

# Wimshurst Machine

Junior  
High  
School

Senior  
High  
School

ESP59205

Wimshurst machine is an electrostatic generator using electrostatic induction to multiply the electric charges continuously.

Wimshurst machine can produce  $\pm 300$  kV static electricity.

Static electricity is produced by two disc which are rotating in contrary direction, each disc has metal sectors. Two quadrants have different electric charges and two other quadrants have identical electric charges.

A pair of Leyden jars, each has  $\pm 140$  or a total of 70 pF capacity, are used to store the produced static electric charges.



## Advantages

- + Transparent plexiglass material frame, allow exposing the apparatus mechanism.
- + Discharging rod can be easily adjusted to change the charge quadrant.
- + Run with hand, no electric power required. The crank shaft is supported by ball bearing for smoother rotation.
- + Two pieces of electrodes in ball shape equipped with plastic handles to adjust the spark distance.
- + There are 4 mm sockets which can be used to connect to other high voltage source if necessary.

## Specification

Disc	2 pcs plexiglass disc, $\varnothing$ 300 mm with 28 sectors.
Electricity arc distance	100 mm (maximum)
Dimension	390 × 300 × 200 mm
Weight	1,5 kgs



Electrostatic arc

