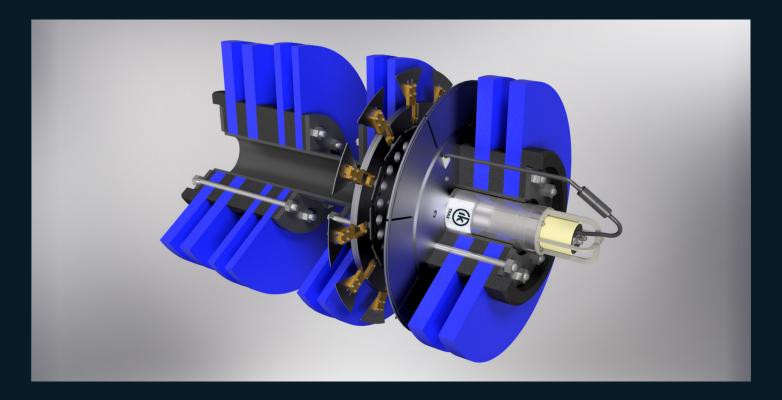


Gauging Run Integrity Data (GRID®)



The Gauging Run Integrity Data (GRID®) system allows the presence and position of defects along a subsea pipeline to be identified.

Key Benefits

- The operator does not need to recover the pig visually to confirm the integrity of the gauge plate or run an intelligent pig which results in significant time and cost savings, particulary if receiving the pig subsea.
- Events can be logged by the GRID® and downloaded to a laptop to present to the client once the pig has been recovered. This provides additional confirmation of the results of the pig run.
- Electromagnetic power and pulse rates and lengths can be altered to extend the battery life allowing specific project requirements to be met.



Gauging Run Integrity Data (GRID®)

IK Trax's GRID® System consists of a GRID® EM Transmitter connected to a Break Wire Gauge Plate (BWGP) or an Auto Resetting Gauging Fingers Ring (ARGF). When fitted to a pig and run through a pipeline, the system detects the presence and location of multiple defects* along the pipeline and logs the information and the pulse rate will change to alert the user that the BWGP or ARGF has located at least one defect.

The system is typically suitable for pipelines of 6" and upwards when using a BWGP and 10" and upwards when using an ARGF.

In the standard configuration, the BWGP and/or ARGF are fitted to the disc pack on the rear of a PIG and connected to a GRID® EM Transmitter that is mounted inside the PIG boy.

Once activated, the GRID® EM transmitter will log the start time into memory.

When the GRID® EM Transmitter is in the PASS state, it will transmit a single pulse at the Pass Pulse Rate.

The GRID® EM Transmitter will remain in the PASS state until it detects that the BWGP has broken, at which point the GRID® EM Transmitter will log the Time of Event (TOE) in memory, then enter into the FAIL state.

When the GRID® EM Transmitter is in the FAIL state, it will transmit a single pulse at the Fail Pulse Rate (FPR.)

Only the first event will be detected by the BWGP. Any subsequent events will be detected by the ARGF ring (if fitted) and logged in by the system.