



High-Pressure Intensifier



M Seals (UK Engineered Seal Division) was approached to support an urgent high profile MRO application requirement. The remit was to both reverse engineer and modify a Spring-Force Gland/Packing assembly.

ASSESSMENT

The brief was to provide replacement seals for a high-pressure system, rated up to 100,000 psi. Working with a media of 95/5 water-based fluid and ambient temperatures, the challenge was to provide a solution as quickly as possible to minimise downtime, which would stop production.

SOLUTION

Taking on board the customer's hardware and existing OEM sealing product, we designed and manufactured a high-quality, high-performance M-Flex® spring-force seal and packing arrangement. This included our 'in-house' micro welded spring energiser, all of which were manufactured in line with our CAD/CAM production drawing.

RESULT

The sealing components were subjected to extensive operational testing, including multiple pressure cycles ranging from 30,000 psi up to the system's maximum operating pressure of 100,000 psi. The seals performed exceptionally well throughout the rigorous conditions, maintaining integrity without any signs of degradation or failure.

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The quality of the sealing solution provided has clearly met the high demands of our application, and it is evident that careful consideration went into the selection and manufacturing of these components.

In addition to the outstanding product performance, I would like to commend the team at M Seals for their excellent customer service and rapid turnaround time. Supplying a tailored sealing arrangement for such a specialised high-pressure application is no small task, and I was thoroughly impressed by the speed and professionalism shown throughout the process.

Thank you for your continued support and for providing a reliable sealing solution that has exceeded expectations.