

FORCE X

Next Generation Vibroseis Control Platform

Intelligent Sweep Control



- Dynamic sweep control
- Predictive PPV protection
- Automatic abort protection

Precision Positioning



- Integrated RTK GNSS receiver
- Optional dual antenna heading
- Real-time fleet tracking

Signal Quality Enhancement



ClearWave
harmonic distortion
reduction



Broadband sweep
generation



Improved low-frequency
performance

Advanced Connectivity

- VHF radio
- Digital radio
- VibLink
- VibLink IP
- Secure Connect
- Wi-Fi
- Cellular internet



Integrated Software Platform



- NavLink navigation integration
- SrcSig signal analysis
- ViDisplay vibrator QC monitoring
- VibTest vibrator diagnostics



Real-Time Data Access

- Instant access to PSS, Vib, DAT and SysLogs
- Secure Connect file sharing
- FTP download and remote access



Operational Dashboard

- Real-time fleet monitoring
- Live QC and sweep status
- Production performance tracking
- Remote supervisory control



CAN Bus Integration

- Direct vehicle system integration
- Real-time control communication
- Robust industrial protocol
- Low-latency data exchange

Integrated Software Platform

 Calls & Messages


 Work Orders

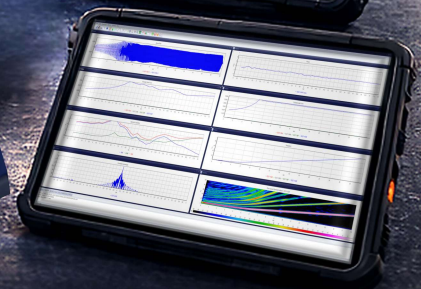
 Hazard Reporting

 Fleet Tracking

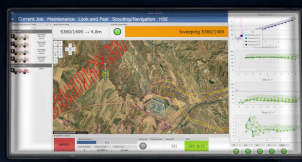
 Data Access

 Secure Connect

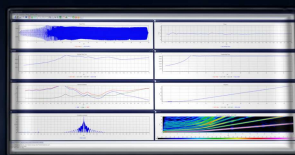
 Real-Time QC



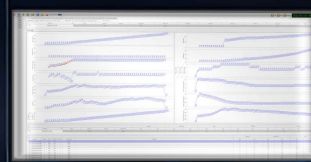
NavLink
Navigation



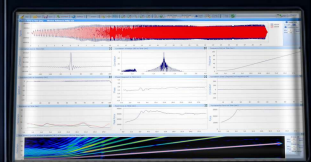
SrcSig
Signal Analysis



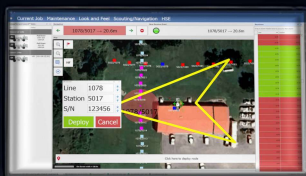
VDisplay
QC Monitoring



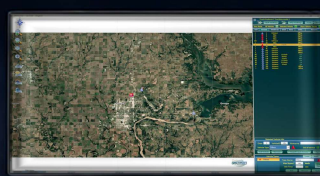
VibTest
Diagnostics



NodeLink
Field Operations



GPS Tracker
Fleet Visibility



Work Orders
& Hazards



Secure Connect
Cloud & Data



FORCE X

THE CENTRAL CONTROL SYSTEM

ForceX acts as the central control unit of the seismic source system, integrating vibrator control, monitoring instruments, field software, and communication infrastructure into a single operational platform.



FORCE X

Hardware Platform

The ForceX hardware platform is designed for the demands of seismic operations. Built with rugged components and robust connectors, ForceX provides unmatched durability and reliability in the toughest field conditions.

RUGGED, FIELD PROVEN DESIGN



Solid Aluminum Construction



Built-In Shock Protection

INDUSTRIAL-GRADE CONNECTORS

Rugged, Lockable Connectors

Corrosion Resistant

Multiple GNSS Inputs

Ethernet & Network Ports

BUILT-IN SHOCK PROTECTION

Vibration Resistant

Field Ready Enclosure

Ethernet & Network Ports



TECHNICAL SPECIFICATIONS

Engineered for performance in the harshest seismic environments.

GENERAL

■ Number of sweeps stored in library	64 (standard, custom or linked)
■ Sweep resolution	24-bit
■ Control system sample rate	0.25 msec
■ Vibrator signature recording (HFVST™)	Standard
■ Timing synchronization	GPS or VHF radio message
■ Networked wireless radio	Optional (upon request)
■ External storage	USB Flash
■ Built-in Ethernet speed	100 Mbit

PHYSICAL

■ Dimensions	406 × 305 × 152 mm (16 × 12 × 6")
■ Weight	10 kg (22 lbs)
■ Power input	9–36 VDC

SOFTWARE & SYSTEM

■ Platform	Linux-based embedded system, Win 8, 10, 11
■ Software framework	Microsoft .NET 4.0
■ I/O	Ethernet, USB, Serial
■ Supported standards	SPS, SEG P1, SBS, CSV
■ Maximum number of	64
■ vibrators/Shooters	64
■ Maximum simultaneous	64