

TEMPEST

SURGICAL DEVICE WASHER DISINFECTION SYSTEM

Automate your cleaning process.

Consistent repeatable results.

Completely flush clear, the long narrow lumens of 24 minimally invasive instruments.

If it isn't clean, it can't be sterilized.

400% Better
Cleaning Results
than AAMI
Benchmark



TEMPEST

FEATURES:

- Built in digital ultrasonic
- Metered chemistry dosing
- 24 quick connect ports
- Accommodate 56 cm lumened devices
- PLC allows for additional program
- Fully automated cycle / consistent results
- All bioburden removed prior to sterilizing
- Process 24 lumened instruments in just 30 minutes
- No prewash needed predetermined enzymatic dose
- No manual brushing, scrubbing and rinsing of lumens
- 190° F thermal disinfection
- Ozonated water final rinse for 3000 x better cleaning
- Hydrojet flush technology for effective lumen interior cleaning

USE FOR:

- All rigid lumens
- Kerrisons
- Suction tips
- Laparoscopic instruments
- Robot arms
- Non lumened devices
- Accommodates 56 cm

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TEMPEST PROCESS FLOW:
(32 MINUTES / 24 INSTRUMENTS)

1. Attach cannulated instruments to either lure lock fitting, recessed hole or compression fitting
2. Attach other tube to end of manifold -integral to each of the two baskets
3. Load baskets onto carriage framework by sliding basket manifold over each fluid feed line
4. Press start
5. Bath fills with Enzymatic Cleaner and 120 degree water
6. Instruments are seeded with same cleaner and steep
7. First Hydrojet Flushing (Scrubbing Bubbles) for Cannulated Instruments
8. Concurrent Ultrasonic Cleaning for outside of instruments
9. Second Hydrojet Flushing (Scrubbing Bubbles)
10. Concurrent Ultrasonic Cleaning for outside of instruments
11. Third Hydrojet Flushing (Scrubbing Bubbles) for Cannulate Instruments
12. Bath Drained
13. Instruments rinsed with 190 degree water both outside and inside the instruments
14. Exterior cool down rinse with Ozonated water flush to supplement previous thermal disinfection
15. Fluid stream ceases and hood lifts as carriage baskets lift up for easy removal
16. Instruments are now cleaned and ready to be sterilized

SAFETY

- Safe door operation
- Toughened glass door
- Emergency power off

CONSUMABLES

- Compatible with all enzymatic cleaners
- Device specific lumen connectors

CONTROL

- Fully integrated Watlow touch screen interface
- Programmable Allen Bradley logic control system
- 3 selectable preprogrammed cycles
- Up to 12 additional cycles can be programmed using the variables available to clean different devices
- USB Connectivity

EQUIPMENT & PERFORMANCE

- Basket dimensions 26" x 10 1/2"
- High pressure irrigation for da Vinci
- Digital sweep ultrasonics
- Automatic lift mechanism for loading / unloading of shelves
- Sensors to automatically control the solution level and chemistry dosage
- Exterior instrument ozonated water rinse
- Submicron inlet compressed air filter
- Safety shut-off switch

UNIT OPTIONS

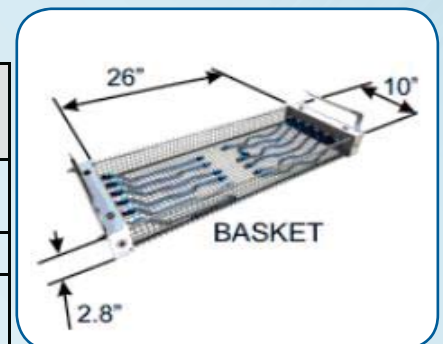
| ITEM# | DESCRIPTION | MACHINE DIMENSIONS (in.) |
|--------|-----------------|----------------------------|
| TW1000 | 1 Basket System | Approx. 55"W x 30"L x 63"H |
| TW2000 | 2 Basket System | Approx. 39"W x 47"L x 63"H |
| TW4000 | 4 Basket System | Approx. 61"W x 47"L x 63"H |

HF Output Power.....2000 watts
 HF Peak Power.....4000 watts
 Frequency.....40 kHz with sweep range of 100-1000 Hz
 Supply.....240V 50-60 Hz

