

sTEem-at-Work: Puzzle #18 (Vacuum Gage Performance)

At “We-Work-in-a Vacuum”, vacuum gages are used to indicate when a vacuum chamber is ready for a metal part coating process to begin. The technician opens the chamber door at room pressure and puts the part into the chamber. The technician understands that the metal part has molecules (oxygen, hydrogen, nitrogen gas) initially adsorbed (stuck) on the metal surface. The tech, closes the door, turns on a vacuum pump and watches the vacuum gage needle go down as gas is pulled out of the chamber through the pump. The gage performance is shown below. The tech sees that the pressure stays constant for a while, gently taps the side of the gage and notices that the pressure eventually starts to continue to go down.

The gage needle got stuck until the gage was tapped on the side. (yes or no) Submit your answers at www.fl-ate.org

