



2026 MATE ROV Competition
Pushing Performance: Science, Technology, & Discovery in Harsh Environments
Onsite Workmanship Inspection Score Sheet
EXPLORER, PIONEER, RANGER

Company Number:	Class:
Company Name:	Judge Name:

Companies must bring this check list, the ROV, tether, surface controls, and any other item used in the deployment and operation of the ROV to the safety inspection; they will all be inspected as part of the safety/workmanship check. Companies that build a float must also bring that to the workmanship inspection.

1.0 Circuit Boards / Circuit Board Wiring

	All circuit boards are securely held in place and are not loose. This applies to both the surface control system and on the ROV.
	All connections are secured to the board with terminal connections. Pin connections are soldered to the board. Jumpers are fully protected and connect to the soldered pin jumpers.
	Wires inserted into terminal blocks are fully secured with no exposed copper showing.
	No exposed wiring in the surface control box. No exposed wiring on the ROV.

2.0 Wiring and Wire Discipline

	Wires are routed properly. Similar wires are bound together and labeled. High power wires are separated from low power wires. When high power wire groups cross low power wire groups, crossing is at a right angle. No messy / spaghetti wiring.
	Wires are cut long enough so they stretch from connection to component when the control box is fully opened.
	Loose wires on the ROV are secured to the frame. No wire loops away from the frame that could catch external objects, mission props, etc.
	All wires are properly terminated. Terminal connectors follow termination standards.
	In the surface control box, 120VAC wiring is separated from DC wiring.
	120VAC wiring must be clearly identified from the DC and control voltages with signage and/or wire color schemes. If the color scheme is used, a key must be provided for identification.
	When the ROV is in use, all wires in the surface control box are protected to IP-30 standards.

3.0 Strain Relief

	Topside tether and cable has a connection attachment built in so that it can attach to the MATE-supplied paracord/rope strain relief. The connection attachment is properly placed so pulling on the tether will no pull on topside wire connections.
	ROV side strain relief has tether cable securely fastened to the frame of the ROV. The tether cable does not slip through the strain relief connector.
	Any wires penetrating through the wall of the surface side control box have both strain relief and abrasion protection in place.

4.0 Other

	Other workmanship issues on the ROV
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Companies can receive up to 20 points for workmanship. Each workmanship violation will incur a 5 point deduction from the total. Judges may opt for a larger penalty for major workmanship violations.

Total Workmanship Points:

0, 5, 10, 15 or 20 points

Workmanship Inspection - Violations found

Judge: _____

[illegible]