

SAND FILTER

The DUAL PORT SAND FILTER is a field proven, versatile and rugged surface equipment that finds its application in oil or gas wells during a well test and subsequent production life of a well. It detects and traps sand/solids coming with the well stream before passing through the coils of an indirect heater or entering the separator vessel. It acts as a safeguard against erosion of the heater coils and pipework downstream of it and also prevents overflowing the separator with these solids since they tend to settle at the base of the separator vessel on entry. Overflowing the separator vessel with sands and solid particles can lead to a dangerous increase in separator pressure, damage to valves and inside components of the separator, malfunctioning of separator controls and metering devices, and affecting the overall efficiency of the separation process.

PRINCIPLE OF OPERATION

Well fluid bearing solids and sand particles enter the Sand Filter Port via the inlet of the Filter, where the fluid imparts on the filter element reducing the velocity of the fluid and subsequently accumulating the solid particles for collection / analysis.

The Sand Filter has two Filter Ports, each with a removable screen to allow continuity of test in case one filter is blocked. Each can be drained to remove solids, without removing the screen. Our Filter design incorporates a by-pass line when the filter is not required. Draining of trapped solids / sand is achieved through a drawn line situated below the base of the filter pot. Oiltest Well Services Ltd has both the 1504m and 2004m Screens available.



10K DUAL PORT SAND FILTER

Specification

Max. working pressure	:	10000 Psi (700 bar)
Working temperature	:	-20° C to 120°C
Max. dry Gas flow	:	35 Mmscf/d (1E6 M3/d)
Max Liquid Flow	:	up to 5000 bbls/d
Sand retention volume	:	5000 bbls/d
Max. Delta P. Screen	:	1500 psi (100 bar)
Volume Filter Pot	:	46 Litre
Hub Connection seal	:	10" / 82 steelring

Connections:

Top inlet hub connection	:	Techlok 10"/82
Inlet	:	3" Fig. 1502 Female WECO union, bore 78 mm.
Outlet	:	3" Fig. 1502 Male WECO union, bore 78 mm.
Drain	:	2" Fig. 1502 Female WECO union, bore 38 mm. (operational 2" adj. Drain-choke)
Internal connections	:	flanged 3.1/16" x 10.000