

**HIGH-PERFORMANCE WASHING COMPOUNDS**



**CLEAN • COAT • PROTECT**

# HIGH-PERFORMANCE WASHING COMPOUNDS

## Setting the stage for high performance

Master Chemical Corporation has produced quality metalworking fluids for more than 60 years. So we know your business inside and out, bringing you high-performance products for every metalworking operation.

There's a Master STAGES™ in-process washing compound just right for your operation:

- > spray, immersion, or ultrasonic parts cleaning
- > multi-metal operations
- > metalworking fluid removal
- > cleaners with built-in RP
- > water-based RP's
- > vibratory finishing
- > reducing disposal costs with environmentally-friendly products

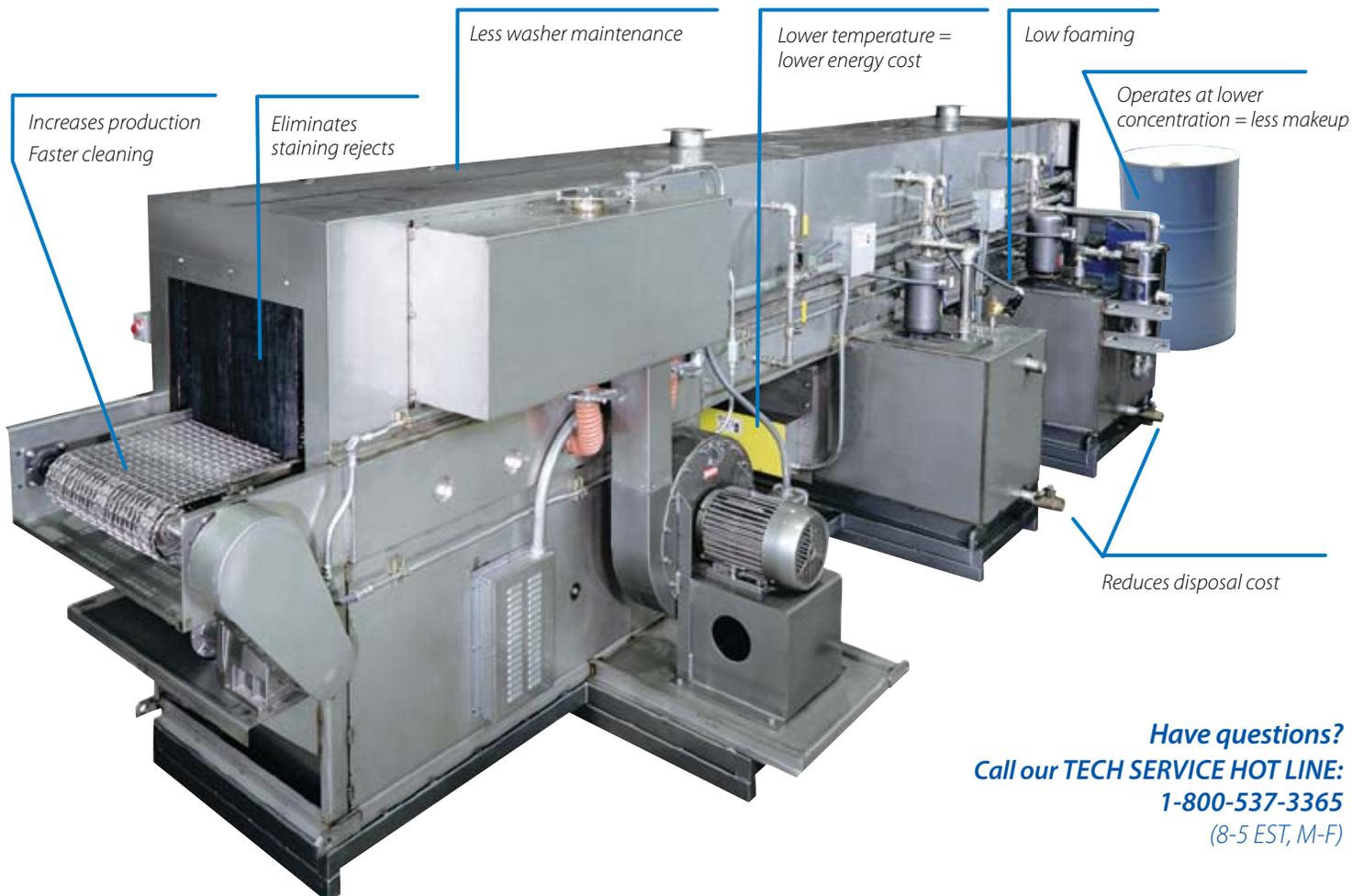
## More than just product, we deliver service

Our customers have the value-added benefit of our:

- > leading-edge customer training programs
- > 50 years of cleaner expertise
- > excellent application and test lab facilities
- > most current test equipment
- > on-line product information
- > tech service hotline

So when you are looking for high performance, look no further than Master STAGES high-performance washing compounds.

