



Sure-Shot™ Acoustic Fluid Level Systems

Through extensive research and comprehensive field testing, Nelgar Oilfield Services Ltd. has developed a **Sure-Shot™ Acoustic Single-Shot Fluid Level System** and a **Sure-Shot™ Acoustic Pressure Survey Fluid Level System**. They feature the following technological advancement over other major competitors'.

- **dual-channel signal processor** - enables the system to simultaneously process the fluid and tubing collar signals independently.
- **independent signal sensitivity adjustments** - provide optimal noise filtration for fluid and collar.
- **multiple sound generating mechanisms** - provide convenience and flexibility in obtaining optimal fluid levels in high and low pressure applications.
- **colour coded real-time display** - distinguishes fluid and collar reflections for easy interpretation of the fluid levels.

The **Sure-Shot™ Acoustic Single-Shot Fluid Level System** consists of a digital sound processing instrument and a wellhead attachment.

In addition to the single-shot system, the **Sure-Shot™ Acoustic Pressure Survey Fluid Level System** has a data recording and storage capability.

All wellhead attachments consist of a sound generator (gun) and a sound receiver (microphone).

These systems are a cost effective tool in oil and gas well production optimization - **increase production and reduce operating expenses.**



Sure-Shot™ Acoustic Single-Shot Fluid Level System

| Features | Benefits |
|---|---|
| Sound sources – well gas, CO ₂ & nitrogen, 10 gauge & 45 caliber blank cartridges | Implosion – releasing the well gas utilizing the wellhead attachment. Explosion – discharging either compressed gas or a blank cartridge into the wellbore utilizing the wellhead attachment. Applications of sound sources are based on the well characteristics for optimal fluid levels. |
| Sound generators - 3,000 psi (compressed gas) - 1,500 psi (blank cartridge) | Convenient and flexible - Multiple sound generating mechanisms for high and low pressure applications. Light weight and rugged. |
| Sound receiver | Extremely sensitive |
| Data processing | Dual-channels – independent fluid and collar signal processing. Sensitivity adjustments – independent for fluid and collars for optimal noise filtration. |
| Real-time display | Colour coded – simplifying the fluid level interpretation process. |
| Output | Flexible – electronic or paper strip chart. |
| Fluid level reading | Electronic 11-point collar counter – reading fluid level on laptop screen. 11-point collar counter – reading fluid level on paper strip chart. Travel time – calculating fluid level depth for wells with collarless tubing, or without tubing. |
| Storage and shipping case | Waterproof and durable construction with pre-formed foam. |



Sure-Shot™ Acoustic Pressure Survey Fluid Level System

| Features | Benefits |
|---|---|
| Sound sources – CO ₂ & nitrogen | Explosion – discharging compressed gas into the wellbore utilizing the wellhead attachment. |
| Sound generator - 3,000 psi | Light weight and rugged. |
| Sound receiver | Extremely sensitive |
| Sample rate | User defined. |
| Data processing and recording | Dual-channels – independent fluid and collar signal processing. Sensitivity adjustments – independent for fluid and collars for optimal noise filtration. Recording – solid state flash memory for data security and integrity. |
| Real-time display | Colour coded – simplifying the fluid level interpretation process. |
| Output | Flexible – electronic or paper strip chart. |
| Fluid level reading | Electronic 11-point collar counter – reading fluid level on laptop screen. 11-point collar counter – reading fluid level on paper strip chart. Travel time – calculating fluid level depth for wells with collarless tubing, or without tubing. |
| Storage and shipping case | Waterproof and durable construction with pre-formed foam. |