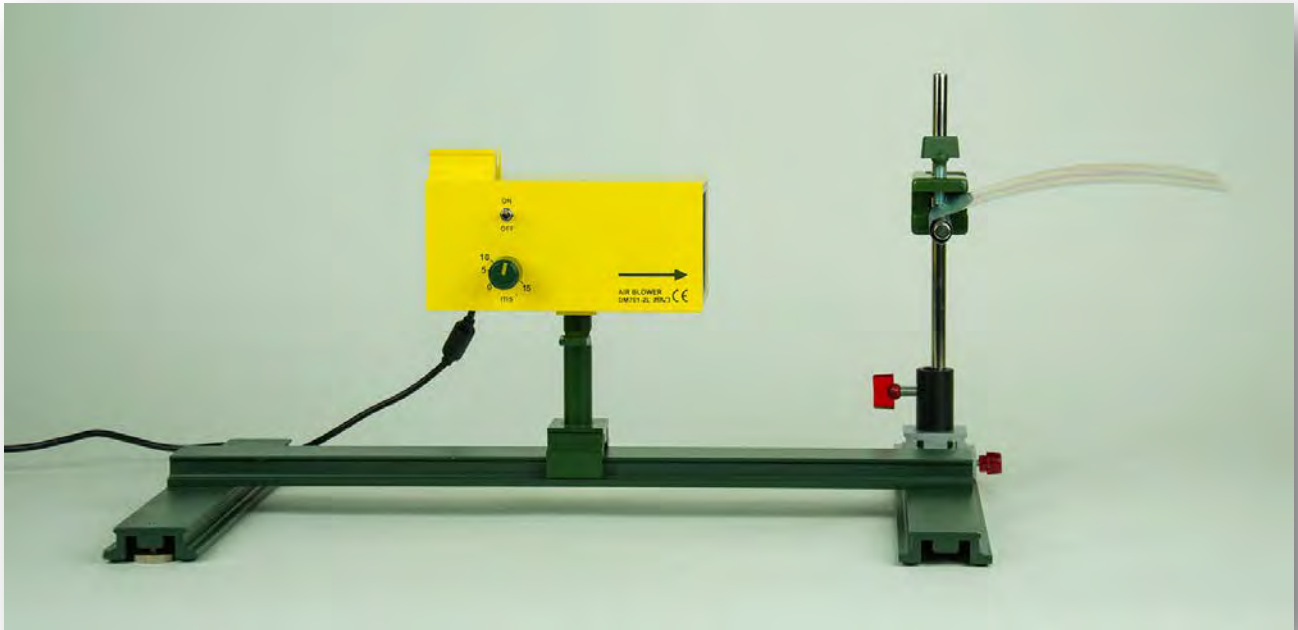




Material:

Item Code	Qty	Description
DS101-1G	1	Support base, large, L=500 mm
DS103-7G	1	Sliding saddle, H=70 mm
DS093-04	1	Sliding saddle "Sepp", H=40 mm
P7240-1C	1	Support rod, round, L=250 mm, D=10 mm
P7240-1F	1	Support rod, round, L=150 mm, D=10 mm
DS400-3K	1	Bosshead cross-pattern, Demo, green
DM710-2L	1	Aluminium sheet, curved
DM701-2L	1	Blower 12 V
P3130-2Q	1	Fixed voltage transformer 12V DC/10 A

Purpose

Demonstrating the uplift from negative pressure in a compacted air flow or owing to the overpressure on the other side

Preparation

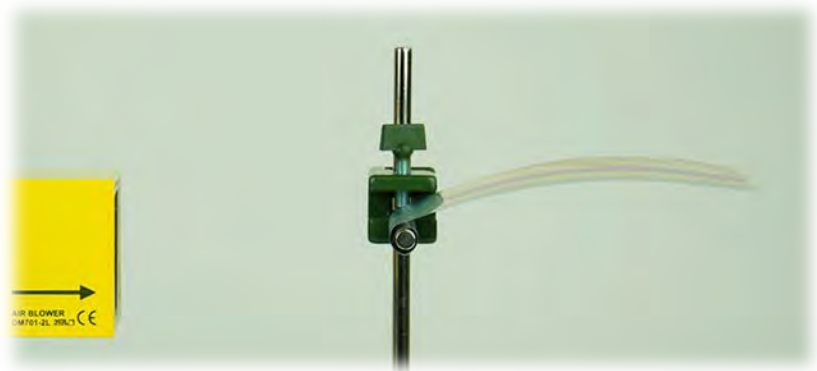
- the sliding saddle is fixed on the center of the support base
- the blower is inserted into the sliding saddle
- the sliding saddle „Sepp“ is fixed to the side arm of the support base
- the support rod with 250 mm is inserted into the sliding saddle „Sepp“
- afterwards the cross-patterned bosshead is attached and the support rod with 150 mm is inserted
- the curved aluminum sheet is pushed onto the support rod; make sure that they can freely oscillate
- the rotary knob for the flow speed of the blower is turned to the very left
- the blower is powered by a fixed voltage transformer (12 V DC, min. 6 A)



Experiment

We turn on the blower and slowly increase the flow speed to 10 - 12 m/s.

The initially suspended aluminum sheet is first lifted by the flowing air into a horizontal position and then raised even further by the air flowing above it.



Note

The lift increases with the flow speed and the surface area, at which the negative pressure is created.