## Get the competitive edge with Master STAGES cleaners



Product	Features	Main Uses	Temperature Range	Concentration Range %	pH (in use)
<b>SPRAY PARTS WASHING WITH CLEAN PRODUCTS</b>					
<b>CLEAN 2012</b>	Economical, medium duty, nonsilicated, low-foam spray cleaner for all metals. Mild pH.	Nonsilicated aluminum spray. Also safe on most other metals.	Ambient–160°F (71°C)	2%–5%	8.5–10
<b>CLEAN 2017</b>	Low cost, heavy-duty spray cleaner. Very low foam. Excellent cleaning of coolants and oils at low, energy saving temperatures.	Low foaming at ambient temperature, very low foam over 105°F (41°C). Safe for steel, cast iron, titanium, magnesium. Do not use on aluminum, brass, or zinc.	Ambient–160°F (71°C)	1%–5%	12.6–13.1
<b>CLEAN IP 2019s</b>	Very low-foaming; energy-saving, low-temperature spray cleaner. Phosphate- and amine-free.	For ferrous metals and aluminum. Multi-metal safe; longer lasting RP, and splits oil for easy removal.	70°–140°F (21° to 60°C)	0.05%–5%	11.0–12.2
<b>CLEAN IP 2026PF</b>	Energy-saving, low-temperature spray cleaner. Phosphate-free.	For ferrous metals, aluminum, magnesium. Multi-metal safe; moderate RP, and splits oil for easy removal.	100°–160°F (38° to 71°C)	3%–5%	11.5–12.2
<b>CLEAN 2023 "Big Al"</b>	Heavy-duty, low foam spray washer for aluminum, steel, cast iron, and brass. Provides one week RP.	Removes heavy soils, oils, and tapping compounds on aluminum parts. Also for use in multi-metal washing.	135°–160°F (57°–71°C)	3%–5%	11.7–12.2
<b>CLEAN 2029 "One Step"</b>	High detergency with controlled foam, great cleaning and good in-process RP. Mild pH means safer working environment. Multi-metal compatible.	Spray, ultrasonic, or dunker washing of steel, cast iron, and powdered metal parts. Safe on most aluminum and yellow metals when used at lower temperatures.	140°–180°F (60° to 82°C)	3%–5%	10.6–11.0
<b>CLEAN 2115AL</b>	Bio-stable, synthetic cleaner for very high-pressure washers with short-term RP. Aluminum compatible.	Like CLEAN 2115 with better aluminum compatibility. For water jet cutting, leak test, and plasma cutting tanks.	Ambient–140°F (60°C)	0.5%–5%	8.0–9.0
<b>CLEAN 2430</b>	Maximum ability to split oils out of cleaner bath. Great cleaning, near-neutral pH. Multi-metal safe.	Removal of straight oils; oil splitting capability with very long bath life; good in-process RP for ferrous parts.	Ambient–150°F (66°C)	0.5%–5%	8.0–8.7
<b>CLEAN 3011</b>	Streak- and residue-free synthetic cleaner removes oils and residue. Safe on aluminum and zinc.	Energy saving, low temperature, high-pressure spray cleaning with short term RP for ferrous parts.	Ambient – 140°F (60°C)	3%–7%	9.0–9.5

