

Air Sparge Systems



Geotech Rotary Vane Blower Packages

The Geotech Air Sparge System is designed to provide positive air pressure into the subsurface thus aiding the volatilization and biodegradation process associated with soil vapor extraction technology.

FEATURES

- Rotary vane compressor with coupled motor
- Delivery of oil-free air into the subsurface
- · Pulse-free air flow
- Heavy-duty filters
- · Inlet particulate filter
- TEFC motors

OPTIONS

- · XP motors available
- · Pressure gauges / switches
- Temperature gauges / switches
- · Pressure relief valves
- · Discharge check valve
- CFM gauge
- Control panels to integrate with soil vapor extraction systems and other equipment

OPERATION

Pumping action is produced by a series of sliding, flat vanes as they rotate in a cylindrical housing. An eccentrically mounted rotor turns and the individual vanes slide in and out of their slots by centrifugal and pressure loading forces. This creates a series of air compartments of unequal volume against the wall of the housing. These compartments get larger during the suction part of the cycle, creating vacuum at the intake port and smaller during the discharge portion of the cycle, creating pressure at the exhaust port.



The vacuum and pressure flows are free of pulsation because the inlet and outlet ports do not have valves and the air is moved continuously rather than intermittently.

APPLICATION

By injecting air directly into the groundwater, the Geotech Air Sparge System remediates groundwater by volatilizing contaminants and enhancing biodegradation. Contaminants are removed from groundwater by physical contact with air and are carried up into the unsaturated zone (i.e., soil). As the contaminants move into the soil, a Geotech provided soil vapor extraction system can be used to remove vapors from the subsurface.

SPECIFICATIONS

Model		Horsepower & Description	Max Flow (CFM)	Max Pressure (PSIG)
DTA 60	TEFC or XP	5 HP 230 Volt, single or 3-phase	41	21.8
DTA 80	TEFC or XP	5 HP, 230 Volt, single or 3-phase	52	11.6
DTA 80	TEFC or XP	7.5 HP, 230 Volt, single or 3-phase	52	21.8
DTA 100	TEFC or XP	10 HP, 230 Volt, 3-phase	68	21.8
DTA 140	TEFC or XP	15 HP, 230 Volt, 3-phase	89	21.8

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