



# AUTOCLEAN®

## ROBOTIC TORCH MAINTENANCE CENTER

Designed to improve overall welding equipment effectiveness in robotic MIG welding cells, the fully automated AUTOCLEAN® from Nasarc is engineered to increase productivity and quality while minimizing downtime and costs.

## FEATURES

### Automated Nozzle Reamer:

- Independent reaming cycle using a high strength coated reaming bit designed to effectively remove and discard spatter from nozzle.

### Automated Tip and Diffuser Cleaning:

- Rotary wire brush design ensures thorough cleaning of diffuser portholes and contact tip for more reliable gas delivery and reduced porosity.

### Automated Anti-Spatter Sprayer:

- Vortex action sprayer delivers a radial spray pattern to uniformly coat the interior surface of the nozzle and help prevent spatter buildup.

### Nozzle Presence Sensor:

- Post-cleaning, presence sensor ensures the nozzle is secured and ready for the next weld.

### Automated Nozzle Removal and Replacement:

- Fully automated removal and replacement allows access to contact tip and diffuser for enhanced cleaning, an industry first.
- Engineered to support rapid tip change-out when used in combination with the AUTOTIP® automatic tip changer.

### Automated Wire Cutter:

- Innovative pinch-off wire cutter design creates a "V" shape for optimal arc starts.
- Powerful and precise enough to handle all wire sizes up to 0.063" mild steel.

### Nozzle Gas Flow Sensor:

- Designed to detect and measure adequate gas flow at the point of use.

### Intuitive User Interface:

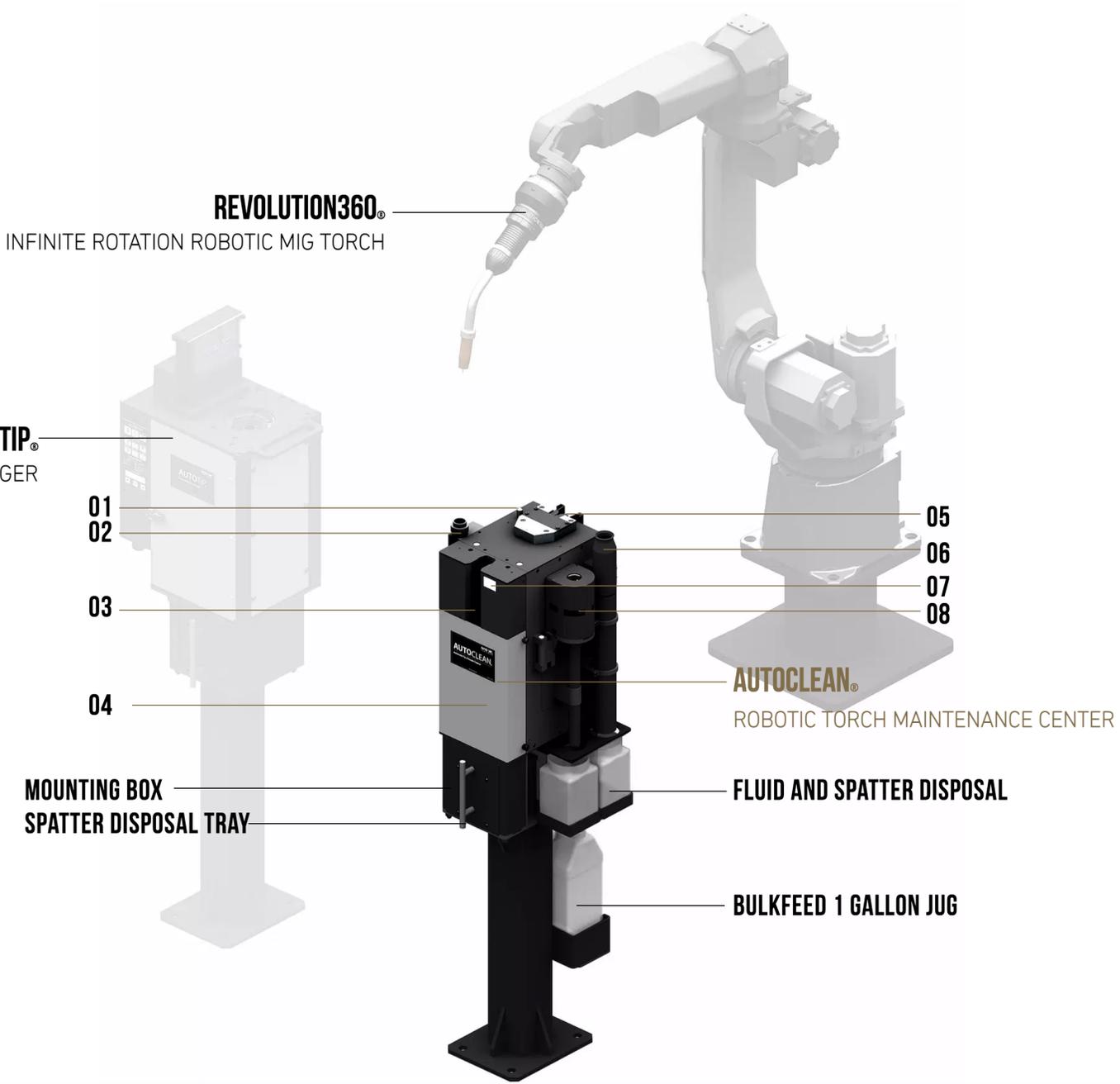
- Designed to allow for easy setup, diagnostics and reporting at point of use.

