

Oil Separating Coalescer

The Magnus Engineered Equipment Coalescer separates splitting oils (i.e. mechanically emulsified oil) from oil/water or oil/cleaner, solutions.

Many of the industrial detergents used to remove oil and grease (or "soil") are classified as "Mechanical Splitting" detergents. Unlike emulsifying detergents that are commonly used in households, "mechanical splitting" detergents rely on an energy input to temporarily emulsify the contaminant and remove it from the substrate being cleaned. The energy input can come from an agitated wash, a sonicated wash, a pressurized wash, or combinations of these techniques. The mechanically emulsified oil and grease will stay suspended in the wash solution so long as the energy input is maintained.



EXTREMELY EFFECTIVE

The Coalescer is designed to use the natural specific gravity differences between oil and water, enhanced by the coalescing element, to separate one from the other.

EXTENDED BATH LIFE

By keeping cleaning baths from excessive soil overload, the detergent requirement is reduced and the overall bath life is extended, resulting in improved cleaning effectiveness. The cleaner bath provides consistently cleaner work loads at a faster throughput and without the need to re-clean the parts.

BUILT STRONG FOR DURABILITY

The Coalescer is constructed of 304 stainless steel which will provide a long service life. The coalescing elements are easily removed for cleaning when necessary. The only moving part in a Coalescer is the pump.

COST SAVINGS

The Magnus Engineered Equipment Coalescer reduces the amount of cleaner consumed by removing the oil/grease from the solution and freeing the cleaner to gather additional oil and grease.

THREE STANDARD SIZES

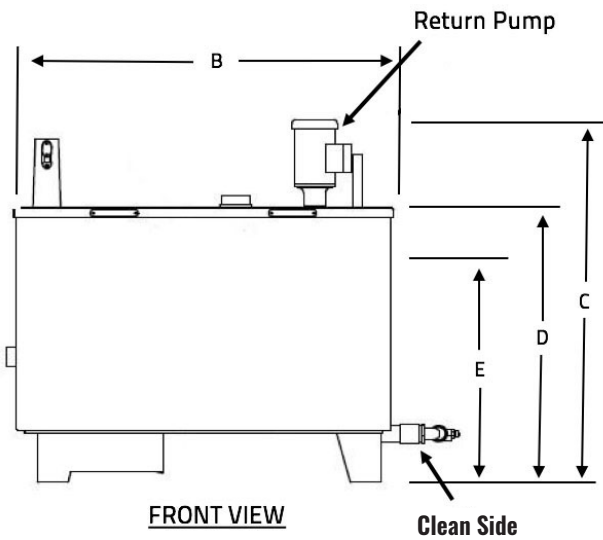
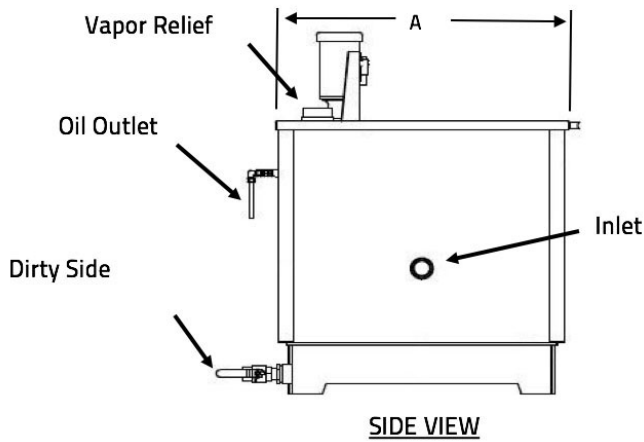
To meet your demands, our coalescer is available in four standard sizes: Miji Coalescer, 5/20 Coalescer, 10/40 Coalescer, and 15/60 Coalescer.

STANDARD FEATURES

- Solution return pump
- Sloped bottom for easy sludge cleanout on 5/20, 10/40, and 15/60 models

AVAILABLE OPTIONS

- Level Control
- Conductivity based chemical addition system
- Return line tank sparger



MACHINE DIMENSIONS

MACHINE NUMBER:		MIJI	5/20	10/40	15/60
Width	A	15.00"	26.75"	26.75"	39.25"
Length	B	52.75"	51.75"	51.75"	61.50"
Overall Height	C	26.00"	38.50"	50.50"	50.50"
Tank Height	D	26.00"	27.00"	39.00"	39.00"
Liquid Level Height	E	18.00"	20.00"	26.75"	26.75"

SERVICE CONNECTIONS

Solution Inlet (NPT)	0.50"	2.00"	2.00"	2.00"
Outlet (pump return) (NPT)	0.50"	1.00"	1.00"	1.00"
Dirty Side Sludge Outlet (NPT)	0.50"	2.00"	2.00"	1.25"
Oil Outlet (tube)	0.50"	0.50"	0.50"	0.50"
Clean Side Drain (NPT)	0.50"	1.25"	1.25"	1.25"
Vapor Relief (diameter)	4.00"	4.00"	4.00"	4.00"

ELECTRICAL SUPPLY (other voltages available)

240V/3/60Hz		3A	3A	3A
480V/3/60Hz		2A	2A	2A

GENERAL DATA

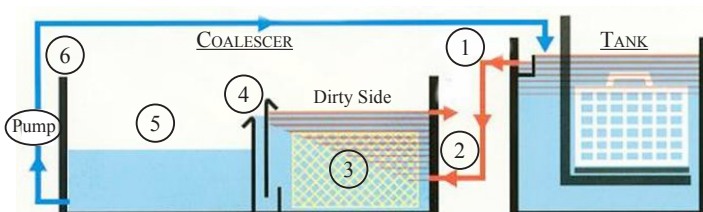
Tank Wall Thickness (ga.)	#12	#12	#12	#12
Rated Flow (GPM)	1	5	10	15

LIQUID CAPACITY:

Maximum (gal.)	36	65	120	200
Minimum (gal.)	23	45	70	110
Surge (gal.)	13	25	50	90

NOTES

MIJI Coalescer uses an external horizontal pump, has a lift-off lid (not hinged), and does not have a sloped bottom standard.



Operation Description:

1. Solution from wash tank exits through an overflow trough
2. Gravity pulls solution to the dirty side of the coalescer, a baffle minimizes turbulence
3. As liquid slowly passes through the coalescing element, the oil coalesces into droplets and rises to the surface where it's withdrawn
4. The cleaned solution exits the dirty side of the tank by passing under a baffle
5. The solution overflows a weir that maintains the liquid level and goes back into the clean surge tank
6. Solution is pumped from the clean surge tank back to the wash tank