

Allegato n. 1

Prova 1

Domanda 1

Il candidato descriva una procedura di spegnimento in sicurezza di un impianto da alto vuoto.

Domanda 2

Cosa si intende per chiave primaria in Access?

Accertamento conoscenza della lingua inglese (non oggetto di valutazione)

High vacuum means removing almost all the air from a space so that very few gas molecules are left inside. In high vacuum, the pressure is much lower than normal atmospheric pressure. This is important in many scientific experiments because air molecules can disturb beams of particles or surfaces of materials. In particle accelerators and surface science, special vacuum pumps are used to lower the pressure to very small values, often far below one millionth of the pressure of the air we breathe. Measuring high vacuum usually requires special gauges that can detect very low pressures.

Industria *Fabrizio* *Luciano*
Melli

Prova 2

Domanda 1

Il candidato descriva le principali componenti ed il funzionamento di una tipologia di pompa a vuoto a scelta.

Domanda 2

Che cosa è un query in ambito Access?

Accertamento conoscenza della lingua inglese (non oggetto di valutazione)

Physical measurements are ways to assign numbers to physical quantities so they can be compared and studied. For example, pressure can be measured in units such as Pascal (Pa) or Torr. In a vacuum system, pressure gauges measure how many gas molecules are present in a chamber, which tells us how good the vacuum is. To understand a physical measurement, you need a clear method and the right tools, and it is important to calibrate instruments so their results are accurate. Simple instruments measure length with a ruler, while advanced systems in physics labs use electronic detectors and sensors for precise results.

Luigi Bertoni
Maleri

Fabrizio Lina Moron

Prova 3

Domanda 1

Il candidato descriva le principali componenti elettromeccaniche di un sistema ad alto vuoto.

Domanda 2

Cosa si intende per tabella pivot e quali sono i suoi possibili utilizzi?

Accertamento conoscenza della lingua inglese (non oggetto di valutazione)

A Van de Graaff accelerator is a machine that uses very high electric voltage to push charged particles faster and faster. It works by moving electric charge to a metal sphere, creating a strong electric field. When particles such as protons or small dust particles enter this field, they are pulled or pushed and gain speed. These accelerators can make particles reach high energy, which scientists use for experiments in physics and materials research. Originally invented by Robert J. Van de Graaff, these machines are still used today to study particles and nuclear reactions.

Robert J. Van de Graaff

Tabella Pivot Lezione

Melli