only for finding no external deformation, fracture, etc. but internal damage or several degradations more than expected, that could produce leaks with the consequent risk for the user and the system. The more significant indicator is the not finding or obtaining very high level of leakage in the channels where the gases go through.

In addition to this, the I-V and I-P curves results showed that the vibrations and freeze – thaw cycles did not affect the stack performance, which means the equipment could work in extreme conditions in a proper manner. In this context the difference of performance from the initial point of vibration test to the end of freeze – thaw test was less than 1,5% at the same conditions of functioning, something that may be due to the accuracy of the measure devices, very light differences of working conditions, expected and usual degradation of the fuel cell components or, more probably, a set of all of them.

Finally, it could be said that, if the fuel cell is placed in an automotive vehicle to be run in severe conditions, not only regarding the road but the ambient conditions, the fuel cell should work perfectly within than expected without problems.

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