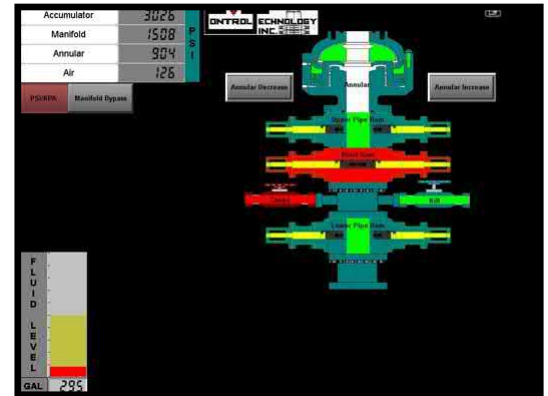


System Specifications

- -40°C to +55°C (-40°F to 131°F) storage temperature rating
- 12" - 21" Touch Screen
- 24V system
- Up to 200 levels of internal security to prevent system changes from unauthorized personnel
- Open Source System

Visual

- Designed, configured, programmed by our in-house automation department
- Configurable for current and future requirements
- Can be serviced, updated and changeable on site
- Industry standard components for easy supply and service
- All panel control functions require two handed operation
- Stack configuration can be changed on site by driller
- Displays all functions in real time
- Displays system pressure
 - ◊ Accumulator, manifold, annular, diverter, shear ram, blind/shear ram, pipe ram, HCR air, nitrogen
- Displays BOP Control Functions from accumulator unit
- Displays Hydraulic Fluid Level
- Visual Alarms—alarms have configurable set points
 - ◊ High/ Low Accumulator Pressure
 - ◊ High/ Low Air Pressure
 - ◊ High/ Low Fluid Level (also audible)
 - ◊ Extended Pump Run
 - ◊ Power Fail
- Information can easily be transferred over to any compatible windows-based devices (laptop, tablet, smart phone) should the touchscreen become inoperable or damaged



Optional Recordable/ Tracking of Data

- Provide event logs or any change in status
 - ◊ Sequentially records all events that transpired during the operation of system
 - ◆ Timestamps all data
 - ◆ Annular/Ram open close
 - ◆ Valve open close
 - ◆ Ram counts
 - ◆ Cycle counts
 - ◆ Pressure test recording
 - ◆ Function testing
 - ◆ Logging of all system alarms
 - ◆ Logs pressure and pressure trends graphically
 - * Accumulator, manifold, annular, diverter, shear ram, blind/shear ram, pipe ram, HCR, air nitrogen

Pipe Ram	
Pipe Ram Serial Number -	Pipe Ram Function History:
Pipe Ram Size -	Activation Time -
Pipe Ram Size Display On Main Screen	Message
ON	06/05/2016 10:43:34 Pipe Ram Function Pressed
Pipe Ram Last Close Time - 08:11	06/05/2016 09:34:25 Pipe Ram Closing Time - 08:00
Pipe Ram Warning Set # -	
Pipe Ram Count Alarm Set # -	
Upper Pipe/Rip Ram Count - 1	
Pipe Ram Count Display on Main Screen	
ON	
Exit	

- ◆ Hydraulic Fluid Level
 - ◆ Pump run times
 - ◆ System settings changes
 - ◆ System reports can be configurable to customer requirements
- ◇ Operator can add notes to any event
 - ◇ 90 days of data storage minimum (additional storage available if required)
 - ◇ Can be programmed to satisfy local jurisdiction standards
 - ◇ Can be installed on existing accumulator units without PLC controls



Additional Capabilities

- Remote access capabilities from anywhere in the world. (Internet must be available on site)
 - ◇ Visual is in real time. Mirror image of drillers panel
 - ◇ Data is read only
 - ◇ Reports can be accessed and stored remotely
- Mirror drillers screen at accumulator and /or client shack
 - ◇ Data is read only
- Monitor Remote Camera(s) (i.e. at accumulator unit, tool push shack, consultant)
- Flow Meters to measure actual delivered volume to BOP (annular, rams, HCR) ensuring full closure or alarm if leak detected.

