BACKGROUND
A large producer of OSB (Oriented Strand Board) was having issues achieving the ISO code requirement for the components in a large press system. The press is key to the process and is used to press and heat the material to acquire a specific density of the material. Schroeder Industries worked with the customer and their fluid power distributor to tailor a filtration skid to achieve their goals while overcoming a system obstacle.

PROBLEM
The customer was not able to reach the required ISO code in the system. To achieve the ISO code target, a contractor was called in to apply a portable filtration skid to bring the oil into compliance. The hydraulic tank on the system had a nitrogen blanket applied to it and is charged to about 120 psi. This pressurized system caused issues with the contractor’s equipment. Pump shaft seal failure was common, leakage and downtime was a big problem.

SOLUTION
Schroeder Industries and the local distributor sales person were able to collect all of the system criteria and understand the issues that the customer was facing. The customer wanted a solution that could be purchased and applied to the system full time to maintain the cleanliness while overcoming the issue of the pressurized reservoir. Schroeder Industries Engineering staff developed a high flow skid utilizing a magnetic coupling drive on the pump, which eliminated the shaft seal on the pump. A pair of Schroeder QF5 filter assemblies were installed in series to turn the entire volume of the press every 2.5 hours. A light system was incorporated to give maintenance personnel a visual indication from a distance of the status of the machine and the filter elements. A float was also incorporated to shut the unit down in the case of leakage.

RESULTS
Schroeder developed a custom skid to get the ISO codes within requirements and overcome issues due to the pressurized system.

System information is displayed via a stack light arrangement to allow for quick analysis by maintenance personnel. The deep pleat element design gives maximum dirt holding capacity and long run time between element services. Schroeder Industries will continue to work closely with the customer to develop custom solutions for their specific needs.

Customer: Large Industrial Press Operator
Fluids Addressed: ISO 68
Schroeder Product: Custom X5 Skid, QF5 Filter Assemblies