



# HAMMERFEST INSTALLATION

A Permasense corrosion monitoring system at the Statoil Hammerfest LNG facility included over 40 sensors being installed. This facility is the world's most northerly and Europe's first LNG export facility, located on Melkøya island in Finnmark County, Norway.

The Permasense system has been put in place to assist with monitoring the thickness of pipeline walls to enable future detection of corrosion activity, and with reliable, continuous data help inform maintenance requirements and enhance reliable and safe operations. Key considerations in choosing the system were that it is non-intrusive, that it does not require maintenance, and that data is delivered to the desk, reducing personnel visits required to potentially dangerous process areas.

The sensors have been placed at multiple circumferential locations for each axial location. The piping varies from carbon steel with a 38mm thickness, to duplex of 25mm thickness, to SMO steel of 3mm thickness. The pipe diameters range from 8 to 36 inches. Generally these are operating at temperatures around 100°C.

At this facility extremes of ambient temperature are also experienced and it was important that the sensors could reliably operate in these harsh environments.

