

Koslow Scientific introduces the [Passi-Pipe Explorer \(Model No. 2027\)](#). Koslow Scientific's team had numerous conversations with existing customers and prospective customers that covered a few common concerns. These common requirements included: passivation testing the interior of a pipe, and preventing dropped testing pads during the passivation testing process. If a testing pad was dropped in a tank during testing, the technician would have to stop testing, and climb down a ladder to retrieve the pad. Errant testing pads would also be a potential contaminant to any pharmaceutical or industrial process.

Koslow Scientific's widely deployed [Passi-Tester 2026](#) and [Passi-Flash 3036](#) passivation testers were able to test only a short distance into a pipe. This meant that an entirely new solution would have to be developed. The probe included in the 2027 was tested at various lengths. Longer lengths of the probe proved physically hard to manipulate to accurately pinpoint a specific spot inside the pipe. We settled on an approximately 4" long probe to maximize the ability of a technician to have steady hands during testing. The 4" long probe can test approximately 3" into the depth of the pipe. Very narrow pipes will limit how far the [Passi-Pipe Explorer](#) probe can test.



The next concern to address was how to eliminate dropped testing pads. The solution came about by borrowing the NIB cartridge system already developed for the Passi-Flash 3036. The 2027 probe simply uses NIBS at the end of the 2027 probe to contact the surface that is being tested.



The time tested NIB Cartridge system has numerous benefits.

- 1) Enable one-handed operation to perform a passivation test, and load/reload new and exhausted pads.
- 2) Enable testing the vertical walls and ceilings of tanks and pipes
- 3) Keep it simple and repeatable as possible.
- 4) Create a closed-loop for the consumable testing pads, virtually eliminating the ability to drop a pad.

Michael McCulloch, Operations Manager at New England Laser Processing (NELP) needed the flexibility to access more area of the stainless steel passivated material that his shop would be working on. Mike was already considering a Koslow Passi-Tester 2026 passivation test kit.

Mike had multiple discussions with Koslow Scientific that helped guide the development of the [Passi-Pipe Explorer](#). The [Passi-Pipe Explorer](#) was already through a few iterations when Mike's input helped to narrow down some of the design considerations. Mike helped us fine tune the length of the Passi-Pipe probe to maximize accuracy and maneuverability.

After receiving the [Passi-Pipe Explorer](#) Mike noticed that the NIBS delivered test results in a second, versus waiting for the six seconds with the standard 2026 test papers. "If I have to send a technician onsite for a passivation test, the speed of the NIBS will create a positive customer service experience and help position NELP as a forward thinking provider"

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