

Ink circulating system (ink tank, pump, and ink filter)

Ink tanks and lids

Standard Valflow ink tanks are round to promote circulation and eliminate “dead spots” in corners where heavier materials can drop, out and stagnate which can cause viscosity and colour issues. Round tanks of 25, 50 and 80 litre capacities, fabricated out of stainless steel feature a low pump-down to reduce ink waste. A rolled rim at the top of each tank provides reinforcement while eliminating sharp edges. Removable spark less castor wheels are offered as an option.

Lids have overlapping rims to reduce evaporation and add strength. A hinged portion allows easy refilling or taking of manual viscosity readings. Holes are provided for return hose and / or bypass. Large handles make lifting easy. Customised and OEM tanks and lids available on request.

Tank capacity is selected based on the amount of ink consumed by the press, length of run, the chamber or ink tray capacity and the amount of ink which will drain back into the tank from the print deck, hoses, and filters when pump is stopped.



Ink filters

Valflow filters are manufactured under license from Graymills® Corporation, USA. Circulating along with the ink are contaminants from three major sources: air (dust, fiber), doctor blades (metallic particles), and ink (dried ink and pigments). Valflow filters eliminate these contaminants through mechanical and magnetic means and thus ensure good print quality.

Eliminating these contaminants helps to ensure good anilox roll or gravure cylinder filling and metering, which improves print quality. Further, filters protect the system from damage. Metallic particles and dry ink are known to be highly abrasive to anilox rolls and gravure cylinders. When caught under a doctor blade, contaminants score these expensive cylinders, requiring repair or replacement. Streak marks are another problem easily eliminated by a filter.



Valflow filters are easy to clean. Simply remove the cartridge and let the filter body get flushed out with the rest of the inking system. Place a clean cartridge in the filter and you can start afresh. No tools are required.

Valflow ink filters allow easy draining of the filter and hoses. In the case of centrifugal pumps, when the pump is switched off, the ink in the filter and hoses will drain back into the pan. With diaphragm pumps, a by-pass path has to be created in the hose line.

AxisValence has extensive experience and expertise in various applications across industries, which we leverage to provide a suitable solution for your application.