TASK-10

INFERENCE MAPPING

FLUID MACHINERY FAILURE PREDICTION

FLUID DETECTION ON FLUID MACHINERY USING HIDDEN MARKOV MODEL

This method was validated experimentally on a case study at CERN with reference to cryogenic plants

The modle is trained by merely exploting data from normal machine operation.

Seven physical quantities have been taken into account. They constitute a dataset build with several months of continuous acquisition

A complex refrigeration system based on this kind of compressors guarantees the distribution of liquid helium.

The model is validated by simulating a fault of the machine by properly corrupting data.