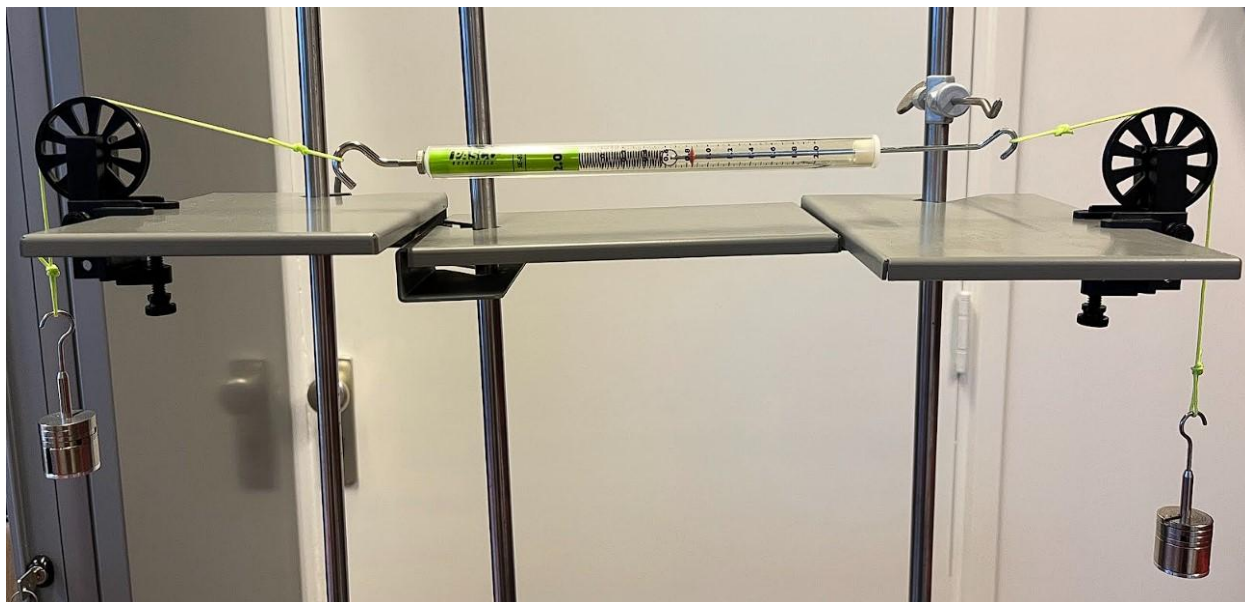


1G10.42 - ATWOOD'S MACHINE



Key words: mechanics, gravitational acceleration, mass, Newton's meter, equilibrium, second law of motion

Equipment List:

1. Two weight constrictions of adjustable weight
2. Two strings
3. Two pulleys
4. Newton's meter

How to assemble and operate:

- Assemble the equipment as shown on the image
- Put weights at the end of the strings - start with equal weight on both ends and observe what Newton's meter measures - talk to the students about this. The setup is under equilibrium when the two masses are identical.
- Now, try experimenting by putting different masses on each end and observe what happens. Feel free to discuss it with the students as well.

Description/Theory:

Atwood's machine consists of two weights connected by a string that passes over a pulley. The demonstration shows how the machine can be used to study the laws of motion and gravity, different weights lead to different results.. It's a practical and visual way to understand Newton's second law of motion and the concept of gravitational acceleration.

Comments/Notes: