

Wine-COR™ Crossflow Microfiltration Systems

To increase wine yield and provide excellent clarification of wine, KSS offers the family of Wine-COR™ crossflow microfiltration systems. Based on WINEFILTER™ hollow fiber cartridges, these systems produce high-quality, clarified wine without compromising aroma, taste, and color.

Built to accommodate a variety of winery operations, our Wine-COR™ M series and Wine-COR P series treat small and large feed volumes, respectively. Both series feature expandable base models for an even greater degree of flexibility and optional scalability. The Wine-COR M series is available in two build variants: Economy or Plus. Wine-COR M Economy is equipped with an on-skid 75 gallon membrane CIP tank and is designed for batch operation with two connections to the raw wine tank (Feed & Return). For Wine-COR M Plus, the CIP tank is replaced with a nitrogen blanketed process tank to allow for topped-off batch operation and requires only one connection to the raw wine tank (Feed). The Wine-COR P systems come equipped with two onboard nitrogen blanketed tanks: a Feed/CIP tank and a permeate tank. They are designed for topped-off batch operation using a minimal number of connections.

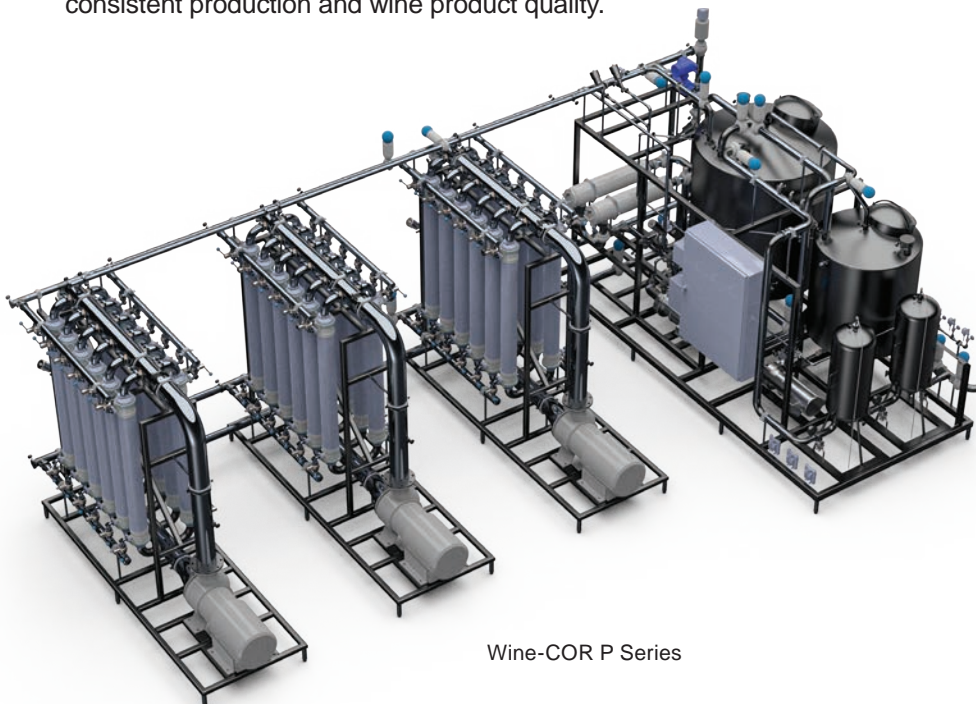
The Wine-COR M and P system series offer automated production and cleaning, have passed rigorous integrity testing, and ensure consistent production and wine product quality.

BENEFITS

- Increased wine yield, up to 99.5%
- Modular design for easy expansion
- Designed for small to large operations
- Simple, automated design
- Reduced labor and disposal costs
- Eliminates the need for Diatomaceous Earth (DE)
- Maintains color, taste, aroma, and alcohol content



Wine-COR M Series



Wine-COR P Series

System Capacity

Model	Red Wine		White Wine	
	1000 gph	m ³ /hr	1000 gph	m ³ /hr
M-3	0.24 – 0.48	0.9 – 1.8	0.40 – 0.80	1.5 – 3.0
M-6	0.48 – 0.96	1.8 – 3.6	0.80 – 1.60	3.0 – 6.1
M-9	0.72 – 1.44	2.7 – 5.5	1.20 – 2.40	4.6 – 9.1
M-12	0.96 – 1.92	3.6 – 7.3	1.60 – 3.20	6.1 – 12.2
P-12	0.77 – 1.32	2.9 – 5.0	1.12 – 1.92	4.2 – 7.3
P-24	1.54 – 2.64	5.8 – 10.0	2.24 – 3.84	8.5 – 14.5
P-36	2.31 – 3.96	8.7 – 15.0	3.36 – 5.76	12.7 – 21.8
P-48	3.08 – 5.28	11.7 – 20.0	4.48 – 7.68	17.0 – 29.1

Available Configurations

Model	Base System (#)	Expansion Modules (#)	Total Number of Cartridges (#)
Wine-COR™ M Series			
M-3	1	0	3
M-6	1	1	6
M-9	1	2	9
M-12	1	3	12
Wine-COR™ P Series			
P-12	1	0	12
P-24	1	1	24
P-36	1	2	36
P-48	1	3	48

Note: Wine-COR M system skid-mounted modules contain 3 membrane cartridges. Wine-COR P system skid-mounted modules contain 12 membrane cartridges.

Installation

Model	Dimensions (L x W x H)	Dry Weight	Electrical Requirements
M-3	48" x 69" x 102" (1.2m x 1.8m x 2.6m)	1500 lbs (680 kg)	20 Amps
M-6	64" x 69" x 102" (1.6m x 1.8m x 2.6m)	1900 lbs (862 kg)	30 Amps
M-9	79" x 69" x 102" (2.0m x 1.8m x 2.6m)	2300 lbs (1043 kg)	40 Amps
M-12	95" x 69" x 102" (2.4m x 1.8m x 2.6m)	2700 lbs (1225 kg)	50 Amps
P-12	140" x 152.15" x 114.5" (3.55m x 3.86m x 2.91m)	7000 lbs (3175 kg)	150 Amps
P-24	140" x 228.65" x 114.5" (3.55m x 5.80m x 2.91m)	8500 lbs (3855 kg)	200 Amps
P-36	140" x 304.25" x 114.5" (3.55m x 7.72m x 2.91m)	10000 lbs (4535 kg)	250 Amps
P-48	140" x 380.75" x 114.5" (3.55m x 9.67m x 2.91m)	11500 lbs (5216 kg)	300 Amps

Note: Wine-COR™ M series electrical requirements are based off 460V / 3 Phase / 60 Hz. Wine-COR P series electrical requirements are based off 480 V / 3 Phase / 60 Hz.

Wine-COR™ M Series Instrumentation

Raw Wine	2.0" Tri-Clamp
Bleed/Return/Permeate/Hot Water/Cold Water	2.0" Tri-Clamp

Wine-COR™ P Series Instrumentation

Bleed/Return	N/A
Wine Feed/Permeate/Hot Water/Cold Water	3.0" Tri-Clamp

Utilities

Model	Compressed Air (SCFM)	Nitrogen for Tank Blanketing, Product Recovery, Integrity Testing (SCFM)	Hot Water Per CIP (gallons @ 165°F)	Cold Water Per CIP (gallons @ 60°F)	Hot Water Supply Specifications	Cold Water Supply Specifications
M-3	5	5	550	950	50-100 gpm @ 50 psi 150-180°F	50-100 gpm @ 50 psi 60-90°F
M-6	5	7.5	850	1300		
M-9	5	10	1150	1650		
M-12	5	12.5	1450	2000		
P-12	90 psi @ 10 SCFM	30-60 psi @ 5 SCFM	2000	2500	50-100 gpm @ 10 psi 150-180°F	50-100 gpm @ 10 psi 60-90°F
P-24						
P-36						
P-48						

Typical Chemical Usage (gallons per CIP)

Model	KOVKLEEN™ 222 High pH Cleaner	KOVKLEEN WO Oxidizer Cleaner	KOVKLEEN 100 Acid Blend Cleaner
M-3	3.5	2	1
M-6	5	3	1.5
M-9	6.5	4	2
M-12	8	5	2.5
P-12	5.5	3.5	2
P-24			
P-36			
P-48			



Separation Technologies for a Better Future™