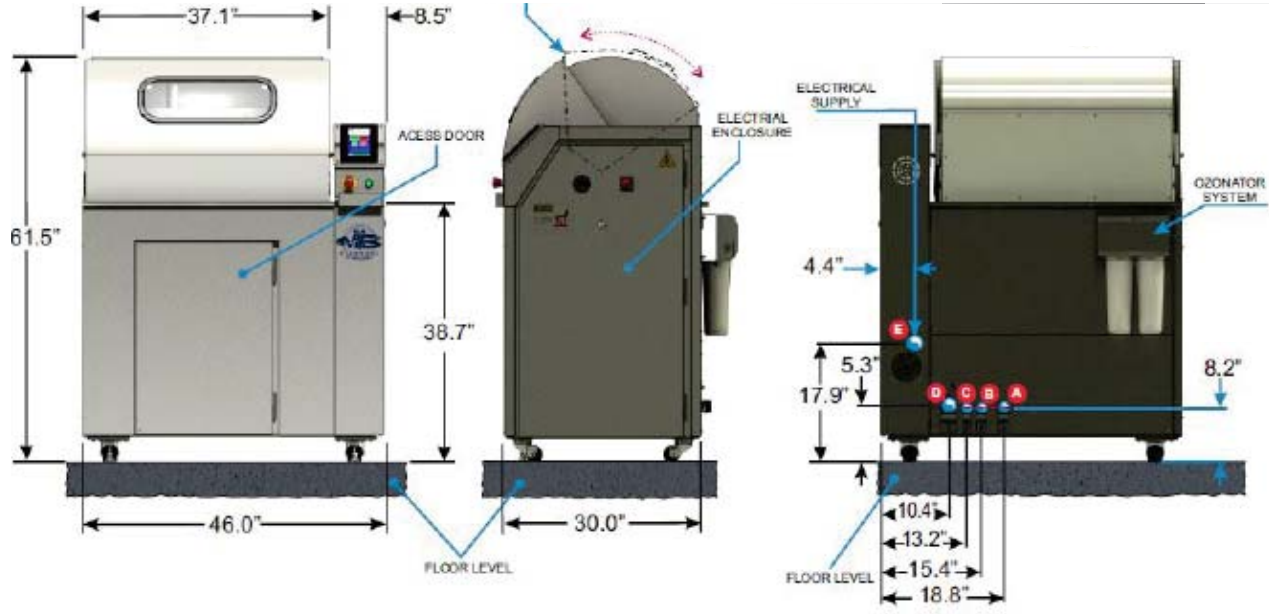
| UTILITY | CONSUMPTION (230V/3PH/60Hz) | CONSUMPTION (480V/3PH/60Hz) | UTILITY REQUIREMENT PER TEMPEST WASHER UNIT |
|----------|-----------------------------|-----------------------------|---|
| Electric | 80 amps | 40 amps | Electric Heated Unit |

SYSTEM REQUIREMENTS

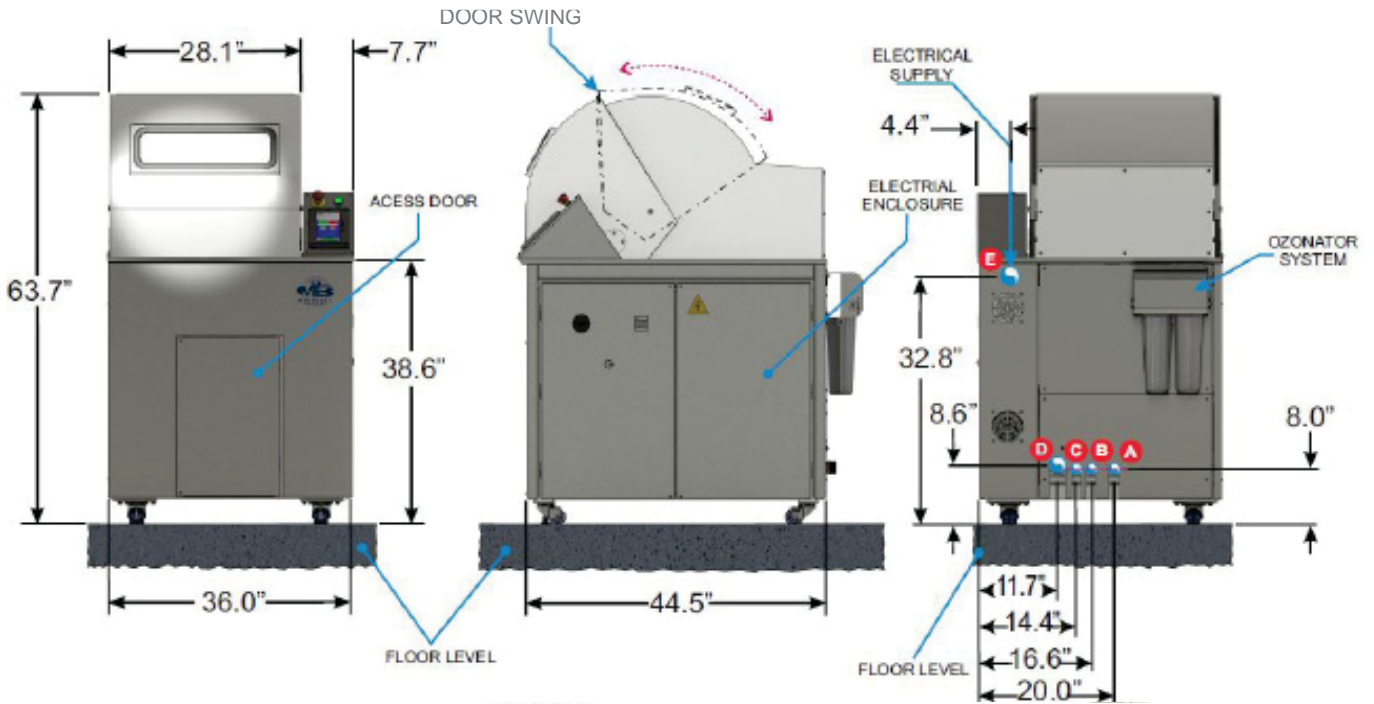
| UTILITY | CONNECTION | PRESSURE | CONSUMPTION | UTILITY REQUIREMENT PER TEMPEST WASHER UNIT |
|----------------|------------|----------|-------------|---|
| Hot Water | 3/4"NPT | 60 psi | 40 gpm | Min water temperature is 120° F |
| Cold Water | 3/4 NPT | 60 psi | 10 gpm | Ozone water rinse |
| Compressed Air | 1/2"NPT | 90 psi | 10 SCFM | Air must be dry and oil free |



