

DI-SEP® SX Filters Make Copper Purer at SX-EW Mines

Pioneered in 1980, Smith & Loveless **DI-SEP**® SX Filters are high volume pressure filters designed exclusively to purify electrolyte fluids in copper mining/electrowinning facilities. **DI-SEP**® SX Filters installed prior to the electrowinning stage first remove organic materials present in the electrolyte, typically achieving removal efficiencies of greater than 90 percent. Because the commercial success of copper is dependent on its final quality, **DI-SEP**® SX Filters serve as an important step in yielding a finer copper product.

DI-SEP® SX Filter systems, which comprise tank vessels, a piping/valve skid, and PLC-driven controls and instrumentation, have been installed at numerous copper SX-EW mines throughout North and South America, Australia, and now, Europe.



DI-SEP® SX Filters are specified for SX-EX mines for purifying copper.

DI-SEP SX Filter System Features and Benefits

- Proven process and systems backed by established engineering
- Unique design allows low shipping, installation and maintenance costs
- Easy access for maintenance located in the front of the system
- Open galleries can be included for easier/safer passage inside the filter
- Custom-designed control panel with interface terminal and data ports
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PRODUCT DATA

Capacity Up to 1,000 gpm per tank vessel

(5,450 cmd)

Filtration Rate 10-15~gpm / sq. ft. (7-10~lps / $\text{m}^2)$

Backwash Rate 6 gpm / sq. ft. (4 lps / m²)
Tank Size Range 5' - 15.5' (1.5 m – 4.72 m)
Organic Removal 90% and greater removal
Solids Removal 10 microns and larger

Contact Smith & Loveless today to request pilot results, budget proposal and P&ID!

DI-SEP[®] SX

Electrolyte Filters











Global Containerized Shipping Original Pilot

More Efficient Piping Schemes Enhanced PLC/Process Control

Introduced in 1980. DI-SEP® Systems began test piloting at coper mines in order to improve Filters were born & installed in Arizona.

Systems leader Smith & Loveless developed containerized packages so that sophisiticated SX Filter piping skids can be fully engineered & assembled in a quality-controlled environment and then safely shipped to any organic removal. SX mine anywhere in the world.

As part of on-going system innovation, S&L Engineering developed more efficient ways to arrange the system piping, valves and instrumentation, which yields a more efficient filter operation. With enhanced PLC controls introduced in the mid 2000s, SX Filter operation continues to enhance operation and performance. Smith & Loveless engineers provide a customized program and we offer support throughout the entire design and start-up phases.

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