Application No. 686: Decelerated fall

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Electromagnetic induction as brake

Video

Materials used

- 1 sphere magnet K-19-C (www.supermagnete.fr/eng/K-19-C)
- 1 sphere magnet K-08-C (www.supermagnete.fr/eng/K-08-C)
- 1 aluminium tube:
  500 mm in length, 20 mm in diameter
- 1 aluminium tube:
  500 mm in length, 15 mm in diameter

Magnetic brake

The drop tube through which the sphere falls down without touching the walls could also be classified as an electromagnetic brake. The smaller the tube diameter, the slower the magnet descents. Using a variety of magnetic sphere sizes and tube diameters is great for didactical demonstrations.

Similar projects

The project "Aluminum Foil as Contact-Free Parachute" (www.supermagnete.fr/eng/project77) contains an in-depth explanation of the phenomenon shown above. Our collection of other "induction projects" (www.supermagnete.fr/eng/projects/induction) may also interest you.

Articles used

1 x K-08-C: Sphere magnet Ø 8 mm (www.supermagnete.fr/eng/K-08-C)
1 x K-19-C: Sphere magnet Ø 19 mm (www.supermagnete.fr/eng/K-19-C)

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