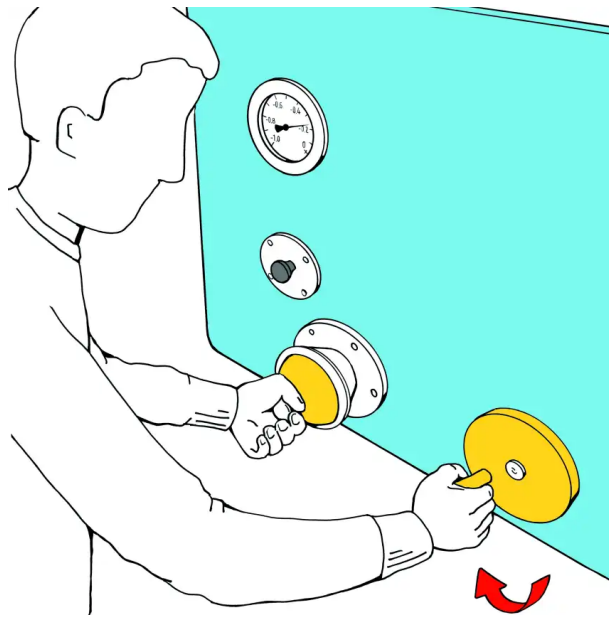


Magdeburg hemispheres

Are you stronger than air?



Push and hold the hanging hemisphere gently against its counterpart.

Turn the crank at the same time to evacuate the air from the sphere.

Pull at the sphere.

Observe the scale. What is the lowest pressure that you are still able to pull away the sphere?

Release the vacuum in the sphere by pushing the black button.

By evacuating the sphere it is sucked in – or more precise: The higher external atmospheric air pressure pushes both hemispheres together.

The experiment was performed for the first time by Otto von Guericke in 1654 in Regensburg to show the existence of the earth's atmosphere. The spheres had a diameter of 30 cm. On both sides 15 horses were trying to pull the hemispheres apart.

One set of Otto von Guericke's hemispheres is on display at the Technical University Braunschweig.