

sTEm-at-Work

Puzzle #25

Chemical Deposition Chamber Outgasing

A technician working for a semiconductor manufacturing facility removes residual molecules that have been adsorbed to the inside surface of a below atmospheric pressure chemical deposition chamber by heating the chamber for several hours. The heat from this "bake-out" process drives the adhered molecules back into the gas state so they can be pumped from the chamber. To perform this procedure, the tech closes the chamber, turns on the vacuum pump, applies heat to the walls of the chamber and records the pressure inside the chamber as a function of time. Two identical chemical deposition chambers are to go through this process one at a time. One chamber was "baked-out" just before a shift change and a new shift tech had to complete the work started before he reported for work. After examining pressure data for the two identical chemical deposition chambers, the technician knows which chamber had already been "baked-out".

Chamber CVD T4 has not been through the "baked-out" process.

(yes or no)

