



# ZENITH

## Mfg. & Chemical Corp.

85 OAK ST. P.O. BOX 412, NORWOOD, NJ 07648-0412 800-432-SONIC  
www.zenith-ultrasonics.com sales@zenith-ultrasonics.com

## MULTI-TANK SYSTEMS

FOR APPLICATIONS REQUIRING CLEANING, RINSING,  
DRYING, AND OTHER MULTI-STAGE PROCESSES



Automated Multi-tank Console with TRANSTAR Automation

Multi-tank cleaning systems are typically used for applications which require more than just an ultrasonic cleaning tank. Any number of tanks can be provided, thereby customizing the system to any possible cleaning application. The first tank may be an ultrasonic cleaning tank, the next 2 tanks may be rinsing tanks, the 4th may be a rust-preventative dip stage, and the 5th tank may be a dryer tank. Any combination is possible, and systems can be typically custom manufactured for your application to ensure that the system provides the best possible cleaning results.

Zenith Multi-tank Cleaners include the following system varieties:

**2-tank Systems:** Provide Cleaning and Rinsing only.

**3-tank Systems:** Provide Cleaning, Rinsing, and Drying with Industrial-grade Cleaning Performance (may leave some residues on

parts).—

**4-tank Systems:** Provide Cleaning, Rinsing, and Drying with Zero Residue Cleaning Performance possible when equipped with Deionized Water for the rinse tanks.

**5-tank Systems:** Provide Cleaning, Rinsing, and Drying, with Best Possible Performance

To process parts in a multi-tank system, baskets are manually or automatically transferred from tank to tank to complete the process required. Parts are first lowered into the cleaning tank. When cleaning is complete, the basket is transferred to the rinse tanks to remove the detergent residues used in the cleaning tank. Transfer to the drying tank will follow to dry the rinsewater from the parts. Any combination of processes may be included, and custom designs which include a greater number of tanks, or custom tank sizes, is always available at no additional cost.

## STANDARD MULTI-TANK CLEANING SYSTEMS

All Zenith multi-tank ultrasonic cleaners are available in the following standard sizes:

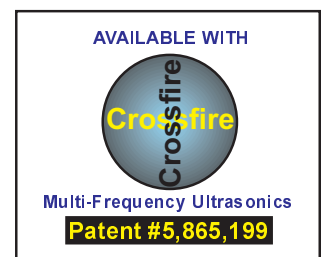
1000 Series: 12" x 16" x 12" tall

2000 Series: 12" x 20" x 14" tall

2400 Series: 18" x 24" x 15" tall

3600 Series: 24" x 36" x 18" tall

Any other size can be custom-fabricated.



**MTC-2:** This 2-tank multi-tank ultrasonic cleaner design includes a single ultrasonic cleaning tank, and a single rinse tank.

**MTC-3:** These 3-tank systems are typically used for industrial applications where zero-residue cleaning results are not required. Includes a single ultrasonic cleaning tank, a single rinsing tank, and a drying tank.

**MTC-4:** The most common clean/rinse/dry system design. These 4-tank systems include a single ultrasonic cleaning tank, dual rinse tanks equipped with Cascade Overflow capabilities, and a single drying tank. Fresh water or deionized water is added to the final rinse tank, which overflows into the first rinse tank so that both tanks share the same water supply. This system is capable of producing zero-residue cleaning results if used with deionized water (deionization systems are available as optional equipment).

**MTC-5:** The MTC-5 series is used when customers require a double drying tank for increased processing speed, rust preventative dip added to a 4-tank process, or triple cascade rinse tanks for the best possible final quality. By adding a 2nd drying tank, parts can typically be processed twice as fast, since drying times usually represent the longest part of the overall process. A rust preventative dip will coat parts with a rust preventative fluid which will leave no residues on parts. Or, the 3-tank rinse design can ensure that your cleanroom-grade results are easily obtained.

MTC5-2000 Clean/Rinse/Dry System with TRANSTAR Automation Option



MTC5-2000 Manually-operated Clean/Rinse/Dry System



A host of other optional equipment can be added to the multi-tank cleaner to enhance its operation. Options such as rinse tank ultrasonics, filtration, heat, timers, double dryer tank options to speed up the process, air knife blow off systems, intermittent parts oscillation, and many others are available to enhance the performance of the ultrasonic cleaning system.

Support frames are manufactured of high-strength tubular steel which is surrounded by stainless steel panels which allow for easy access to all internal components. Frame options include all stainless steel construction, leveling feet, caster options, custom control panels, and many others. Frames are ergonomically designed to be easy to work with for manually-operated cleaning lines.

Multi-tank cleaning systems can be fully automated by the use of Zenith's Simultaneous Multiple Basket Transfer System or the TRANSTAR Single-basket Transfer System. The MBT system not only transfers all baskets simultaneously, but also adds FULL

OSCILLATING AGITATION to all tanks in the process. Pneumatic pistons which control the up/down movement of the baskets can also be programmed to intermittently, or continuously, oscillate the baskets in all tanks to maximize cleaning performance. The TRANSTAR Automation System transfers a single basket from tank to tank rather than transferring all baskets in the process simultaneously like the MBT system. Although a bit slower than the MBT Automation System, the TRANSTAR is less costly, and can address most manufacturing speed requirements.

If you are looking for a multi-tank cleaning system for a given application, call Zenith and speak to one of our sales engineers. We will test clean your parts, send them back for your approval, then design a system that can consistently deliver those cleaning results for many years to come.



**ZENITH MFG. & CHEM. CORP.**  
85 OAK ST. P.O. BOX 412  
NORWOOD, NJ 07648-0412  
800-432-SONIC (7664)  
FAX: 201-768-6999  
[WWW.ZENITH-ULTRASONICS.COM](http://WWW.ZENITH-ULTRASONICS.COM)