

Visibility: Cloudy

Current: Strong

Report: We've placed the first order of printed circuit boards, injection molding is coming along slow but steady, battery packs are undergoing certification testing, and we're crossing off more assembly processes. Oh, and the backpacks look very nice!

Circuit Boards Ordered:

NEMO has two circuit boards. There is the main controller board on the body, which takes input signals from the Smart Reg to monitor if the diver is inhaling, and if so then it turns the motor on to begin pumping air down the hose. Then there is a very small circuit board inside of the Smart Reg which is used for mounting the hall effect sensor. As mentioned in the previous update, NEMO passed all EMC compliance testing so the boards could then be finalized. The order has now been placed for both of these boards and we should see the first units produced in about 5-6 weeks. Sample units should arrive sooner than that so we can test them around the same time we receive our sample injection molded parts.

Injection Molding:

The injection molding process has not made any major leaps forward yet. It is a long process, though, so we must patiently await as the molders do what they do best. There was one change on the Smart Reg housing recently to make it more moldable. Otherwise, the mold could end up failing or producing a high percentage of defect parts. We confirmed the change is acceptable and so the molders are moving ahead on that one. Lots of details...

Battery Pack Certifications:

The production order for battery packs has been placed now that we've confirmed the sample parts are correct. There was a setback with the first molded battery packs, so the timeline shifted as the mold had to be reworked. The battery pack manufacturer is now building sample packs that will be used in certification testing. In total, 80 battery packs will be built for the purpose of running tests and obtaining certifications, including CE, UN38.3+MSDS, IEC62133, RoHS, and UL2054. Most of these certifications are used to show that the battery pack is safe and enable the pack to be imported to consumers in various countries around the world.

Backpacks:

The first 50 harnesses have been completed so we've moved onto the next textile. The first backpacks are being sewn together! We found a local silkscreener to print the BLU3 logo right on the front panel. In the prototypes, the BLU3 wordmark was embroidered in black, but this new white logo really makes it pop. What do you think?



Assembly Processes:

There is still a long list of assembly processes for us to work out, but we've been making

great progress and we're on track to have the majority of processes ironed out by the time we receive sample injection molded parts. This will give us an opportunity for a practice run through the assembly line, and it's good practice to build the sample NEMO's as the production NEMO's will be built in case we find any defects as a result of our processes. There are quality checks along the entire assembly process to ensure that major errors cannot be overlooked.

Forecast: There remains some uncertainty in the timing of injection molded parts. In addition to that, setbacks with the battery packs and foam flotation units are indicating that first deliveries will likely be made in June instead of May. There are many variables out of our control at this point, but the team remains focused on the tasks within our control, as we're sure everything will come together very quickly in the coming month to month and a half. The support of all of you who have made this possible does not go unappreciated. We can't wait for you to dive BLU3 very soon!

-BLU3 Team