

Indizone™ - PWD Technology for Pharmaceuticals

RAW WATER /PRODUCT WATER treatment in pharma companies assume a very important role in maintaining standards that are so very stringent. Apart from the common contamination such as coli forms, streptococcus species, one very major contamination that Phama industry dread is the contamination by pseudomonas species.

Pseudomonas aeruginosa :

Culprit in most phrama water contamination.

Chlorine resistant and hence survives normal water disinfectant process

Contaminates pipe lines, tanks , RO systems, UF systems

Facultative anaerobe, adapted to proliferate in conditions of partial or total oxygen depletion

Indizone™ PWD Technology: Product Water Disinfection from *Indizone™* ensures total eradication of pseudomonas and other contaminants using state of Art ozone Technology

Why ozone?

Ozone disinfectant properties are most suited for the Phrama Industry

Effective against Bacteria, Viruses strains, Unicellular organisms

Ooxidizes unwanted organic compounds in the water .

Acts quickly and efficiently in very small concentrations.

Very effective at Ph 7 and at say 25 degrees water temperature

Rapidly consumed or decomposes without leaving any residue.

Very effective as a CIP agent

Why *Indizone™* PWD Technology ?

Turnkey Engineered solutions form OTSIL. Available in SS skid plug and play type for all flow rates up to 30M3/hour

Reliable ozonation process with reliable equipments integrated for maximum efficiency of process

Carefully designed ozone dose, ozone injection, ozone contacting, ozone destruction

Residual ozone on line monitoring with interlocks

Safety controls with ambient ozone monitoring

Dissolved Ozone analyser / ORP probe Ozone Control option: The ozone system can incorporate a very reliable dissolved ozone analyser or an ORP screw type platinum tipped probe to read the health of the water. It can also be made to control the ozone water depending on the process ozone requirement . So you will need exactly the amount of ozone required to treat your water .

Automatic control of ozonation and deozonation : solenoid valve controls interlocked with ozone analysers will ensure that the water is ozonated to the expected levels during ozonation, and ensures that only deozonated water is transferred to process



OZONE TECHNOLOGIES & SYSTEMS INDIA PVT LIMITED

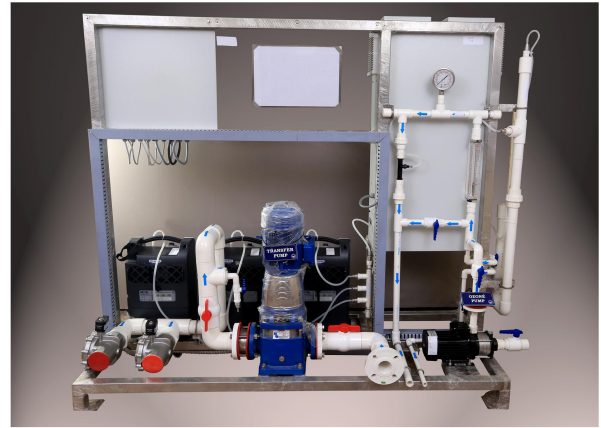
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Indizone™ ELITE SKID PLUG & PLAY

IMPROVED LOOK, ENHANCED PERFORMANCE

ENHANCED SAFETY FEATURES



INDIZONE NEW OZONE SKID FOR PWD TECHNOLOGY

→ Improved look

- 1) SS SKID with UPVC /SS piping for lower foot print
- 2) All pumps ozone resistant LOWARA/GRUNDFOS
- 3) Classy Digital meters from Schneider
- 4) Mains switch and regulator switch from Schneider
- 5) Imported Rittal panel with engineered air cooling system

→ Improved performance

- 1) Improved SS non return solenoid valve with TEFLON diaphragm – ensures zero tolerance to back flow
- 2) Oxygen as feed gas – provides higher ozone concentration for dissolving more ozone. Improved oxidation process and bacteria kill
- 3) 10-100% ozone regulator.
- 4) Extended life of ozone dielectrics with water cooled option (20000 hours)

→ Improved safety features (elite models)

- 1) Incorporates emergency stop switch for safety
- 2) Incorporates door open –ozone off safety feature for accidental shock prevention- from Schneider (limit switch)

→ Priority on service for Elite customers

- 1) Immediate response to Elite customers – RESPONSE TIME within 24 hours (next day)
- 2) No question asked all parts replaceable warranty on ozone generator for 12 months
- 3) 24 HOURS hot line for ELITE/Pharma customers.