

COALESCING SYSTEMS

EFFECTIVELY REMOVE OIL FOR
EXTENDED COOLANT LIFE AND
IMPROVED MACHINING



FLUID RECYCLING EQUIPMENT

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Master Chemical Corporation originated coolant recycling with the development of its XYBEX® coalescers. XYBEX coalescers remove tramp oil (hydraulic oil, lubes, other undesirable oil) and fines from coolants and cleaners – producing clean, reusable fluid. Running on a side loop on the machine tool or parts washer, coalescers continually pull dirty fluid, separate out tramp oil, and return cleaned fluid – while the machine is in operation. With a wide range of units, there's a XYBEX coalescer to meet the needs of any metalworking plant for simple, cost-effective, on-line fluid recycling.

Tramp oil, a major source of problems associated with water-miscible cutting and grinding fluids, contributes to:

- > the growth of coolant-destroying bacteria
- > undesirable residue on machine tools and work pieces
- > smoke and oil mist in shop atmosphere

XYBEX COALESCERS

- > lengthen coolant life
- > remove a food source for bacteria
- > improve machining and lengthen tool life
- > improve finish and size control
- > produce higher material removal rates
- > lower maintenance and material cost
- > improve shop atmosphere

How a coalescer works

An oil collector floating in the machine tool sump pumps coolant and tramp oil into the coalescer tank. The dirty coolant flows through the tank and coalescing media (if so equipped) and forces the oil to coalesce and rise to the surface. A coolant weir prevents the separated oil from being discharged with the clean coolant. Clean coolant flows by gravity back to the machine tool sump, while the separated oil builds up in the tank until there is enough to drain out of the coalescer.

NOTE: the best oil separation occurs with water-resistant lubricating and hydraulic oils. Contact your Master Chemical District Sales Manager for specific recommendations.



Master Coalescer II™

MASTER COALESCER II™

The ultimate coalescing unit for use with large sumps and/or a large number of machine tools

FEATURES

- > cast iron self-priming pump
- > double-diaphragm air pump with pre-pump strainer
- > 264 square feet of removable oleophobic media for maximum oil removal
- > includes casters for mobility
- > push handle and hose/bucket hangers
- > includes tank drain valve for cleaning
- > adjustable oil removal weir pipe
- > lid on tank

OPTIONS

- > larger and/or stainless steel tanks
- > 110 volt, 50 Hz or 220 volt, 50 Hz operation
- > special units for parts washers

SPECIFICATIONS AND UTILITIES

Process rate: 1 to 3 GPM (4 to 12 LPM)

Dimension: 41" l x 19" w x 43" h
(1041 mm x 483 mm x 1092 mm)

Electric: 110 volt, single phase, 60 Hz

Air: 30 psi/min., 100 psi max

MASTER COALESCER JR™

High-performance, low-maintenance coalescer removes tramp oil while machine is running

FEATURES

- > compact, works on CNC machine tools with hard-to-access sumps
- > double-diaphragm air pump
- > 132 square feet of removable oleophobic media for highly-efficient oil removal
- > simple design, less operator involvement
- > includes casters for mobility
- > hinged pull handle with handy latch
- > pre-pump strainer
- > adjustable oil removal discharge pipe
- > streamline oil skimmer for shallow sumps of 1.5" depth

SPECIFICATIONS AND UTILITIES

Process rate: 1/3 to 1 GPM (1.33 to 4 LPM)

Flow rate depends on how skimmer is placed in the sump

Dimension: 18" l x 12 1/2" w x 24-28" h
(483 mm x 317 mm x 610-711 mm)

Air: 30 psi/min., 100 psi max

SUMP SIDE COALESCER™

Simple to operate, lower-cost coalescer for smaller shops removes tramp oil even with large sumps

FEATURES

- > 15-gallon polypropylene settling tank with lid and clamp
- > includes GFI adapter
- > easily modified for sumps just 3" deep

OPTIONS

- > double-diaphragm models available for deep sump applications
- > larger electric pump unit for mounting higher on or further from the sump
- > Scrounger® Jr Oil Skimmer for automatic removal of tramp oil from tank

SPECIFICATIONS AND UTILITIES

Process rate: 1 to 2 GPM (4 to 8 LPM)

Dimension of tank: 18" w x 23" h
(457mm x 584mm)

Electric: 110 volt, single phase, 60Hz

Master Coalescer Jr™



Sump Side Coalescer™



Committed Today for a Greener Tomorrow

Our corporation is committed to sustaining our natural resources, protecting our environment, and leaving a smaller footprint on the places we all call home. As a manufacturer of fluids and fluid recycling equipment, we are committed to promoting conservation in manufacturing and helping customers maximize productivity while minimizing waste. Just visit masterchemical.com and click on "Green Policy" to learn more about our commitment to environmental stewardship.



Cutting and Grinding Fluids that Lead the Industry

Master Chemical has been recognized for more than 60 years for its TRIM® family of metalworking fluids for all types of cutting and grinding operations. Known worldwide for superior performance, TRIM meets the demands of specialized industries such as automotive, aerospace, and medical parts manufacturers. For the full range of cutting and grinding applications for synthetics, semisynthetics, and soluble oils, TRIM products deliver longer tool and sump life, better finished parts, and a better bottom line.



CUTTING & GRINDING FLUIDS



CLEAN • COAT • PROTECT

Master STAGES: Products to Clean, Coat, and Protect

Master STAGES™ surface treatments include cleaners and corrosion inhibitors to keep you environmentally compliant, up and running at peak performance, and more profitable.

Have health and safety issues? High disposal costs? Need to prevent rust or clean lubricant from parts? Whatever your production problems and concerns, we have a performance-proven product sure to make the difference. The Master STAGES difference—the right solution for the job at the right price.

For prices or additional information on special units or special applications, contact your Master Chemical Corporation Distributor:



FLUID RECYCLING EQUIPMENT

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