AUTOCLEAN®

ROBOTIC TORCH MAINTENANCE CENTER

Designed to improve overall welding equipment effectiveness in robotic MIG welding cells, the fully automated AUTOCLEAN® from Nasarac 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 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 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 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.

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 Gas Flow Sensor:
- Designed to detect and measure adequate gas flow at the point of use.

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

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
   - Discrete I/O
   - Discrete I/O with Ethernet/IP

2. NOZZLE CLAMP (REQUIRED):
   - Standard Duty Nozzle Clamp
   - Heavy Duty Nozzle Clamp

3. REAMING BIT (REQUIRED):
   - Ream Bit for 5/8” Tapered Nozzle
   - Ream Bit for 1/2” Bottleneck Nozzle

4. CABLE (RECOMMENDED):
   - Ethernet/IP 4 pin power cable
   - Ethernet/IP M12/RJ45 cable
   - Discrete I/O 10 pin cable
   XX: LENGTH (FEET) = 20, 30, 50

5. MOUNTING (RECOMMENDED):
   - Mounting Box & Tray Assembly (NAC)
   - Stand Post Assembly 23”

6. REPLACEMENT PARTS:
   - Diffuser Brush Set
   - Wire Cutter Insert Set