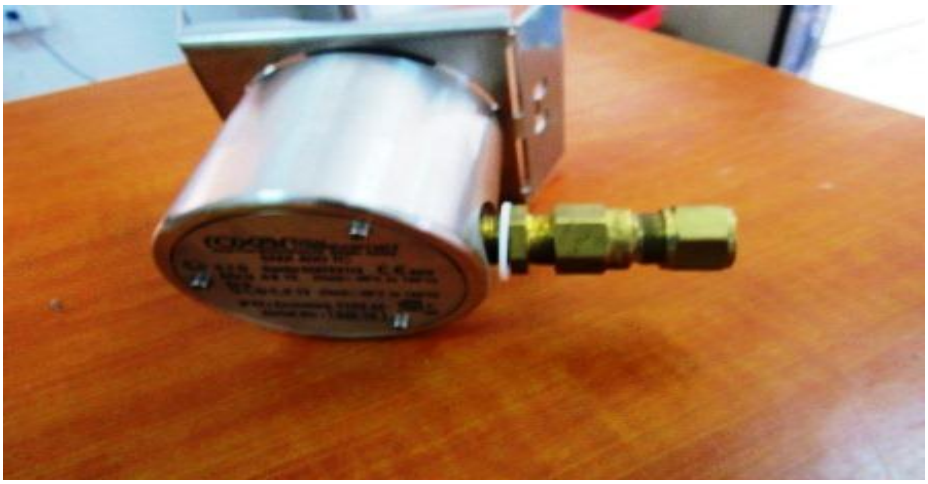
SAND MONITORING SYSTEM

The Eastline's Roxar Sand Monitoring is a non-intrusive sand monitoring system that identifies in real time sand production in water, oil, gas or multiphase flow lines for offshore and onshore locations. It offers a cost effective means for operators to optimize production by enabling the determination of sand –free rates or maximum acceptable sand production rates.

Calculation & Interface Unit

Shunt-Diode Safety



ROXAR Flow Measurement Monitor

Optimizing production is becoming more and more important as reservoirs are facing declining production curves while the demand for oil and gas is ever increasing.

One consequence of this optimization can be increased sand production which again can lead to serious damage to production equipment such as valves, chokes, pipes and elbows. If not controlled, high sand production can have a damaging impact on the integrity of the production system.
Sand monitors are valuable for production system integrity by:

- ►Allow the monitoring and prediction of erosion in process equipment in order to ensure safe production and reduced down time.
- ► Enable optimized production through the determination of maximum Sand Free Rates (SFR) or maximum Acceptable Sand Rates (ASR).
- ► Allow for improved production process in order to prevent pipelines or separators filling with sand.
- ► Enable the monitoring of sand screen integrity.

The Eastline Roxar Sand Monitor is an acoustic type device and the benefits include:

- ► Real time measurement of sand production in any water, gas, oil or multiphase flow line for both onshore and offshore locations.

- ► The quantification of sand accumulating in the production system by calculating grams per second passing through. This supports maximum Acceptable Sand Rates (ASR) with onsite sand calibration measured against actual conditions in grams per second.
- ► The ability to detect sand noise without calibration.
- ► No mechanical moving parts resulting in low maintenance requirements.
- ► It is a compact and low weight device.
- ► The non-intrusive design benefits include:
    i. No wetted parts
    ii. No pipe pressure drop
    iii. Easy to install
    iv. No shut down required for installation
    v. Easy to retrofit for existing installations