

# Geological Disaster Monitoring

Geological Disaster Monitoring is the application of stress intelligent sensing, intelligent analysis, intelligent evaluation, intelligent prediction and early warning technology, to build the "end + cloud + big data" platform of the geological environment and ontology stress of the pipeline transportation system, so as to realize the visualization, networking and intelligent monitoring of the geological environment and ontology stress of the pipeline transportation system.

## Technical Feature

- 1 Invention Patent
  - The utility model relates to a pipeline geological hazard field monitoring pile (ZL 2014 1 0200558.4)
- 6 Utility Model Patents
  - Pipeline fiber grating remote automatic warning device (ZL 2012 2 0255961.3)
  - Stress and strain monitoring device for long distance oil and gas pipeline (ZL 2012 2 0257107.0)
  - Stress-strain non-destructive monitoring device for in-service oil and gas pipelines (ZL 2011 2 0181082.6)
  - Strain monitoring device for girth weld defects of oil and gas pipelines in service (ZL 2018 2 1594804.9)
  - A multi-field coupling monitoring and warning device for buried oil and gas pipelines in permafrost regions (ZL 2020 2 1240568.8)
  - A water-sealed tunnel oil and gas pipeline deformation monitoring system (ZL 2020 2 1240599.3)
- 1 Proprietary Technology
  - Long-term monitoring technology of pipeline stress and temperature field in permafrost regions Proprietary technology number: (ZYJS2018-015S)

## Service Scope

- Monitoring of high and steep slope pipelines
- Through section pipeline monitoring
- Cross section pipeline monitoring
- Girth weld monitoring
- Monitoring of permafrost
- Pipeline monitoring through seismic fault zone



## Qualification

- The approval certificate of special equipment inspection and testing institution issued by the State Administration for Market Regulation.

## Service Performance

- Service market covers: Tarim Oilfield, Southwest oil and gas field, Western pipeline, West-east gas pipeline, southwest pipeline, etc
- 15 years of industry service experience, the accumulated detection pipeline exceeds 12,000 km.