



Product Introduction

Slim-hole MWD System (SNM-175SLIM)

Introduction

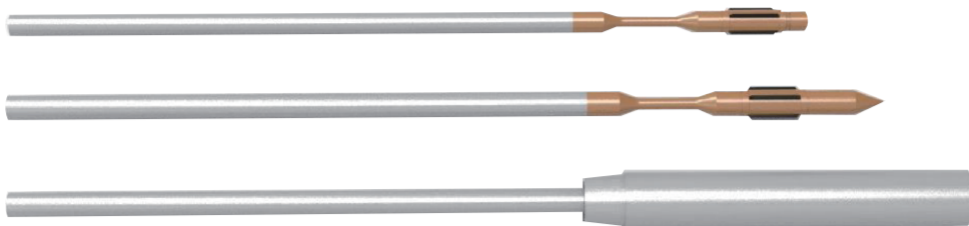
The Slim-hole MWD System is miniaturized series developed to meet the needs of small borehole operation. The overall outer diameter is reduced to 38mm, significantly reducing circulation pressure loss and casing erosion. The system features flexible joint design, improving overall instrument passability, suitable for sidetracking in old wells and slim-hole short-radius directional drilling operations.

Features

- /// Small diameter, high-driving force motor design
- /// AI-based signal filtering and processing methods for stronger small signal decoding capability
- /// Downhole condition recognition with intelligent measurement data sequence switching
- /// High compatibility of downhole electrical interfaces
- /// Flexible joint design, with build rate up to 108°/30m

Application

The SNM-175SLIM System has been deployed in multiple blocks including Zhongyuan Wenmingzhai, Zhongyuan Pucheng, and Southwest-Northeast Sichuan, with continuous failure-free operation exceeding 3000h. It has reduced drilling cycles by up to 70%, achieved a maximum single-trip downhole time of 282h, maximum sidetrack depth of 7363m, and highest bottom hole temperature of 140°C.





Product Introduction

System Specifications			
OD	φ38mm		
Tool Length	5.8m or 6.9m (with gamma)		
Max. Working Pressure	20kpsi		
Working temperature	-40 ~ 175 °C		
Flow Rate Range	5 ~ 15L/s		
Build Rate	108°/30m		
Continuous Working Time	≥230h		
Shock	1000g@0.5ms		
Vibration	25g RMS		
Measurement Parameters			
Natural/Azimuthal Gamma Sensor			
Parameter	Range	Sensitivity	Accuracy
Gamma	0 ~ 1000API	Natural 1.97CPS/API Azimuthal 0.52CPS/API	±5% F.S.@150°C ±10% F.S.@175°C
Directional Probe			
Parameter	Range	Resolution	Accuracy
Inclination	0 ~ 180°	0.1°	±0.1°
Azimuth	0 ~ 360°	1.0°	±1.0°
Toolface	0 ~ 360°	1.0°	±1.0°
Temperature	0 ~ 175°C	0.1°C	±0.5°C
Magnetic field	0 ~ 100μT	0.01μT	±0.075μT
Magnetic dip	-90 ~ 90°	0.1°	±0.15°
Surface System			
RFD	ATEX Zone 1, CE certified		
Surface Processor	110/220V power input, UL&CE certified		
Surface Transmission	Cable bus/Wireless communication		