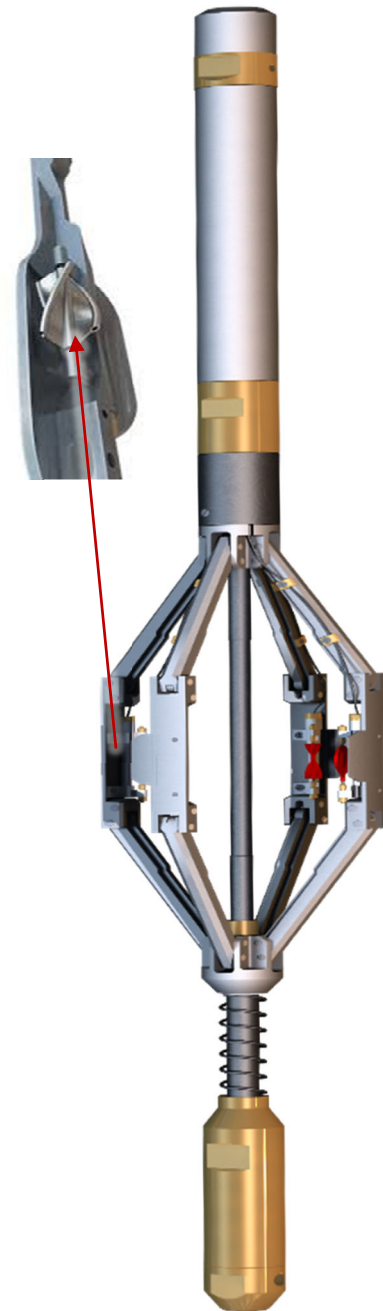


SPINNER ARRAY TOOL



A fully autonomous Spinner Array Tool (SAT) consists of 4 miniature impellers installed around the circumference on self-centralized rigid arms covering the entire cross-section of the wellbore. Additionally, the tool is equipped with an accelerometer for sensors positioning and a caliper for arms opening confirmation.

The tool is independently programmable for the duration of logging and fully compatible with other North Side PL tools and modules.



Spinner Flowmeter	
Detectable flowrates range	20-15,000 bpd
Number of array spinners	4
Build-in Positioning Sensor (accelerometer)	
Axial rotation	0-360°C
Angle of inclination	0-90°C
Build-In Caliper	Yes
General Specifications	
Maximum operating pressure	14,500 PSI (100 MPa)
Maximum operating temperature	150°C (304°F)
Arms opening range	1.7-5.8 in
Tool OD	1.65 in (42.0 mm)
Tool length	4.1 ft (1.25 m)
Tool weight	16.5 lbs (7.5 kg)
Connections	15/16 SR
Surface read-out / Memory	Fully autonomous (memory mode)
Operational time	Over 100 hours
H ₂ S resistance	6% standard (25% optional)



Spinner Array Tool (SAT) in combination with Capacitance Array Tool (CAT) provides a detailed array production profile addressing the segregation of the fluid phases across the lateral section of the well.

SPINNER ARRAY TOOL



Applications

- Production/injection flow profiling in highly deviated or horizontal trajectories with segregated flow regimes
- Cross-flow between zones localization

Advantages

- The circumferential distribution of 4 sensors allows obtaining the data across the 360° of the wellbore
- Simultaneous flow velocity assessment for different fluid phases
- Diamond spinner's bearings - extra low friction
- Friction pads for safe operations

