

# Ultraviolet Technology

## UV Disinfection of Air

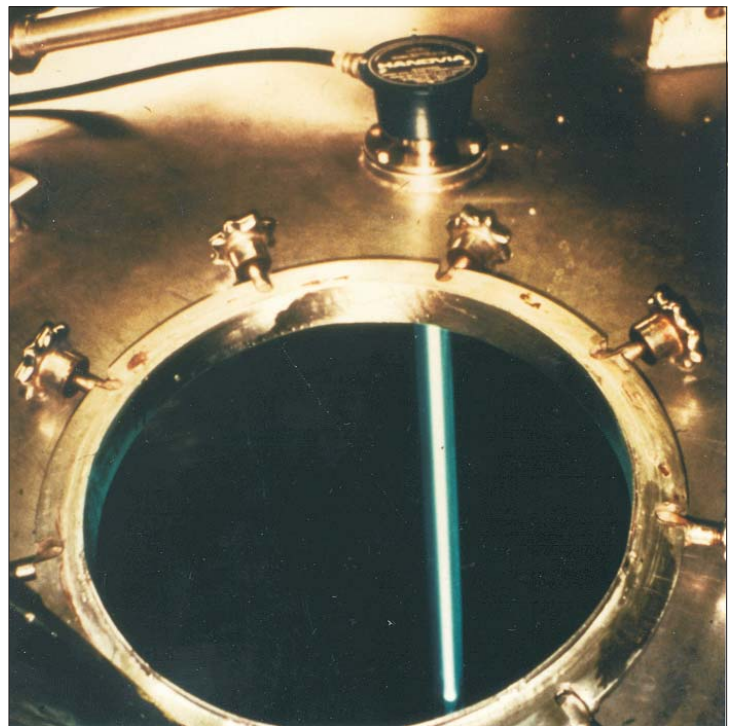
### How Does Ultraviolet Work?

Ultraviolet energy causes permanent inactivation of micro-organisms by disrupting DNA so that they are no longer able to maintain metabolism or reproduce. The maximum effectiveness occurs at between 240nm and 280nm, with the most effective wavelength typically at 265nm. The Hanovia high-intensity Arc Tube produces these wavelengths in abundance.

### Moving Air Applications

Increasingly strict standards for product quality and personal safety are not always met by air filtration alone. More and more companies and public sector employers are choosing to use UV in conjunction with, or instead of, sterile filters in air ducts. Prime application areas include:

- ▶ Air to aseptic and sensitive areas for the food, beverage, pharmaceutical and electronics industries
- ▶ Air to clean rooms and laboratories in all scientific establishments
- ▶ Air to hospitals and clinics
- ▶ Disinfection of air in ventilation ducts in all types of buildings, often for prevention of "sick building syndrome"
- ▶ Protection of staff and visitors against *Legionella* in public buildings



A Hanovia UV-I system installed in the head space of a sugar syrup tank at a major soft drinks production site.

