



CASE STUDY: BULK FLUID HANDLING IN A MECHANICAL SHOP

APPLICATION: PORTABLE LUBE SKID

In a typical mechanic shop, fluid pumps are mounted on the walls, with lines routed through the ceiling to hose reels located in each service bay. However, there are cases where a shop owner may opt not to invest in a full fluid distribution system - especially in smaller shops with limited budgets or leased buildings where permanent infrastructure isn't practical. For situations like these, FLO offers a portable lube skid - a complete, self-contained fluid handling system designed for flexibility and mobility. This plug-and-play solution eliminates the need for mounting ceiling lines and hose reels. All it requires is a single air hose connection, and it's ready for use.

FLO was approached by a local college mechanical program that faced two challenges:

- 1) they didn't want to invest in permanent infrastructure
- 2) they might relocate in



THE FLO SOLUTION

FLO's portable lube skid design incorporated quality equipment from Lincoln Industrial, Alemite Lubrication and other quality manufacturers. It was built on heavy-duty casters, allowing it to be easily moved around the shop - or even outside - for full-service maintenance wherever it's needed. It enables student technicians to perform a complete service on a machine, including oil evacuation, filter changes, and refilling with fresh oil - all using one portable unit.

The final solution design included:

- One Waste Oil Transfer Package, consisting of a heavy duty 50' hose reel, an air-operated double diaphragm pump, waste oil diverter valve, waste oil discharge connection, air regulator, a safety lockout valve (installed in the pneumatic control lines), and a 250L double-walled steel, vacuum monitored, waste oil tank with electronic "overfill monitoring and shut-off". The diverter valve switches the suction port and the outlet port of the DD pump. Technicians can connect the hose reel to the machine, evacuate the used oil into the waste oil tank on the lube skid, then switch the diverting valve to pump the oil from the waste oil tank to a larger holding tank.
- Three New Fluid Packages (for engine oil, hydraulic oil and transmission fluid), each consisting of a 300L double-walled steel tank, a 3:1 air-operated pump package with air regulator, filter, lubricator and gauge; a heavy duty 50' hose reel assembly, and an electronic LCD metered control valve. Each tank has a level indicator and is vacuum monitored.
- One Grease Pump Package (for regular greasing of the machines), consisting of an air-operated 50:1 grease pump for 120lb drum, complete with follower plate, clamping ring and tie-downs, and a heavy duty 50' hose reel assembly with dispense nozzle.
- All required hose ends, tube, fittings, valves and controls.
- All mounted on a Custom Skid Frame complete with forklift pockets.



FLO RESULTS

FLO's Portable Lube Skid offered the perfect solution:

- ✓ Low upfront cost
- ✓ Quick setup
- ✓ Simple relocation when the time comes

**For Total Lube Solutions,
GO WITH THE FLO!**

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