



Fox River Tools

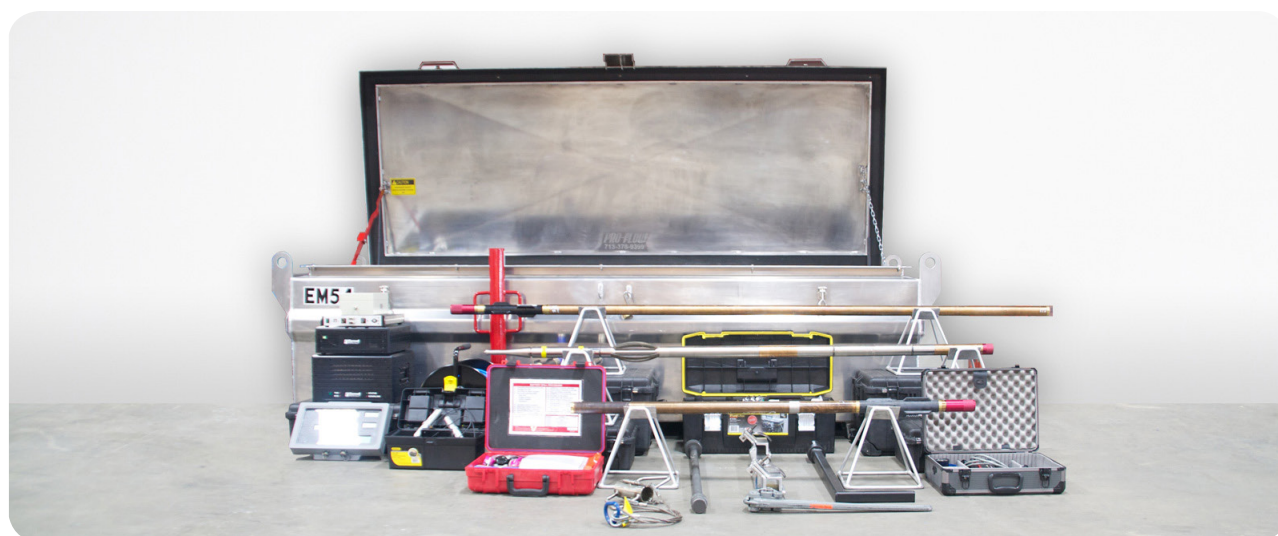
Directional Services

Electro-Trac EM System

The Electro-Trac EM MWD System, a Sharewell technology, is a revolutionary approach for facilitating underground wireless telemetry. Unlike conventional electromagnetic receivers, the Electro-Trac Data Fusion receiver utilizes multiple input channels to fuse various input/receive sources into a single decodable message. This tool is based on the GE Tensor retrievable MWD architecture enabling customers to utilize standard BHA components and common Tensor parts across their tool fleet.

FEATURES

- ✓ Specifically engineered internal and external dual gaps
- ✓ Multiple input channel structure
- ✓ Decode data from both electrical and magnetic sources
- ✓ Patented "Data Fusion" telemetry utilizing advanced noise cancellation and filtration technology
- ✓ High operating temperature (175 °C) and pressure (20,000 psi)
- ✓ Downlink capability allows bi-directional communication with down-hole tool



TOOL SPECIFICATIONS

TOOL LENGTH	Approximately 8m (26 ft.)
SIZE	57.15mm (1.875 in.)
PRESSURE RATING	137,895 kPa, (20,000 psi)
BATTERY CONSUMPTION	200+ Operating Hours depending on borehole conditions and transmitter power selection
MAXIMUM OPERATING TEMPERATURE	150 °C (302 °F)
DOWNLINK CAPABILITY	Electromagnetic transmission

OPERATING SPECIFICATIONS AND LIMITS

DATA TRANSMISSION TYPE	Low Frequency Electromagnetic waves
COLLAR SIZES	89mm-203mm (3.5"-8") Additional sizes available
OPERATING FLOW RATE	0.28 – 4.45 m³/min (75-1200 gpm)
WIRELINE RETRIEVABILITY	Retrievable and Re-insertable
MINIMUM I.D. FOR RETRIEVABILITY	57mm (2.25")
SHOCK LIMIT	1000g, 0.5 msec, ½ sine all axes
VIBRATION LIMIT	5 – 30 Hz @ 1" double amplitude, 50 – 800 Hz, 15g all axes
OPERATING FREQUENCY	2 to 12 Hz, User selectable via downlink
DATA TRANSMISSION RATE	1 to 12 BPS
MAX FLOW RATE	800 gpm
MAXIMUM DRILLING TORQUE	25,000 lbs.

SENSOR SPECIFICATIONS

PARAMETER	RANGE	ACCURACY
Inclination	0 - 180°	+/- 0.10°
Azimuth	0 - 360°	+/- 0.25°
Tool Face	0 - 360°	+/- 0.50°
Dip Angle	0 - +/- 90°	+/- 1°
Magnetic Field	0 - 100 µT	+/- 0.003 µT
Temperature	0 - 200 °C	+/- 0.5°C

