Metso

Polishing filtration

Dual media DM filters





Cost efficient, reliable and proven

Metso is a leading solvent extraction and electro-winning technology supplier with an extensive track record in delivery of highly efficient and reliable SX-EW plants. We are well known in the mining and metallurgical industry for continuously developing highly efficient and reliable filtration process equipment.

Metso's SX-EW technology

Customers installing Metso DM filters have access to Metso's SX-EW know-how, technical support, start up and training services for the duel media filtration equipment.

In addition Metso DM filter is suitable for other processes where organics and solids removing is needed, such as polishing filtration of crystallizer feed solutions.

High quality filtration

Absorption filtration utilizing the well proven dual media concept reduces entrained organic and particulate concentrations to a level of a few parts per million. Production capacities increase, as does the quality of cathode products.

Filters use two separate layers of media for coalescing & for filtration. The upper media layer provides organic removal while the second layer filters particulates in the filter feed.

Sustainability is a strategic priority for Metso

That is why we have introduced the Planet Positive offering – products that are demonstrably more energy or water efficient than the market standard, and services that help our customers improve their productivity.

The DM filter is a part of our Planet Positive offering.





Metso DM filters

Increase product quality and production capacities

Low operating costs

Low electrical energy consumption is a cost-saving benefit, as the adsorption filtration technique uses low pumping pressures compared to alternate solutions utilizing flotation.

Fully automatic operation

Automatic (PLC) control of the filtration and media cleaning steps at the end of each filtration cycle ensures maximum filtration time in subsequent cycles. Metso DM filters are delivered as an automated operational filtration system which can be fully integrated to any SX-EW solution package.

High capacity and expandability

Use filtrate for backwash and returning it to the After Settler after holding in a backwash collection tank means Metso DM filters do not reduce the capacity of SX production. Filter flow rates as high as 255 m3/hr can be consistently handled by a single unit (5.2 m diameter), greatly simplifying the process. Typically, multiple units are installed in parallel for flexibility and expandability to economically accommodate growing plant capacity requirements.

Minimal maintenance costs

With no moving parts, the media cleaning system ensures maximum media lifetimes. Typically the anthracite media is replaced every 24 months when combined with Metso's proven SX process technology. Garnet lifetime is considerably longer.

Benefits

- Metso SX-EW and crystallization technology know-how
- · High quality filtration
- Low operating costs
- Fully automatic operation
- High capacity and expandability
- · Minimal maintenance cost

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Metso DM filters

Technical data



Recommended max. constant process flow m³/h (@12m³/m²/h flux)

Filter type	2 filters	3 filters	4 filters	5 filters
DM 1000	18	28	37	47
DM 2000	75	113	151	188
DM 2400	109	163	217	271
DM 2800	148	222	296	369
DM 3200	193	290	386	483
DM 3600	244	366	489	611
DM 4000	302	452	603	754
DM 4400	365	547	730	912
DM 4800	434	651	869	1086
DM 5200	<i>5</i> 10	765	1019	1274

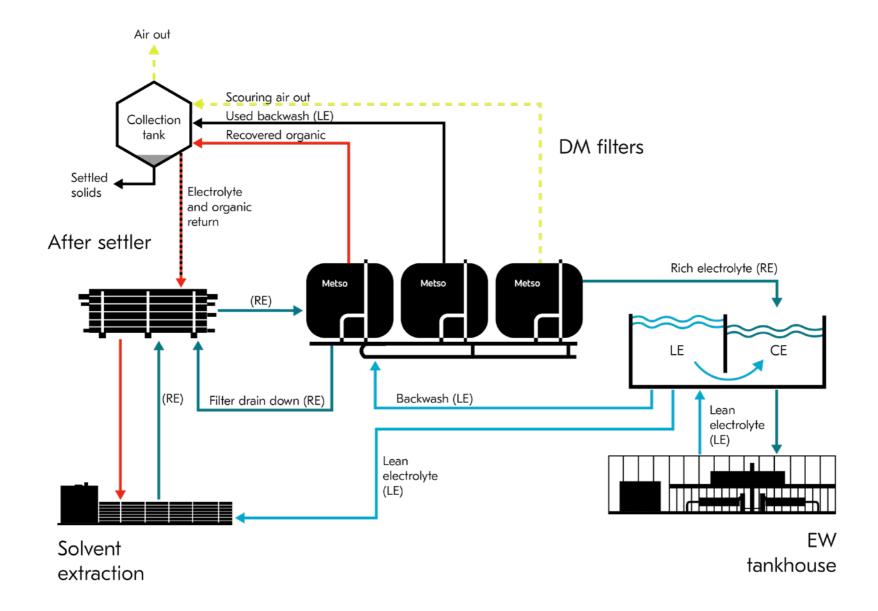
DM1000 can also be installed as a single unit with max. constant process flow of 9m3/h

Metso DM filters are delivered in compliance with the relevant design codes as an automated operational filtration package containing:

- Filter vessels
- Air and liquid internal distributors
- Filter media
- Piping and valve skid
- Blower skid
- Automation & instrumentation
- Maintenance platform

Metso polishing filtration

Metso SX-EW flow schematic with DM filters



expertise, we are the partner for positive change.

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Metso is a frontrunner in providing sustainable technologies, end-to-end solutions and services for the aggregates, minerals processing and metals refining industries globally. By helping our customers increase their productivity, improve their energy and water efficiency and environmental performance with our process and product

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