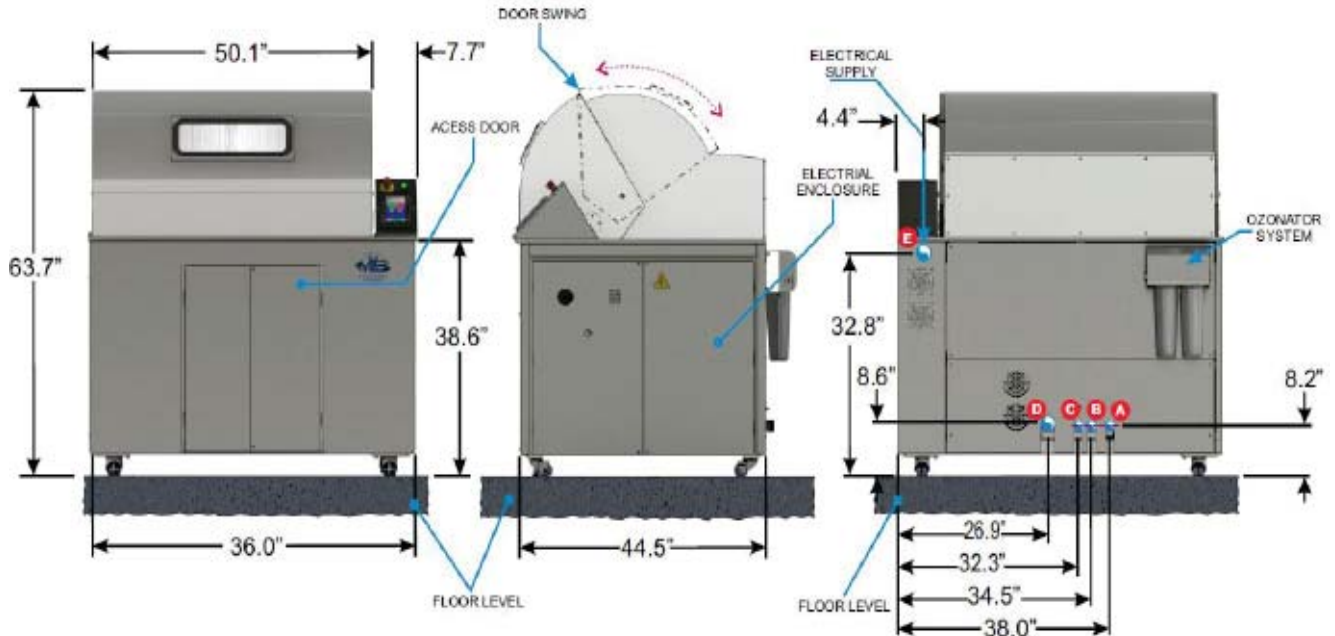
TEMPEST TW1000



TEMPEST TW2000



TEMPEST TW4000



HOW DOES THE TEMPEST SURGICAL DEVICE WASHER WORK?



REASON FOR APPLICATION:

Although reusable device manufacturers often provide a flushing port for their instruments, the instructions rely on manual flushing which results in a low flow flush with no direct physical cleaning. Given the nature of soil presented to these devices in surgery, the manual flushing method is not a highly effective method for cleaning. The Tempest washer was designed to replace this manual process with an automated one, and introduces a unique air injected flushing system. In studies done by Nelson Labs, the Tempest has achieved 6 log reduction in bacteria levels. The Tempest Washer eliminates human errors and offers a high powered internal cleaning of reusable devices.



PROCESSES 24- LUMENED INSTRUMENTS IN 30 MINUTES

The Tempest Surgical Device Washer is designed to clean reusable surgical instruments, including difficult to clean cannulated instrumentation.

The Tempest can be used for:

- Cannulated Instruments
- Suction Tubes
- Endoscopy Devices
- All rigid lumens
- Kerrisons
- Laparoscopic Instruments
- Robot arms
- Non lumened devices

The Tempest brings high-powered, industrial-grade cleaning with repeatable results to your Central Processing Department. This instrument washer uses a combination of high-powered, tested, and proven washing actions: ultrasonics, enzymatic soaks, agitation, exterior and interior sprays, and air injection bubble cavitation stream.

QUALITY:

Manufactured in the USA under ISO 13485 quality program

Name: Tempest Surgical Washer

Classification Regulation Name & Number : 880.6992

Regulatory Class: Class II Exempt

Product Code: MEC



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