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Press Release

Micro-plasma Oxidation Systems at Metro Stations

CMRL adds another feather to its cap, as we become the first Metro Rail in India to install Micro-plasma Oxidation (COSMO) system in Metro Stations. This Micro-plasma Oxidation (COSMO) provides complete sterilization for air and surface disinfection at Metro Stations and Metro Trains. This air and surface disinfection system helps destroy virus, bacteria, moulds etc.

Through proper dilution of micro-plasma oxidation in water, the air through ventilation system in the Metro stations are sterilized and safe. The main advantage of this technology is that it uses tap water as input. The system is a chemical-free, environment friendly, sustainable disinfection methodology to mitigate infections that spread through air and surfaces. This mechanism is primarily used in hospitals and healthcare settings to combat novel contaminants in air, water and environment with a disinfection efficacy of more than 99%.

CMRL studied and tested the disinfection system which has shown reduction of 99% in the microbial load, such as bacteria, fungi, viruses, protozoa and bacterial and fungal spores by mounting the System to Air Handling Units (AHU) of the centralized air conditioning system in underground station. Cleaning the Surface with Gas-Phase Oxidizing Disinfectant ensure clean surfaces at the Metro Stations.

The Micro-Discharge Plasma Technology, which is the backbone of the system, has been validated and listed by National Science Foundation, USA and also supported by the Department of Science and Technology, Government of India. This innovative disinfection process is safe & harmless to humans, but effective in killing viruses and bacteria.

CMRL hopes that passengers can now rest easy while travelling in the Metro Trains as the Environment inside the Metro Stations and Trains are Sterilized and Clean for travelling.

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