

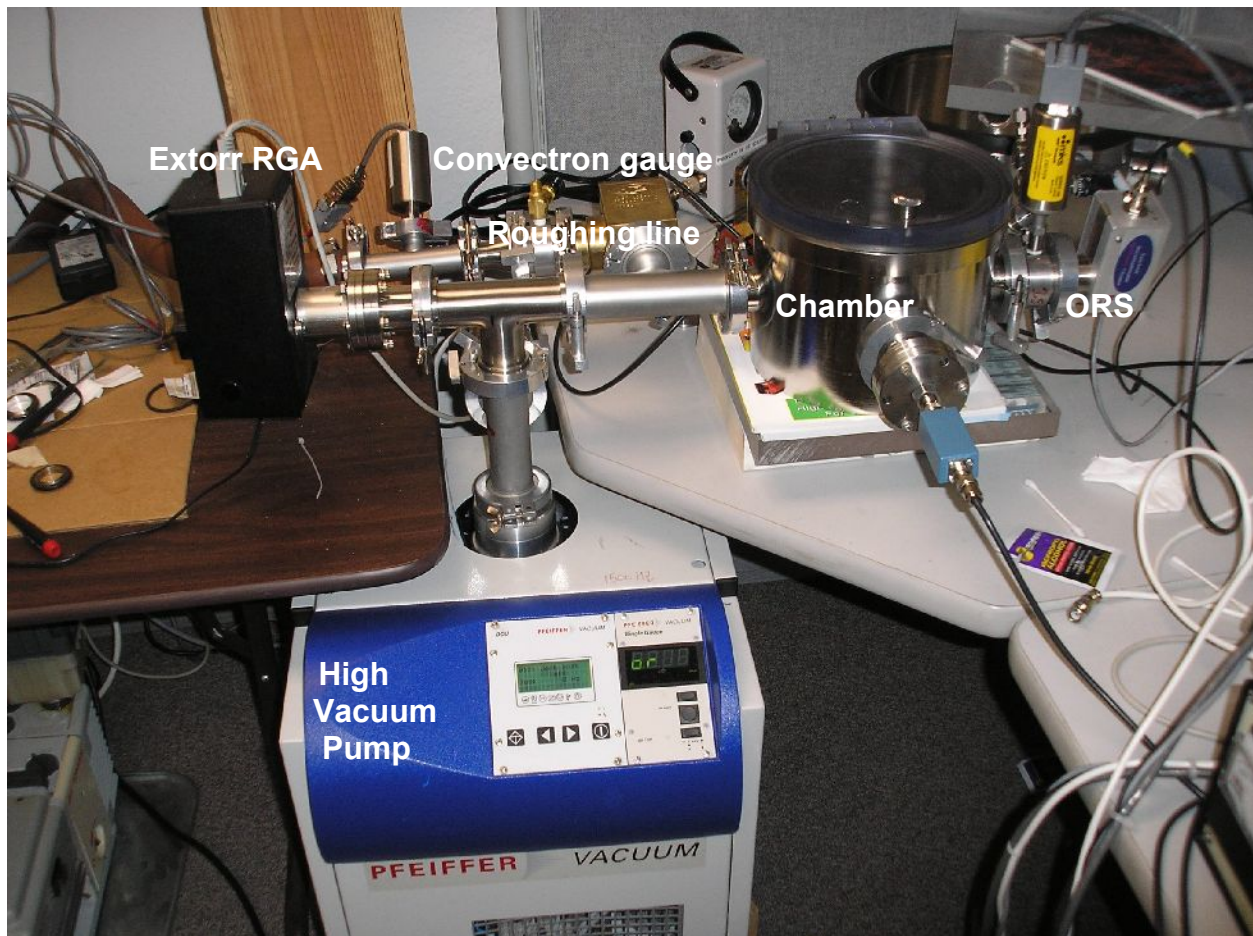


## Evactron De-Contaminator Applications Note

### RGA Results of Chamber Cleaning

Evactron cleaning is a new tool for removing hydrocarbon peaks from RGA spectra.

