



# AIR POLLUTION CONTROL



LET US IMPROVE  
YOUR LOCAL AIR QUALITY

# World Class

## Odour and dust abatement system



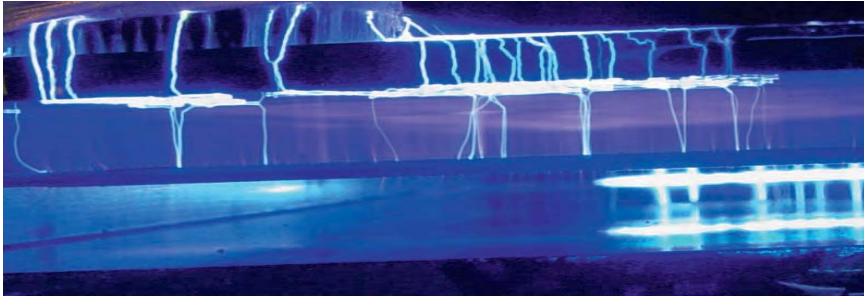
Our job is to solve  
your odour and dust problems

APP provides cutting edge solutions that can clean odours and particulate emissions; minimising attention from neighbours and ensuring compliance with local ordinances. By installing APP equipment at an early stage companies can avoid costly and damaging high profile conflicts. Managers can then focus their attention on efficient production and the need for potentially much higher investments at a later stage, and negative environmental focus can often be avoided.

**Some of the benefits using the Non-Thermal Plasma technology from APP are:**

- Removes odour and dust particles with an efficiency of 80 – 99,9%
- Very low maintenance and operating cost
- No waste – or by-products
- No consumables
- Recommended as Best Available Technique by IPPC/EPA
- Low installed footprint compared to system capacities
- Collects sub-micron particles from the airflow
- Modular concept – one module with a nominal capacity of 20.000 m<sup>3</sup>/h
- Remote control and monitoring via Internet
- Simple On/Off operation
- Low pressure drop (180 Pa)

# Our Non-Thermal Plasma Technology re-creates natural processes



- The oxidation process in the Corona Reactor can be compared to the natural oxidation. The APP Corona Reactor oxidise directly the emissions in a Non-Thermal Plasma zone.
- Inside the reaction chambers, the plasma electrons collide with the background gas molecules in the actual emission, and create chemically active species known as radicals. It is well documented that these discharges in humid air generate large quantities of both atomic oxygen (O<sup>3P</sup>) and hydroxyls (OH). The radicals react with pollutant molecules in the gas stream, breaking them down into less hazardous or more easily handled compounds.
- This cleansing oxidation process inside the reaction chambers is identical to what the polluted emission would normally be exposed to in the atmosphere. The only difference is that in the atmosphere the process can take days and months whereas in the APP solution the oxidation take place in 0,5 seconds.



## Our systems also remove particulates

The APP reaction chambers create a very strong electrical field strength and thereby act as an efficient compact electrostatic precipitator. Tests have shown that the system is very effective in removing fine dust and submicron particles down to 2.5 micron (PM<sub>2.5</sub>) and below. The system is designed with a Cleaning In Place (CIP).

## PRODUCTS

### ModuPower™



Modular high voltage  
switch mode power  
supplies.

### Odour & Dust Abatement Systems



A cold plasma installation  
removing odour and particulates  
from industrial emissions.



# Global supplier



Applied Plasma Physics (APP) was established in 1997 and has since then established a solid position with world class customers. The technology is designed, engineered and prototyped by APP and is the first of its kind. The business concept of APP is to replace conventional solutions with state of the art technology and sustainable solutions.

APP is the supplier of a Direct Non-Thermal Plasma (NTP) technology for industrial air pollution control; odour abatement and dust removal. The key selling point of this technology is the high efficiency and the very low operational cost.

APP has delivered Switch Mode Power Supplies (SMPS) to world class customers for more than 10 years. The ModuPower™ is a modular and scalable power supply with a voltage range of 33 to 120kV and virtually with no limit in power output.



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