall include a packing pressure ring, effective wiper ring, and an adjustable steel packing ring. The hydraulic cylinder assembly shall be factory tested with oil at a minimum of 1000 PSI; however, operating pressure of the system under maximum load shall not exceed 400 PSI. A stroke of 30" shall be provided. No cast iron or other brittle materials shall be used in the cylinder construction.

Hydraulic Pumping Unit: The Power Unit shall consist of a _____V, _____Cycle, _____Phase, 5-HP, standard NEMA frame open drip proof motor directly connected with a flexible coupling to a heavy duty industrial pump. The operating speed of the cylinders under full rated load conditions shall not be less than 3-FPM. The system shall include a cleanable suction strainer, a quiet adjustable pressure relief valve, a check valve and a solenoid operated lowering oil valve. A means shall be provided at the power unit for lowering the lift manually in the event of power failure. The motor/pump and valve assembly shall be completely piped and mounted on an oil reservoir of adequate capacity to operate the system, plus reserve oil. The oil reservoir shall be equipped with a drain.

Controls: Control of the platform shall be by push-button station marked UP/DOWN. The push-button station shall be of the constant pressure type, so that release of either operating button will stop the platform. Additional controls in a NEMA-1 enclosure shall include an across-the-line magnetic motor starter and transformer to provide 115-V control circuit.

Painting and Finishing: The platform shall be cleaned and painted with a surface primer and finished coat of machinery enamel. The cylinders and bolster shall be painted with Tapecoat or equal.

General Specifications – Truck Leveler (Continued)

Optional Equipment

Cylinder Load Pad: A heavy gusseted plate (load pad) suitable for mounting on pit channels.

Load Pad Support (Pit Frame): A steel pit frame of adequate strength to evenly distribute the load over the pit floor.

Wheel Guide: A raised divider approximately 24" wide and 4" minimum height shall be provided down the longitudinal centerline of the platform to guide the wheels of the vehicle. A removable plate in this section shall provide access to the pit.

Safety Locking Device: An automatic mechanical safety locking device will be provided to prevent the platform from accidentally falling in case of loss of pressure in the hydraulic system. It shall be of adequate strength to support the platform at any position of its travel and will consist of a heavy rack bar, a rack bar bearing and housing, a hinged spring loaded locking pawl, a solenoid release device and heavy swivels and pins to connect the assembly to the hinge frame assembly and to the platform. The locking pawl will be arranged to be held in contact against the rack bar during the full raising cycle, and will lock the rack against accidental lowering. Actuating the "LOWER" button of the push-button station will automatically cause the release solenoid to pull the locking pawl out of the locked position thereby permitting the platform to lower. Electrical circuitry will be provided to make it unnecessary to actuate the "raise" circuit before lowering.