

Series MR/SR

Series SR

Tank Capacities to 50 gallons



Precious Metal Recovery Systems

Features:

- Recovers up to 99% of Precious Metals Loss
- Rinse Water Clarification and Purification
- Low Initial Cost
- Rapid Payback Averaging 30 Days
- Sizes to 400 Gallon Tanks
- Depth Pre-filtration Available
- Longer Resin Life - Less Frequent Changeouts

Series MR

Tank Capacities to 400 gallons



Recommended Applications:

- Still Drag-out Rinse Tanks
- Flowing Rinses
- Recovery of Precious Metals - Gold, Silver, Platinum, Rhodium, Palladium, etc.
- Partial Water Demineralization
- Small Jewelry Manufacturing Shops
- Electronics PCB Manufacturers

NOTE: Removal efficiency depends on temperature, pH, water quality, flow rate, and suspended solids. Competing ion effects or other physical conditions may reduce effective ion exchange.

Precious Metal Recovery Systems

Penguin precious metal recovery systems are a simple, economical method for reclaiming gold and other precious metals from processing rinse water and drag-out tanks. The ion exchange resin is considered to be hydrophilic in nature and displays excellent cation exchange resin properties and characteristics in absorbing positively charged metal ions from process streams. Up to three troy ounces of precious metal can be recovered per pound. Thus, even with our smallest unit containing just four pounds of resin, these systems can pay for themselves after their initial use. These precious metal recovery units are also effective in producing higher purity rinse water for improved rinse processing re-use. Various pump/chamber combinations provide for small laboratory operations up to 400 gallon large volume tanks.

Series SR and MR are simple to install and easy to operate. Equipped with a sealless magnetically-driven out-of-tank pump and priming chamber or vertical in-tank pump, the solution is pumped through the ion exchange resin slowly to provide adequate residence time. This closed loop, continuously recirculating system absorbs metal ions from the solution until rendered spent. An additional optional chamber is offered as a second resin chamber mounted in series to assure a higher degree of recovery and to absorb any precious metals which may escape from the first chamber. Since the reclaim resin is most effective on low particulate solutions, an optional prefilter is available on all units. When exhausted, the resin is removed and sent to your local refine for extraction. The resin chamber is then reloaded and the recovery process continues. RECLAIM RESIN IS IN STOCK AT THE FACTORY FOR IMMEDIATE SHIPMENT.

System Model	Pump Model	Chamber Model	Lbs of Resin	Dimensions			
				Ht	Wth	Lth	Wt
SR-20	M-1/14B	R-20	4	26	12	17	25
SRF-20	M-1/14B	R-20	4	26	12	17	28
PSR-20	P-1/15A	R-20	4	25	4	4	25
2-SR-20	M-1/8B	2-R-20	8	26	12	22	35
MR-10-1	M-1/8B	6R-10	8	25	18	16	35
PR-10-1	P-1/6A	6R-10	8	24	7	7	27
MR-10-2	M-1/4B	2-6R-10	16	25	18	24	50
PR-10-2	P-1/4A	2-6R-10	16	25	10	24	50
MR-20-1	M-1/4B	6R-20	16	35	18	16	50
PR-20-1	P-1/4A	6R-20	16	34	7	7	52
MR-20-2	M-1/4B	2-6R-20	32	35	18	24	73
PR-20-2	P-1/4A	2-6R-20	32	35	10	24	75
MR-30-1	M-1/4B	6R-30	24	45	18	16	57
PR-30-1	P-1/4A	6R-30	24	44	7	7	57
MR-30-2	M-1/3B	2-6R-30	48	45	18	24	78
PR-30-2	P-1/2A	2-6R-30	48	45	10	24	80

Pumps

Series M

These magnetically driven polypropylene pumps have no seals to leak, no pump bearings to forge, and no bushings to wear out. The only moving part is the polypropylene encapsulated impeller magnet assembly rotating on an internal high purity alumina ceramic spindle. A priming chamber is available as an optional equipment on all precious metal recovery systems which incorporates the M Series pumps. This chamber reduces the problem of run-dry operation and may be used as an aid in priming the pump on start-up.

Series P

Completely constructed of CPVC where in contact with the solution, these in-tank vertical pumps have no pump bearings, seals, bushings or parts to wear out. The pump is self-priming when immersed in solution and can run dry nearly indefinitely due to the absence of any seals.