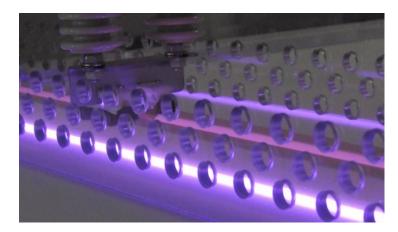
## Corona Surface Treatment

- Corona discharge is an electrical discharge caused by ionized air near a high voltage conductor or electrode
  - ► The corona system will consist of a high-voltage source, two electrodes at different potential, and a dielectric between them
  - Material placed in between the electrodes will become subjected to the corona field and thus become "treated"
  - During the corona treatment parts will become subjected to low levels of heat but high levels of electrical potential

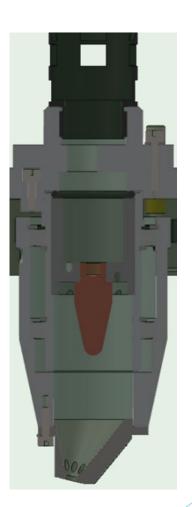






## Plasma Surface Treatment

- Atmospheric plasma discharge is a stream of heavily ionized gas and free electrons that has been excited to the plasma state via a high-voltage arc
  - The plasma system will consist of a high-voltage source, two electrodes at different potential, and no dielectric between them
  - A very high energy electrical arc will occur between the electrodes, and with an air supply will be forced out of the plasma nozzle onto the surface of material
  - During the plasma treatment parts will become subjected to moderate levels of heat but virtually no electrical potential





## **Surface Treatment Applications**



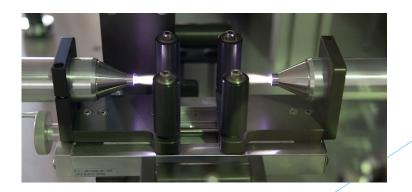
Corona treatment of petri dishes



Plasma treatment of individual parts



Corona treatment of plastic tubing



Plasma treatment of rubber profile

