### WHEN RELIABILITY IS KEY:

# Improving machine uptime and equipment lifetime with DanaFlex H

Generic o-rings made of materials like FPM and NBR are often the default choice for constructing and securing machinery due to their familiarity and affordability. However, despite their low cost, they can lead to significant downtime if they fail. As small components, o-rings play a vital role in the overall functioning of the machine, and their failure can result in the machine's complete breakdown.

#### Background

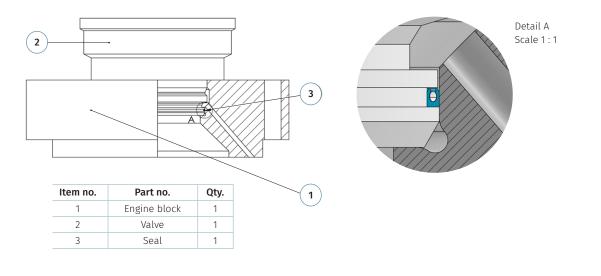
In the context of a heavy industry client, a challenge arose concerning a large diesel engine. The seal between a major exhaust valve and the engine was initially constructed using a generic FPM O-ring. While the operating conditions of the engine were not extreme, with a maximum pressure of 7 bar and temperatures below 100 degrees in its water-cooled, semi-static, and vibration-prone environment, there was a crucial requirement for uninterrupted 24/7 operation. Any downtime would have severe financial implications for the company.

#### Solution

To ensure the reliability of the client's engine, we opted to design a specialized seal using our product called DanaFlex H. DanaFlex H was chosen specifically because it offers an infinite service life under the unique conditions of the engine. To optimize the mounting of the seal, Dana-Seals collaborated with the customer to develop custom profiles tailored to their specific needs.

By implementing the DanaFlex H seal and closely monitoring its service life, we aimed to provide a reliable solution that would mitigate the risk of downtime and ensure continuous operation of the client's diesel engine.

## Exhaust valve seat seal in big diesel engine



#### Dana-Seals A/S

Ole Rømersvej 4G | DK-3000 Helsingør +45 4922 4400 | info@dana-seals.dk | www.dana-seals.com

