



TW4000



TW2000



TW2000



**BRING HIGH-POWERED, CONSISTENT  
CLEANING RESULTS TO YOUR CENTRAL  
PROCESSING DEPARTMENT WITH  
EFFICIENT AUTOMATION**

The Tempest uses a combination of validated tested, and proven washing actions to effectively remove bio-burden from surgical instruments:

- Enzymatic soak – @120°
- Digital ultrasonics
- 2 phase hydrojet flush
- Exterior and Interior disinfection rinse – @190°
- Ozonated bacteria killing final rinse

**Infection Prevention Experts**

**Midbrook Inc.**  
2080 Brooklyn Rd  
Jackson, MI 49203

**Phone:** (517) 787-3481  
**Fax:** (517) 787-2349

[sales@midbrook.com](mailto:sales@midbrook.com)  
[www.midbrookmedical.com](http://www.midbrookmedical.com)

# TEMPEST

**TEMPEST SURGICAL DEVICE WASHER**  
Fully Automated Bioburden Removal System for  
Minimally Invasive Surgical Instruments

# TEMPEST

**Consistent. Repeatable. Results.**

Hand cleaning or ultrasonics alone cannot duplicate.

## GENERAL SYSTEM FEATURES

- Processes 24-lumened instruments in 30 minutes
- Special port adaptors accommodate:
  - Laparoscopic tools
  - ROBOTIC tools
  - Minimally invasive devices, accurate
  - Accurately doses appropriate ratio of enzymatic cleaner
- Drained between each cycle to prevent re-contamination
- Baskets can accommodate non-ported surgical instruments
- Programmable cycles for simple, one-touch start
- Automated lid lift and automated shelf loading/unloading
- Viewing window to see inside during operation
- Basket Dimensions: 26" x 10.5" – can accommodate 56cm bariatric tool



## UNIT OPTIONS

ITEM#	DESCRIPTION	MACHINE DIMENSIONS (in.)
TW1000	1 Basket System	Approx. 55"W x 30"L x 63"H
TW2000	2 Basket System	Approx. 39"W x 47"L x 63"H
TW4000	4 Basket System	Approx. 61"W x 47"L x 63"H

## SYSTEM REQUIREMENTS

UTILITY	CONNECTION	PRESSURE	CONSUMPTION	UTILITY REQUIREMENT PER TEMPEST WASHER UNIT
Hot Water	3/4"NPT	60 psg	40 gpm	Min water temp.- 120° F
Cold Water	3/4 NPT	60 psig	10gpm	Ozone water rinse
Compressed Air	1/2"NPT	90psig	10SCFM	Air must be dry and oil free
Drain	1-1/2"NPT	Gravity		Located in pit

UTILITY	CONSUMPTION (230V/3PH/60Hz)	CONSUMPTION (480V/3PH/60Hz)	UTILITY REQUIREMENT PER TEMPEST WASHER UNIT
Electric	80 amps	40 amps	Electric heated unit

## THE TEMPEST PROCESS FLOW

1. Bath fills w/ Enzymatic Cleaner and 120° Water
2. Lumen Instruments are seeded with same cleaner and soak for 3 minutes
3. First Hydrojet Flushing for Cannulated Instruments
4. Concurrent Ultrasonic Cleaning for outside of instruments
5. Second Hydrojet Flushing for Cannulated Instruments
6. Concurrent Ultrasonic Cleaning for outside of instruments
7. Third Hydrojet Flushing for Cannulated Instruments
8. Bath Drained
9. Instruments rinsed with 190° water both outside and inside the instruments
10. Ozonated water bacteria killing spray
11. Instruments are now cleaned and ready to be sterilized