

EMERGENCY SHUT DOWN (ESD) CONTROL PANEL

Oiltest's E. S. D. Panels offer a portable and fast response well head shut down system.

An E.S.D. control panel is a vital piece of well test safety equipment, designed to pick up an emergency signal from any of the E.S.D. remote stations located on all the well test equipment.

When a remote station is activated, the pneumatic (air) pressure is bled off. The gate valve held in open position by hydraulic/spring actuator bleeds down hydraulic back to the panel reservoir in a closed circuit and the valve on spring will force the gate to close. Only air is bled to the atmosphere, no spill of hydraulic oil. ESD is designed to work with ESD control Panel. Typical ESD response time is 3 seconds.

The E.S.D. unit is sized for the surface flowhead pressure rating and hydraulic actuator swept volume.



ESD CONTROL PANEL

Specification - ESD Panel

Service & Output Pressure	Supply & Pilot Pressure	Pump Type & Ratio	Valves	Reservoir Capacity	Cabinet Material	Dimensions h x l x w	Weight
Psi (bar)	Psi (bar)			U.S. Galls (litres)		ins (mm)	lbs (kgs)
Standard & 10,000 (690)	150 (10.3)	Manual Hand, lever operated Auto 1 x Haskel M-110 Ratio Air : hydraulic 1 : 110	Relay: Low press' manual & auto. Hydraulic control: High press' 3 - way Relief H.P: 10,000 psi stn stl Relief L.P: 1.0 psi Check: 10,000 psi stn stl	8 (30.28)	316 stn stl	18.12 x 22.215 x 18.25 (460 x 565 x 464)	120 (55)

Specification - ESD Unit

Dual outlet ESD System

Maximum Allowable Hydraulic W.P.: 10000 psig
 Maximum Allowable Pneumatic W.P.: 150 psig
 Nominal pneumatic O.P.: 90 psig
 Design Temperature: -50°F to 250°F
 ESD System response time: 3 Secs.

MATERIALS

Housing/tank reservoir: Stainless Steel

SYSTEM DESIGN FEATURES

Air operated dual pump system
 Control valves, gauges on front panel

 Single reservoir
 Pumps complete with lever attachment to facilitate manual operation
 Air filter
 Inlet mains air pressure regulator and gauge
 Pump control pressure regulator and gauge
 Pilot line air pressure regulator
 Pilot line air throttle choke control valve
 Pilot line system charge button
 Pilot line bulkhead fitting, quick connect fittings 6mm
 Panel Emergency stop button
 ESD override valve
 Hydraulic and Pneumatic circuit gauges
 Hydraulic relief valve
 Air and Hand operated high pressure release valves
 High pressure bulkhead connector, 1/4" NPT.
 Control panel ESD valve and 5 stainless remote ESD valve units.

VALVES

Fluid Inlet: 2" 600# RF flange Balon Ball Valve
Oil Outlet: 3" 150# RF flange Butterfly Valve
Bypass line: 2" 600# RF flange Balon Ball Valve
Drain line: 2" 150# RF flange Butterfly Valve

CONNECTIONS

Fluid Inlet: 2" # 150 RF flange x 2" fig 602 female
Fluid Outlet: 3" # 150 RF flange x 3" fig 206
Drain line: 3" # 150 RF flange x 3" fig 206 male

MISCELLANEOUS

Temperature Indicator points: 3/4" NPT female x 2" 150# RF flange
Fluid sampling points: 3/4" NPT female x 2" 150# RF flange

DIMENSIONS

Weight: 3787 kg (Skid & Empty Vessel)