

# *LCQ DUO Exhaust Requirements*

**It is your responsibility as the user to provide an adequate exhaust system.** Much of what is introduced into the LCQ<sub>DUO</sub> MS detector will eventually be exhausted from the rotary-vane pump, along with the small amount of oil vapor that these pumps characteristically emit. Therefore, the pump should be connected to a fume exhaust system.

**Note.** An efficient fume exhaust system is required for the proper operation of your rotary-vane pump. Most API applications will contribute to the accumulation of solvents in the rotary-vane pump. These solvents must be purged from the mechanical pump oil periodically by opening the ballast valve located on the top of the pump. When the ballast valve is opened a large volume volatile solvent waste might enter the fume exhaust system. Therefore, your fume exhaust system must be able to accommodate the periodic purging of the solvents. The frequency of the purging is dependent on the throughput of your system.

The rotary-vane pump has two functions: (1) provides forepressure for the turbomolecular pump, (2) provides a vacuum for the capillary skimmer of the API source.

The rotary-vane pump requires a 25 mm (1 in.) exhaust port.