The test set up:

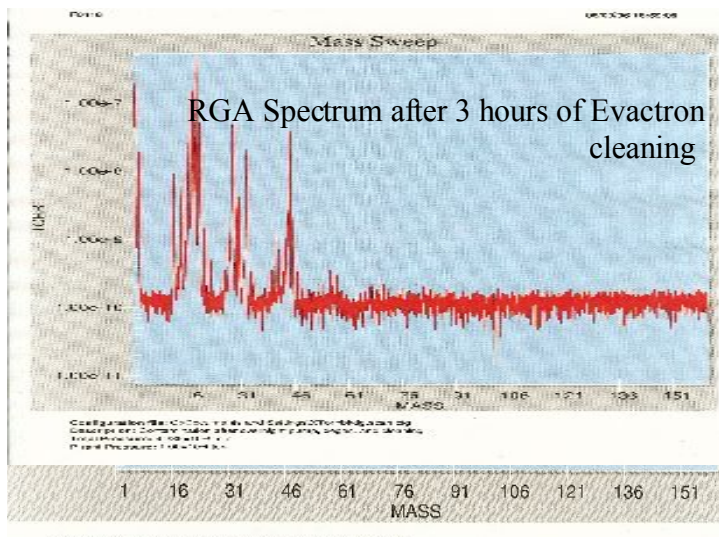
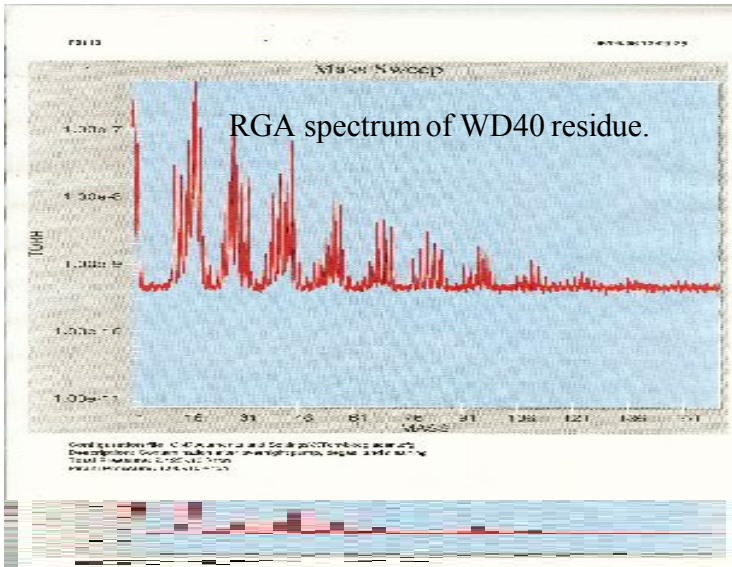


The Extorr RGA has pirani vacuum gauge and Ion Gauge built in and is self protected against pressure surges. It can be operated as soon as the chamber goes below  $10^{-4}$  Torr. The ion gauge results of the exTorr read high. The full range “single” gauge readings on the Pfeiffer pump station were more reliable. The ORS is the Evactron Oxygen Radical Source.

Evactron cleaning is done by raising to 600 milli Torr, flowing air through the RF plasma in the ORS to make O radicals, and flowing the O radicals through the chamber to the roughing pump to oxidize Hydrocarbons. To make an RGA measurement the Pfeiffer turbo pump cube is started, the

Evactron cleaning is direct through the RGA for about 1 minute while the turbo spins up. Then the air flow is stopped and the roughing is valved off. The turbo quickly brings the pressure down to RGA range and measurements are made.

Test Results on a WD40 residue that was left in the chamber overnight



The Evactron cleaning almost completely removes the HC peaks above M/e 55.

F0607 – R Vane