2025 MATE ROV Competition
UN Decade of the Ocean, MATE Year of the Great Lakes
INITIAL SAFETY AND DOCUMENTATION REVIEW
RANGER

Company Number:	**Competition Class: RANGER**
Company Name:	**Judge:**

Documentation Submission

Documentation is not submitted on time, is not within the given file size or page limit, does not use the proper naming convention, or is not a PDF file.

1	0	Technical Documentation
1	0	Company Spec Sheet
1	0	SID(s)
1	0	Company Safety Review
1	0	Non-ROV Device Design Specifications
1	0	JSEA

Score: 0 | Weighting Value: 0.333333 | 0

ROV

ROV SID

1	0	ROV SID is 1 page in length and drawn with CAD (is not hand drawn)
1	0	ROV SID shows a fuse and fuse uses a proper IEC, NEMA, or ANSI symbol
1	0	ROV SID includes includes full load amps value and fuse selection
1	0	ROV SID is a higher level interconnection diagram, not a component level electrical schematic

ROV Safety (Company Safety Review - photos are required of each system)

1	0	The ROV uses red/black Anderson connectors and has a properly sized ATO or mini blade fuse within 30 cm.
1	0	Company safety review includes full load amps value and fuse selection
1	0	Control box/console is neatly laid out and does not have exposed wiring.
1	0	AC and DC are separated and identified in control box, or AC is not used
1	0	ROV has adequate ROV-side strain relief and pressure housings can withstand depth
1	0	All propellers are properly shrouded and protected to IP-20 standards.
1	0	There are no sharp edges or dangersous components seen on the ROV.

Score: 0 | Weighting Value: 1.636364 | 0

Fluid Power

0 **If fluid power is used, enter a 1 in the box.**
If fluid power is NOT used, enter a 0 in the box.

Fluid power SID

1	0	Fluid power SID 1 page in length, drawn with CAD (is not hand drawn), and uses industry standard symbols

# of Ys: 0 | Weighting Value: 0 | 0

Non-ROV device - Float

0 **If a float is built and documented, enter a 1 in the box.**
If a float is NOT built and documented, enter a 0 in the box.

Non-ROV Device SID (vertical profiling float)

1	0	Non-ROV-Device SID shows a fuse using a standard fuse symbol and includes full load amps value and fuse selection

Non-ROV device design documents (vertical profiling float)

1	0	A photo or diagram of the non-ROV devices is included
1	0	The type of battery used is described. A photo of the battery pack and a photo of the fuse(s) is included
1	0	A table of the measurements showing full load current is included
1	0	How the battery pack was designed to safely fulfill the full load current needs and voltage requirements is described
1	0	The buoyancy engine / mechanism used for completing vertical profiles is described
1	0	How the float communicates with the shore side receiver is described

# of Ys: 0 | Weighting Value: 0 | 0

TOTAL POINTS: 0