GROUND FORCE
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WORLD'S FINEST MINE SUPPORT EQUIPMENT

Safe, Clean & Reliable
Overfill Protection System

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HYDRAU-FLO®
Safety Solutions for Liquid Filling

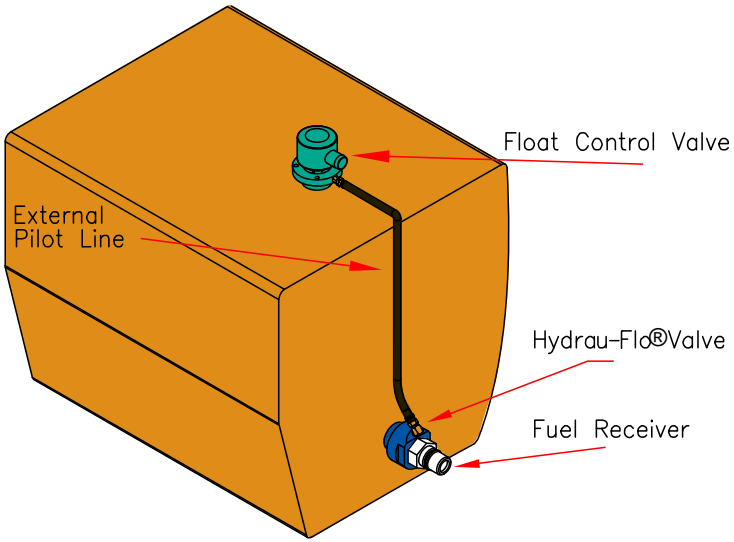
SAFE, CLEAN & RELIABLE OVERFILL PROTECTION SYSTEM

Hydrau-Flo® is designed to be used in conjunction with existing "*fast fill*" systems, and a retro fit to existing conventional pressurized fast fill systems.

Hydrau-Flo® fuel filling system prevents the potential issues that a conventional pressurized fast fill system can create such as:

- Overfilling
- Fuel spillage and wastage
- Possible risk of fire as a result of fuel spillage
- Fuel costs associated with fuel wastage
- Tank rupture due to pressure build up during filling
- Environmental and safety hazards

HOW IT WORKS



1. Fuel enters the system via an existing fuel nozzle and receiver, the fuel then flows into the HYDRAU-FLO® Fuel Filling Valve (FFV).

2. The fuel flow / line pressure from the fuel pump forces the FFV's piston to open allowing fuel to enter into the tank via the ports in the FFV. The FFV piston is constantly acting against an opposing spring during the filling cycle.

3. An orifice in the piston directs fuel through a capillary line (Pilot Line) to the Float Control Valve (FCV), a constant bleed flows through the FCV into the tank. When fuel reaches the required level the float in the FCV rises and cuts off the bleed into the tank. This action equalises the pressure on both sides of the FFV's piston.

4. With the FFV's piston in a pressure balanced state the opposing spring is then able to close the FFV's piston, stopping fuel flow entering into the tank.

5. While the HYDRAU-FLO® system is in this balanced state the fuel nozzle cannot be overridden, therefore preventing the potential of overriding the fuel nozzle and over filling the tank.

6. The HYDRAU-FLO® system uses the fluid level set point in FCV to determine the fill cut off point, once the fluid has reached this cut off point it will cause the nozzle to be triggered to the closed position, the system operation depends on the fluid level within the tank and *not tank pressure,* to cause the filling nozzle to close.

7. HYDRAU-FLO® removes the potential pressurisation of the tank, that can cause tank fatigue and rupture.

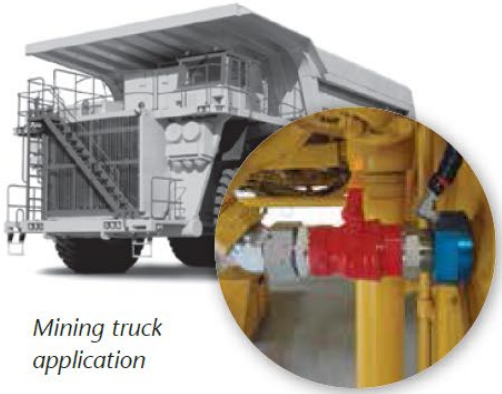
COMPONENTS YOU NEED

The Hydrau-Flo system comprises of 3 main components:

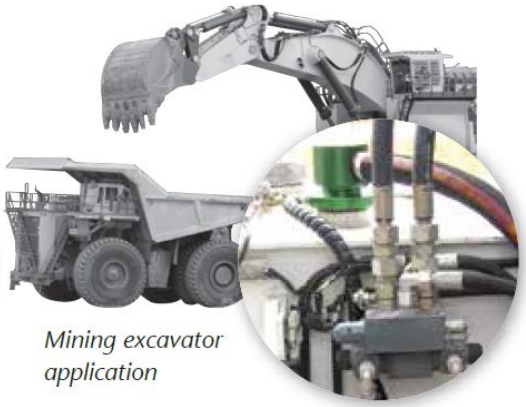
1. Float Control Valve (FCV)
2. Fuel Filling Valve (FFV)
3. Pilot Line (how the valves are connected)

There are several valve options available depending on your existing fittings and equipment.

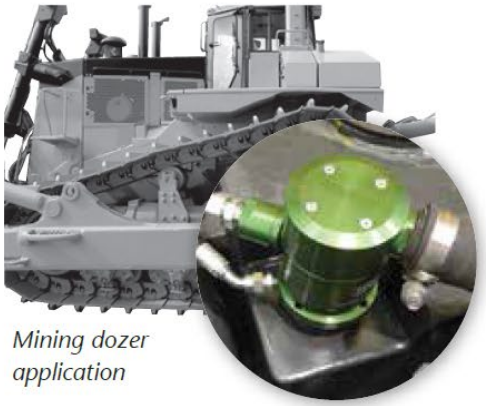
HYDRAU-FLO APPLICATIONS



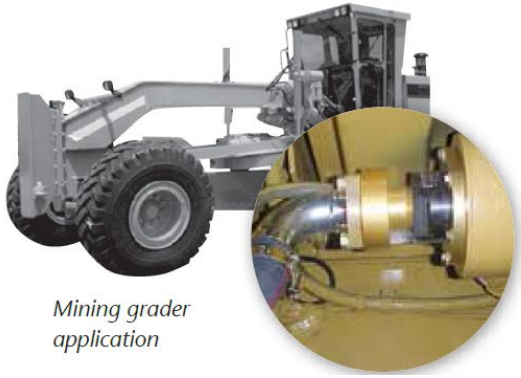
Mining truck application



Mining excavator application



Mining dozer application



Mining grader application

Drill application

Mining service truck application

Contact us at +1-208-664-9291 or partsales@gfworldwide.com for more information.