## TECHNICAL DATA

Footprint Size:	18" H x 11.5" L x 10" W
Air Supply:	85 PSI, 22 CFM
Power Supply:	24 VDC, 1.0 A

# EIGHT PROCESSES

- 01 TCP check pin verifies positional accuracy of the tool center point.
- 02 Nozzle gas flow sensor detects gas flow at the point of use.
- 03 Nozzle removal and replacement enables tip and diffuser cleaning.
- 04 Automated reaming cycle uses a high strength coated reaming bit.
- 05 Pinch-off wire cutter creates a "V" shape for optimal arc starts.
- 06 Anti-spatter sprayer delivers a radial spray pattern to uniformly coat the interior surface of the nozzle.
- 07 Nozzle presence sensor verifies the nozzle is secured and ready for the next weld.
- 08 Tip and diffuser cleaner with rotary brush offers enhanced torch maintenance.



## BENEFITS

- **Cycle Time:** Process features minimize overall robot cycle time.
- **Quality:** Enhanced torch cleaning improves gas flow and minimizes weld defects.
- **Flexibility:** Eight processes in a small envelope offers maximum flexibility.
- **Safety:** Operator entry into robot weld cell is reduced.
- **Powerful:** High torque, high power industry benchmark ream motor.

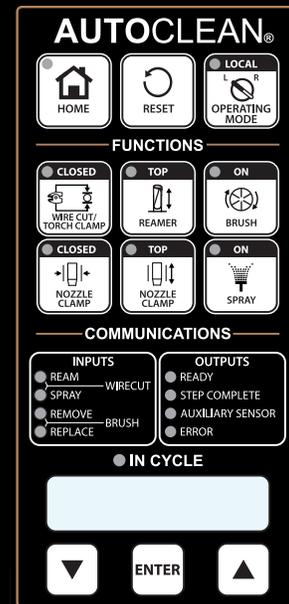
## USER INTERFACE

### EASY ACCESS TO INFORMATION AT POINT OF USE.

- Intuitive user interface available for setup and robot programming.
- Onboard controls are used to measure and manage internal functions and communications with the robot.
- LCD readout allows for complete setup and diagnostics.

### WEB SERVER- EXTENDED USER INTERFACE

- Built-in web server user interface offers enhanced diagnostics, configuration, remote monitoring and analytics.



## ROBOT INTEGRATION

### ROBOT INTEGRATION IMPLEMENTED THROUGH ETHERNET/IP OR DISCRETE I/O.

#### ETHERNET/IP:

Intuitive user interface available for setup and robot programming.

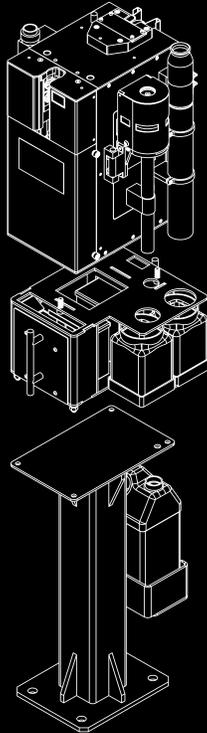
- Expanded I/O for enhanced control
- Cycle counters on each process
- Consumable management
- Error codes
- Process diagnostics
- RS-logix AOI is available for easy integration

#### DISCRETE I/O:

- Automatic configuration of sinking/sourcing input and outputs

# FLEXIBLE MOUNTING OPTIONS

The mounting box may be installed on the recommended stand (sold separately) with various heights available on a custom stand or fixture.



## ORDERING INFORMATION

### 1. AUTOCLEAN®:

Ethernet/IP	NAC1E
Discrete I/O	NAC1D
Discrete I/O with Ethernet/IP	NAC1DE

### 2. NOZZLE CLAMP (REQUIRED):

Standard Duty Nozzle Clamp	NAC08-1R
Heavy Duty Nozzle Clamp	NAC08-2R

### 3. REAMING BIT (REQUIRED):

Ream Bit for 5/8" Tapered Nozzle	IRB020625-00
Ream Bit for 1/2" Bottleneck Nozzle	IRB020501-00

### 4. CABLE (RECOMMENDED):

Ethernet/IP 4 pin power cable	NCCA-F-XX
Ethernet/IP M12/RJ45 cable	NCCD-R-XX
Discrete I/O 10 pin cable	NCCB-F-XX

XX: LENGTH (FEET) = 20, 30, 50

### 5. MOUNTING (RECOMMENDED):

Mounting Box & Tray Assembly (NAC)	NSMC1-07
Stand Post Assembly 23"	NSSC1-23

### 6. REPLACEMENT PARTS:

Diffuser Brush Set	NAC20-3R
Wire Cutter Insert Set	IRW010099-00