

Enclosed solids handling tank (ESHT)

Expro's enclosed solids handling tank (ESHT) enables solids removal and measurement with minimum exposure to vapours.

The ESHT is designed to operate at minimum pressures and to collect solids which are filtered out of the production process by high pressure applications.

The tank consists of a vertical cylindrical top part with a funnel shaped bottom part. Sight glasses in the funnel enable liquid-and solid level determination. A 10" air operated valve at the bottom of the funnel allows draining of solids.

The design includes a 2" or 3" inlet, 2" liquid drains at several levels on the tank and a flame arrestor as an integral part of the vent line. An internal water spray enables the tank and sight glasses to be flushed.

A roller conveyor at the bottom of the frame enables easy removal of solids containers. Finally a weight indicator is supplied to measure produced amounts of solids.



Features and benefits

Reduces the need for manual handling

Reduces exposure to personnel

Small footprint

Applications

Onshore and offshore oil and gas well testing and clean-up operations.

Solids exclusion

Frac clean up

Well Testing

Surface equipment



Technical specifications

| | Type 1 | | Type 2 | | Type 3 | |
|-----------------------------------|--|-----------------|--|-----------------|---|-----------------|
| Working pressure (inlet manifold) | 150 psi | | 150 psi | | 150 psi | |
| | (10 bar) | | (10 bar) | | (10 bar) | |
| Working pressure | Atmospheric | | Atmospheric | | 150 psi | |
| (vessel) | | | | | (10 bar) | |
| Capacity | 10.4 bbls | | 12.6 bbls | | 9.4 bbls | |
| | (1.7 m3) | | (2.0 m3) | | (1.5 m3) | |
| Connections | Effluent inlet: | 2" fig 1502 | Effluent inlet: | 3" fig 1502 | Effluent inlet: | 3" fig 1502 |
| | Liquid outlet: | 2" fig 1502 | Liquid outlet: | 2" fig 1502 | Liquid outlet: | 2" fig 206 |
| | Solids outlet: | 10" knife valve | Solids outlet: | 10" knife valve | Solids outlet: | 10" knife valve |
| | Water flush | ½" crowsfoot | Water flush | ½" crowsfoot | Water flush | 1" 150lb flange |
| | Air inlet: | ½" crowsfoot | Air inlet: | ½" crowsfoot | Relief outlet: | 4" fig 206 |
| | Manhole: | 16" | Manhole: | 19" | Vent outlet: | 4" fig 206 |
| | | | | | Air inlet: | ½" crowsfoot |
| | | | | | Manhole: | 24" |
| Weight (dry) | 2,750 kg | | 3,500 kg | | 7,000 kg | |
| | (6,062 lb) | | (7,716 lb) | | (16,534 lb) | |
| Dimensions | 4.5m x 2.0m x 1.9m | | 3.8m x 2.0m x 1.9m | | 4.4m x 2.1m x 1.8m | |
| | (14.8' x 6.6' x 6.2') | | (12.5' x 6.6' x 6.2') | | (14.4' x 6.9' x 5.9') | |
| Special Features | Air operated solids drain valve | | Air operated solids drain valve | | Pressurised vessel | |
| | Internal water flush system | | Internal water flush system | | Nitrogen purge facility | |
| | 4 liquid drains at several heights | | 5 liquid drains at several heights | | Air operated solids drain valve | |
| | Integrated flame arrestor in vent line Separate weight indicator for solids measurement | | Integrated flame arrestor in vent line Separate weight indicator for solids measurement | | Internal water flush system | |
| | | | | | 5 liquid drains at several heights | |
| | | | | | Separate weight indicator for solids measurement. | |

Note: Other sizes, configurations and pressure ratings are available to meet most applications. For more information contact your local Expro representative or email welltesting@exprogroup.com