

# SAFELY AND ACCURATELY MEASURE BLOCK POSITION WITH AUTOMATIC SAFETY LIMITS FOR CROWN & FLOOR IMPACT PREVENTION

**SENSORS:** Rotational sensors interface with existing crown sheave to monitor block position and speed. Sensors can be installed on the existing crown sheaves or retrofitted to the drawworks.

**AUTOMATIC SAFETY INTERLOCK:** Upper and lower block limits are set during rig up process. If limits are exceeded, a smart valve is actuated and the drawworks clutch and throttle are disengaged while the brake is applied. A visual and audible indicator on the electronics alerts the operator of this condition. Optional wireless alerts are sent to additional personnel.

**ZONE CONTROL:** Intermediate zones can be programmed for top drive rigs which prevent travel thru the pipe platform.

**DATA LOGGING:** Logs all measurement data and alarms to USB memory stick. Anti-manipulation feature prevents post-process data corruption.

**SPEED CONTROL:** Prevents the block from over running the upper and lower limits even when the brake is engaged due to inertia.

**WEIGHT MODE:** Adds weight sensor to crown blocks for decimal point load accuracy. Overload alarms trigger the automatic safety interlock. Also compatible with pad type hydraulic load cells.

**SANDLINE VERSION:** Additional display or combined display option shows both the main and sandline position, depth, speed, and weight parameters. Safety interlocks can be programmed for all measurement parameters.

PROGRAMMABLE CONTROLLERS • TENSIOMETERS • SOFTWARE



### INSTRUMENTATION

### STANDARD SYSTEM:

**Crown Rotational** Sensor Assembly



LCI-80x Crown Out Floor Out Controller



Solenoid Air **Control Valve** 





**OPTIONS:** 

Weight Sensors in Crown Blocks



LCI-90i - Dual Crown & Sandline Monitor



Weight Sensors -Hydraulic Pad type



Sandline Rotational Sensor Assembly



**Deadman Safety** 



**Encoder Sensor** at Winch



## CROWN OUT FLOOR OUT DISPLAY:



#### **OPTIONAL SOFTWARE FEATURES:**

- KPI Reports
- On-Rig Video
- Weather Data
- Rig Vitals/Engine

- Ton/Miles Calculator
- Crew Activity Logging
- GPS/Rig Location
- Bluetooth, Wifi or Cellular communications