Zenith’s TRANSTAR Automation System, one of 4 different automation designs available, is an overhead pick & place robotic system which completely automates a multi-stage ultrasonic cleaning or passivation process by transferring baskets of parts through the entire process fully automatically without the need for operator handling. This system provides for complete process repeatability and is fully user-programmable to adjust the system to suit any cleaning application.

Baskets of parts are placed onto the included Load Platform or optional Multi-position Load Conveyor, and one of 10 pre-programmed recipes is assigned to the basket using the color Touch-screen Operator Interface. Once the recipe is assigned, the TRANSTAR system will lift the basket from the load platform and automatically transfer it through all process tanks. The system will automatically activate all process features when required, such as ultrasonic systems, spray over submersion, compressed gas blow-off, dryer tank activation, filtration systems, and any other process which is included in the system based on the application.

Optional automated covers are available which will cover the baths at all times unless a basket is being inserted or removed from a particular tank to reduce evaporative and heat losses.

Multi-position load and unload conveyors are also available as optional equipment which will permit queuing of multiple baskets at once. In addition, Zenith’s exclusive Random Recipe Processor will permit each basket to be programmed with a different recipe of operation, allowing baskets with any recipe requirement to be added whenever needed.

A Light Signal Tower is also included which will alert operators when baskets are completed, or when a particular alert function is activated based on the application.

The TRANSTAR, like all Zenith ultrasonic equipment, is manufactured of 316L stainless steel tanks and polished 304 stainless steel tubing for the best possible corrosion resistance and reduction of flaking and rusting which may contaminate the cleanroom or medical facility.
All internally-mounted components are positioned where easily accessible for service and maintenance.

OPTIONAL EQUIPMENT INCLUDES:

- Pedestal-mounted Touch-screen Enclosures
- Stainless Steel Plumbing with Dead Leg Drain Features for Medical Applications
- Process Pause Features for Parts which include blind holes in multiple orientations
- Air-knife Blow-off to remove excess water during the drying process
- PLC upgrades to a large variety of Allen Bradley PLCs
- Bar code recipe assignment wand
- Slope-bottom processing tanks to ensure complete draining of tank contents
- Process Area Enclosures with Interlocked Access Doors, and Fume Exhaust of Mist Collection
- Thermocouple options for more precise temperature monitoring when required.
- Automated Covers to Reduce Evaporative and Heat Losses
- Speed and Ramping Adjustment for Vertical and Horizontal Movement

To find out how a Zenith cleaning system equipped with TRANSTAR Automation can enhance your high-technology, medical, or cleanroom application, contact Zenith Ultrasonics. Our salespeople are engineers with decades of experience with ultrasonic cleaners, and will be able to determine if the TRANSTAR system is right for you.