

## Plasma (Gliding Arc) process module for VOC removal

### Description/Parameters

A gliding arc is generated between three electrodes. To initiate the ignition, the fourth auxiliary electrode is located at the nozzle close to the electrodes. The length of the electrodes is 150 mm. The electrodes are placed in a stainless-steel reactor with a diameter of 150 mm and a length of 800 mm.

### Utilization/Services

Low-temperature plasma generated by the gliding arc is a potential technology for the disposal of liquid organic waste (especially VOC vapour in gas). Low-temperature plasma equipment is often used as an end-of-pipe method to decompose a wide variety of contaminants.

- Plasma power 1 - 3.5 kW.
- Working electrode voltage 1.4 kV.
- Supply current on working electrodes 5 A on each of the electrodes.
- Frequency 50 Hz.
- Example: Removal efficiency of 1500 ppm toluene is 80 - 90 %.

