

ATLAS EPD Inspection  
for Oil retaining wall through pipe  
**Job site operation  
guideline**

**ATLAS** *ATLAS CO., LTD.*

# Preparation



If the target is covered by insulation, it is necessary to ask the client to remove it before doing inspection. To remove about one meter of insulation both side of the dike (retaining wall) will be enough.

To confirm the points by a ruler and marker



To mark the points for electrode and sensor pins.



## Remove the material on the surface



The points marked need to be scratched by a tool or/and sand paper. We will not use grinding wheel or other tools that will spark.

## Remove the surface material



To polish the surface until it appears the original steel color. The area for sensor pin needs to be 20mm\*20mm, the area for electrode needs to be 40mm\*40mm around.



## Fix sensor pin and connect the cables



The sensor pin having a built-in magnet can be easily fixed on the pipe. In case of a stainless pipe, the sensor pin having a dual side sticker can be fixed on the pipe.

Fix sensor pin and connect the cables



The same to fix the electrode(s) by magnets.



Make sure all devices can operate properly.



Actual measurement



Check the measuring data by using laptop PC



Hardware and program set up, voltage difference measurement and data acquisition/confirmation are all managed via laptop and EPD device.



# Measuring the distance among sensor pins



The measuring distance will be done after measuring data.

The distance is important for making a data analysis



The thickness of the pipe on which sensor pins were fixed need to be identified by UT (Ultra Sonic Testing).



The pipe thickness measurement using UT is to make a double check on our EPD measuring data, which is to follow Japanese Industrial Standard (JIS Z 2355) requirement.



## After measurement



If necessary, we will make a spray treatment on the polished area by a paint. The insulation recovery would be done by customer<sub>11</sub> if required.