Wellhead Desander

The Expro Wellhead Desander is used to remove solids from Gas Wells.

The Wellhead Desander is designed to be deployed close to the wellhead and upstream of the first well control device, usually a choke manifold, allowing solids to be removed at higher pressure and therefore lower velocity.

The well flow is directed tangentially into the internal deflector assembly, the resulting spinning effect forces the heavier solids to the wall of the vessel. As the solids lose energy they fall due to the effects of gravity and are collected in the bottom of the vessel.

The solids free gas is extracted from the centre of the deflector assembly and through the overflow outlet at the top of the vessel.

The vessel can be isolated from the incoming gas flow and the accumulated solids flushed out of the vessel by pumping water into the vessel flush connection and recovering the solids from the vessel drain.

For maximum effectiveness, the units would usually be deployed in tandem and used on a standby/duty regime to allow continuous solids removal.

Alternative configurations may include the use of Expro's proven severe service adjustable choke, connected to the vessel drain to control discharge from the vessel.

The unit is manufactured to ANSI, API, PED and NACE specifications for use in all service environments.

Applications:

- Onshore and Offshore Gas well testing and clean up operations
- Post Fracture Stimulation flowback, units used in tandem to remove proppant continuously from gas flow
- Measure formation sand recovery in high rate gas well applications

Features & Benefits:

- Low back pressure design permits high flow rates
- Double valve isolation of Desander vessel
- Fitted with a bypass line to enable isolation
- Flush removal of accumulated solids, no containment break required to empty units
- Monitor/Bleed/Equalisation panel for ease of operation
- Removable, hardfaced deflector insert
- Bypass line features connection for intrusive sand detector
- Unit constructed to DNV 2.7-1
- Drain line can be retrofitted with Expro Hydraulic severe service adjustable choke

Technical Specifications:

Working press. psi (bar)	Working temp. °F (°C)	Maximum Gas Rate MMSCF/D	Solids Holding Capacity Gallons (Litres)	Weight (dry) lbs (kg)	Dimensions h x l x w	Design Code and Service
10,000 (690)	-50/350 (-46/175)	Approx 100	25 (113)	31,350 (14,250)	6.06 x 2.5 x 3	ASME VIII Div.2, ANSI B31.3, NACE MR-01-75 ISO 15156 DNV 2.7.1 API 6A PED/97/23/EC

Note:The above referred design codes are for guideline purposes only. Other sizes, configurations, and pressure ratings are available to meet most applications. For specific information and any additional codes applicable to comply with region specific standards please consult your local Expro representative.