<b>IMMERSION PARTS WASHING WITH CLEAN PRODUCTS</b>					
<b>CLEAN 2017</b>	Low cost, high pH cleaner for ferrous, magnesium, titanium, and pure copper (not aluminum, brass, or zinc).	Medium-duty immersion washing of ferrous parts. Do not heat over 120°F (49°C) unless washer is agitated.	Ambient–160°F (71°C)	3%–7%	12.6–13.1
<b>CLEAN 2020</b>	Very fast cleaning even at energy-saving low temperatures. Good oil splitting; built-in RP. Contains no phosphates.	Immersion or ultrasonic cleaning of all metals. Can use at high temperature over 130°F (54°C).	Ambient–160°F (71°C)	3%–10%	11.5–12.5
<b>CLEAN 2023 "Big Al"</b>	Heavy-duty, aluminum-compatible. Also use in multi-metal washing. Up to one week RP for ferrous parts.	For agitated immersion washers (not ultrasonics) for aluminum, also suitable for steel, cast iron, and brass.	Ambient–160°F (71°C)	5%–10%	11.7–12.2
<b>CLEAN 2029 "One Step"</b>	High detergency with controlled foam, great cleaning, and in-process RP. Mild pH for safer working environment.	Spray, ultrasonic, or dunker washing of steel, cast iron, most aluminum/yellow metals at lower temperatures.	Ambient–160°F (71°C)	5%–10%	10.6–11.0
<b>CLEAN 2030</b>	No phosphates, multi-metal friendly. Similar to CLEAN 2020 with added corrosion inhibitors.	High-performance, ultrasonic or immersion with ferrous RP. Cleans at high- or energy-saving temperatures.	Ambient–160°F (71°C)	3%–10%	10.5–11.0
<b>RINSE 100</b>	Multi-purpose detergent with pine oil. Mild pH and light pine scent – a favorite for general machine shop cleaning.	Excellent ultrasonic cleaner. Great soak cleaner for oily soils. Safe to use on most metals.	Ambient–135°F (57°C)	3%–10%	9.0–9.6
<b>Whamex™</b>	The best tool and system cleaner ever! Removes tough soils at low temperatures.	For single step immersion washing of ferrous metals. Excels on grey cast iron; up to one week of RP.	Ambient–120°F (49°C)	3%–5%	10.5–10.6

<b>ULTRASONIC PARTS WASHING WITH CLEAN PRODUCTS</b>					
<b>CLEAN 2020</b>	Very fast cleaning even at energy-saving low temperatures. Good oil splitting; built-in RP. Contains no phosphates.	Immersion or ultrasonic cleaning of all metals. Can use at high temperature over 130°F (54°C).	Ambient–160°F (71°C)	3%–10%	11.5–12.5
<b>CLEAN 2030</b>	No phosphates, multi-metal friendly. Similar to CLEAN 2020 with added corrosion inhibitors.	High-performance, ultrasonic or immersion with ferrous RP. Cleans at high- or energy-saving temperatures.	Ambient–160°F (71°C)	3%–10%	10.5–11.0
<b>RINSE 100</b>	Multi-purpose detergent with pine oil. Mild pH and light pine scent – a favorite for general machine shop cleaning.	Excellent ultrasonic cleaner. Great soak cleaner for oily soils. Safe to use on most metals.	Ambient–135°F (57°C)	3%–10%	9.0–9.6

Product	Features	Main Uses	Typical Storage Time	Concentration Range %	Flash Point°	Humidity Cabinet Test ASTM D1748	ASTM B117 Salt Fog
<b>EMULSION WATER-BASED RUST PREVENTATIVES</b>							
<b>NOCOR® E6</b>	RP for steel, cast iron, yellow metals. Effective at 4%–12%. No boron or barium.	Spray or dunk applied RP for in-process protection or before packaging.	up to 6 months (depending on dilution)	3%–16%	none	100 hrs. no rust @ 12%	3 hrs. very slight
<b>SYNTHETIC WATER-SOLUBLE RUST PREVENTATIVES</b>							
<b>NOCOR® S2</b>	Synthetic, water-cut, shorter-term RP. Economical at low dilutions. Barium-free, low V.O.C.	Used in spray washers rinse stage. Do not heat above 135°F (57°C).	1–2 months (depending on dilution)	3%–10%	none		



### ***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](http://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**



**FLUID RECYCLING EQUIPMENT**

### ***Increase Profitability with XYBEX Equipment***

Master Chemical, the pioneers of coolant technology, also invented systems for recycling those same coolants and even cleaners. Since properly maintained coolant can last almost indefinitely, a fluid management and recycling program using XYBEX equipment pays for itself with savings in material costs, disposal expense, and reduced downtime.

Help your customers maximize their productivity and minimize waste with XYBEX fluid recycling equipment.

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

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