



# INTELLIREAM®- IOL

## ROBOTIC TORCH MAINTENANCE CENTER

Extend the life of your robotic MIG torch and improve cycle time in your robotic welding cell with the Nasarc INTELLIREAM®-IOL (IO-Link) model. Designed to improve overall welding equipment effectiveness, this robotic torch maintenance center systematically removes and limits spatter accumulation for enhanced productivity.

The INTELLIREAM®-IOL model provides additional functionality including enhanced command and diagnostic signals. The complete process is managed by the internal CPU.



## PRODUCT ADVANTAGES

### Automated Nozzle Reamer:

- Independent reaming cycle uses a high-strength coated reaming bit designed to effectively remove and discard spatter from the nozzle. A two stage de-ringer removes the spatter ring at the bottom of the nozzle before reaming. The automatic retry feature ensures the nozzle is reamed to full depth.

### Automated Wire Cutter:

- The innovative pinch-off wire cutter design creates a "V" shape for optimal arc starts. It is powerful and precise enough to handle all wire sizes up to 1/16" 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. The anti-spatter fluid reservoir may be mounted remotely.

### Nozzle Gas Flow Sensor:

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

### Nozzle Detect Sensor:

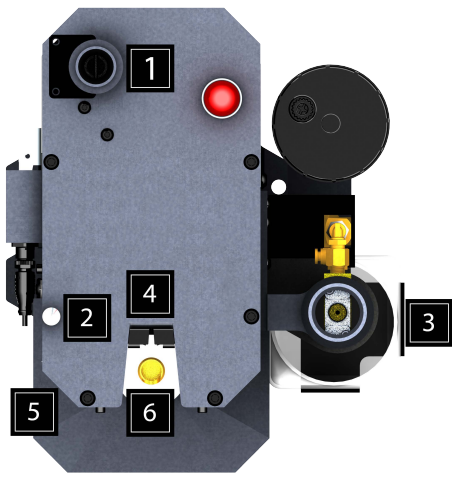
- Post-cleaning, detect sensor ensures the nozzle is secured and ready for the next weld.

### Intuitive User Interface:

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

## TECHNICAL DATA

Footprint Size:	H: 20.6", W: 11", D: 12.1"
Cutter Speed:	1100 RPM
Air Driven Motor:	0.60 HP
Wire Cutter Diameter:	0.030" - 0.0625"
Air Supply:	80 PSI, 16.5 SCFM
Power Supply:	24 VDC, 0.75A*



## PROCESS HIGHLIGHTS

- 1 Nozzle gas flow sensor detects gas flow at the point of use.
- 2 TCP check pin verifies positional accuracy of the tool center point.
- 3 Vortex action sprayer delivers a radial spray pattern to uniformly coat the interior surface of the nozzle.
- 4 Pinch-off wire cutter is integrated in the clamp housing for easy and quick access, minimizing robot movement.
- 5 Nozzle detect sensor ensures that the nozzle is fastened on the torch.
- 6 Automated reaming cycle uses a high-strength coated reaming bit.

## PERFORMANCE

The networked INTELLIREAM®-IOL provides additional performance over traditional reamers.

- Ease of installation and seamless integration with controller.
- IO-Link is available as a port class A device.
- Troubleshooting via diagnostics at the robot or PLC.
- Expandable platform for feature upgrades.
- Single connection for multiple robots.
- Data acquisition of process counters.
- \*Ensure the IO-Link Hub used is capable of supplying at least 0.75A per each device port. Contact Nasarc sales for optional power supply configurations.

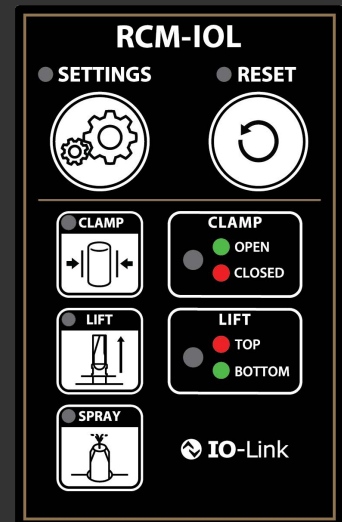
### IO-Link Interface Wiring

1. +24 VDC Control	(BRN)
2. Input 1	(WHT)
3. 0 VDC Control	(BLU)
4. C/Q IO-Link	(BLK)

## INDUSTRY 4.0 FEATURES & BENEFITS

The INTELLIREAM®-IOL torch maintenance center incorporates the following advantages enabled by network connectivity:

- Advanced diagnostic and troubleshooting tools help pinpoint issues and decrease downtime.
- Cycle counter and preventive maintenance countdown will boost uptime and improve overall equipment effectiveness.
- Add-on instruction (AOI) is available for Logix PLCs to cut integration time and costs.
- Magnetic sensors are utilized for optimum position accuracy and reliability.
- Dry-run and sensor override modes make setting up and trouble-shooting easier.
- Self-centering grip design for positive traction on all nozzle sizes.
- On-board diagnostics indicate position and fault codes for ease of troubleshooting.
- A status light signals when the unit is operating and flashes diagnostic codes if a fault occurs.



# **ORDERING INFORMATION**

---

## **STANDARD EQUIPMENT**

INTELLIREAM®-IOL	IRM040001-IOL
Spray System	
TCP Check	
Status Light	
De-ringer	
Fluid Reservoir	

## **FACTORY INSTALLED OPTIONS**

Wire Cutter	IRW010099-00
Nozzle Detect Assembly	IRE120099-02
Nozzle Gas Flow Sensor	NAC40A

## **ACCESSORIES**

Reaming Bit, 1/2"	IRB010500-00
Reaming Bit, 1/2" Bottleneck	IRB010501-00
Reaming Bit, 15.5mm	IRB01M155-00
Reaming Bit, 5/8"	IRB020625-00
Reaming Bit, 3/4"	IRB010750-00
IO-Link Cable, 4 pin, 10m	IRE060017-00
Floor Mount Stand, 30"	IRX010001-00
Anti Spatter Bulk Feed	IRS120099-06