

1. Introduction

JFE Mechanical performs erosion diagnosis, mainly of overhead piping, at steel works of JFE Steel using "Scan-WALKER™," which was developed by JFE Steel, and has achieved important results, including prevention of environmental disasters.

This report introduces an erosion diagnosis technology using "Scan-WALKER™" in diagnosis of the side plates of oil tanks.

2. Development of Erosion Diagnosis Technology for Side Plates of Oil Tanks, Etc.

To enable measurement of the side plates of oil tanks, it is necessary to expand the plate thickness measurement range from 10m, which is possible with the existing technology, to 20m.

2.1 Development of New Sensor

Detection up to a maximum plate thickness of 24m was made possible by a development process in which the optimum range of the distance between electrodes,

