

INTELLIREAM™ NT

SIMPLE . SMART . NETWORK ENABLED

ROBOTIC TORCH MAINTENANCE CENTER

Extend the life of your robotic MIG torch and improve cycle time in your robotic welding cell with the next generation INTELLIREAM NT. This robotic torch maintenance center systematically removes and limits spatter accumulation for enhanced productivity.

The network enabled NT model provides additional capabilities based on its proprietary and patented **iNODE™** communication technology platform. Features include; enhanced command and diagnostic signals, direct access to process controls and feature configuration, with the complete process managed by the internal CPU.



PROCESS HIGHLIGHTS



1) High strength coated reaming bit provides enhanced wear resistance. Precision machined to tight tolerances for optimized performance.



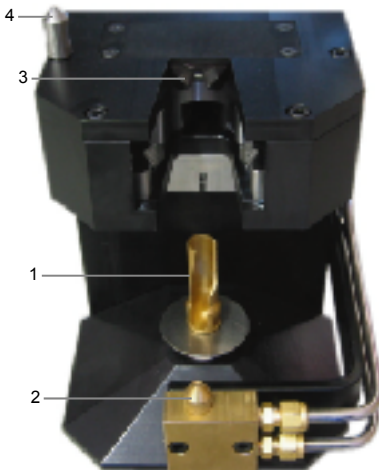
2) Vortex action sprayer delivers a radial spray pattern to uniformly coat the interior surface of the nozzle. Self cleaning with postflow logic.



3) Pinch off wire cutter is integrated in the clamp housing for easy and quick access, minimizing robot movement. (Optional)



4) Tapered cone provides a visual check to ensure positional accuracy of the TCP (tool center point).



HIGHLIGHTS

- The INTELLIREAM NT controller features a simple "No Trial - No Error" programming technique and constant process monitoring.
- Self centering diamond grip design for positive traction on all nozzle sizes.
- Complete enclosure seals out small particles and contaminants.
- 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. (Optional)
- Dry run and sensor override modes make setting up and troubleshooting easier.
- The INTELLIREAM is the only reamer to offer an automatic retry feature.
- De-Ringer; A pilot reaming stroke removes the spatter ring that forms on the end of the weld nozzle. (optional)

TECHNICAL DATA

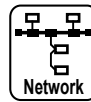
Footprint Size	25"H x 13"L x 10"W
Cutter Speed	1100 RPM
Air Driven Motor	0.65 HP
Wire Cut Diameter	0.030" - 1/16"
Air Supply	80 PSI, 15 SCFM
Power Supply	24Vdc, 0.65A

PERFORMANCE

The INTELLIREAM NT controls the entire reaming process. Every aspect of the reaming cycle is commanded, monitored and verified. The feedback signal to the robot is a true "complete" signal indicating that the entire sequence has been executed without error. Modern robotic systems with network capability have advantages over their earlier discrete I/O counterparts. The connectivity of the INTELLIREAM NT provides many of these advantages including:

- Ease of installation and seamless integration with controller.
- Troubleshooting via diagnostics at the robot or PLC.
- Expandable platform for feature upgrades.
- Single connection for multiple robots
- Data acquisition of process counters and solenoid / cylinder activation timers

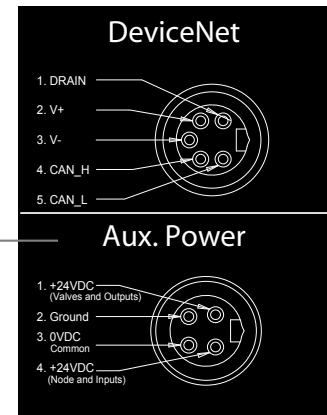
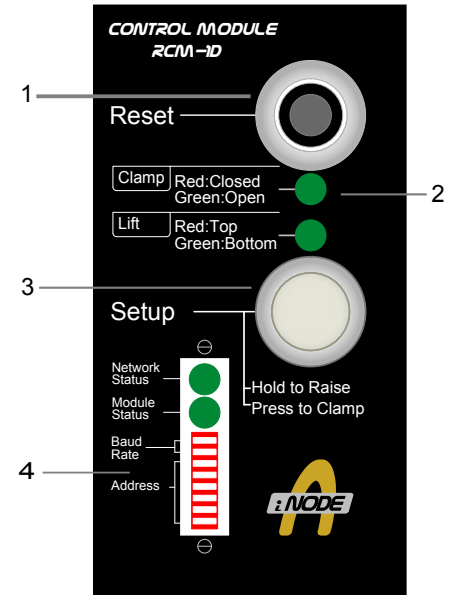
iNODE™ : DISTRIBUTED INTELLIGENCE



- 1) Fail-safe reset push button overrides the INTELLIREAM NT commands to the cylinders and sends them back to their home position.
 - commands to the cylinders and sends them back to their home position.
- 2) Indicator LEDs are visible to an operator and show the position of air cylinders.
 - If a fault occurs, the on-board diagnostics report the error via flashing LED codes so that the problem can be resolved faster.
- 3) Unique programming technique: The setup pushbutton is used to sequence the reamer solenoids for ease of programming the correct position the very first time.
 - Subsequent pressing of the button will raise the reaming head (without spinning the ream bit), then clamp and release the nozzle. The setup button may be enabled only when the robot is in teach mode, safeguarding it against unintended operation.
- 4) Network address and baud rate are configurable. LED indicators show module and network status.
- 5) Separate receptacles are supplied for network and auxiliary power. The network connection supplies power to the node and the inputs. The auxiliary connection supplies power to the solenoids so that they are interrupted by an E-stop condition.
- 6) The iNODE™ is enclosed in the RCM-1D CONTROL MODULE. The control module is easily removed from the side of the machine and disconnected without removing the front or rear panels.

The following network communication protocols are available for the iNODE™ :

- DeviceNet · Profibus-DP
- Ethernet-IP · Modbus-RTU and Modbus



STANDARD EQUIPMENT

- INTELLIREAM NT (DeviceNet) IRM010001-1D
- Nozzle Reamer (with 5/8" Reaming Bit)
 - Spray System
 - TCP check

Request any of the following options when ordering:

- Wire Cutter Module
- Network control cable
- Auxiliary power cable
- Adapter / Locator Plate
- Floor Mount Stand
- De-Ringer hardware

RECOMMENDED ACCESSORIES

- | | |
|---|--------------|
| Reaming Bit, 1/2" <input type="checkbox"/> | IRB010500-00 |
| Reaming Bit, 1/2" Bottleneck <input type="checkbox"/> | IRB010501-00 |
| Reaming Bit, 15.5mm <input type="checkbox"/> | IRB01M155-00 |
| Reaming Bit, 5/8" <input type="checkbox"/> | IRB010625-00 |
| Reaming Bit, 3/4" <input type="checkbox"/> | IRB010750-00 |
| Test Box <input type="checkbox"/> | IRT010001-1D |