

Continental AG Design Project

Brief Description:

The system was engineered in such a way that there are as few points of failure as possible. For this reason, gravity is used instead of pumps wherever possible. This reduces the need for pumps, which require more maintenance and will fail more often than a system with no pumps. In addition, the system was designed with future maintenance in mind. Cutoff valves were placed wherever necessary to facilitate work without the need to drain any of the tanks. Another high priority was the quick and efficient transfer of fluid such that it interfered with regular productivity of the plant as little as possible. This meant quick fluid transfer times. The clean coolant storage tank was made to be 15000-gallons, the same size as a typical coolant delivery. The dirty coolant tank is also 8,000 gallons. This was done so that if for some reason (inclement weather for example) the recycling trucks are unable to pick up the coolant, the plant can continue to operate for an extended period before the tank fills completely and halts production.