

Abstract

**METHOD FOR OPERATING A MECHANICAL FACE SEAL ASSEMBLY, AND
MECHANICAL FACE SEAL ASSEMBLY**

- 5 The invention relates to a method of operating a mechanical seal assembly (1) having a mechanical seal (2) with a rotating sliding ring (3) and a stationary sliding ring (4), defining a sealing gap (5) between the sliding surfaces thereof, comprising the steps of: collecting operating data and/or environmental data of the mechanical seal (2), transmitting the collected operating data and/or environmental data to a digital twin (31) of the mechanical seal (2),
- 10 simulating and monitoring the operation of the mechanical seal (2) using the digital twin (31) based on the transmitted operating data and/or environmental data of the mechanical seal (2), and retransmitting a simulation result and/or data of the digital twin.

(Fig. 1)