

## .HMC. TRUCK UNLOADING HOPPER PLAIN WATER DUST SUPPRESSION SYSTEM

.hmc. Plain Water TRUCK UNLOADING HOPPER DS system is a plain water mist type Dust Suppression system. (Application) Truck Unloading Hopper (coal) normally installed at truck unloading hopper.

### Principle of Operation:

The pump is to be activated manually (optional auto system if required) spray will activate automatically once the unloading of truck starts in the hopper.



### Pre-Wetting DS System – Waiting Trucks

The Fogging type spray nozzle fitted on the entrance of the receiving pit area will spray to moisten the top layer of the trucks.

Further in order to form a water curtain around the entire periphery specially designed misting nozzle shall be installed & activated at the same time with an horizontal multistage water pump (nozzle discharge 1.00 to 5.00 lpm @ 3-10 bar pressure)

Dust generating points will be properly placed with spray headers and nozzles which produce fine mist sprays. The Air borne dust oncoming in contact with the fine mist type water particle, which becomes heavy and settle down with the original material flow.

No Ro quality treated water required for PWDS system as the nozzles is fitted inside the protective cover having inbuilt filter to prevent nozzle from chocking.

COMPLETE SYSTEM CONSISTING OF ELECTRICAL ACTUATOR / SPRAY HEADER / PWDS NOZZLE / FILTER / BALL VALVE / WATER PUMP / MCC PANEL / GI PIPES & REQUIRED INSTRUMENTS.



The TUH Spraying actuation shall be controlled from operators cabin by pushing the LPBS switch to energize the normally closed solenoid valve (Automation through sensor – optional). The Spraying will be started / stopped through Solenoid Valve mounted on the Solenoid Boxes for each header. Specific solenoid valves will get energized based on the truck movement and will get de-energized through a pre-set timer (adjustable). The system shall be suitably interlocked by solenoid box with the truck unloading mechanism so that the spraying time should be throughout the complete operation of unloading. Total suppression system shall act in such a way that the water curtain shall cover the entire periphery of the hopper.



## .HMC Equipments Private Limited.

(AN ISO 9001:2015 CERTIFIED)

CONTROLLING ENVIRONMENT

PLOT No. 4, BLOCK D, SECTOR A, INDUSTRIAL AREA SIRGITI, BILASPUR – 495004, CHHATTISGARH

Cell: +91 94252-19536, 78989-89885, E-mail: [info@hmcindia.co.in](mailto:info@hmcindia.co.in), Web: [www.hmcindia.co.in](http://www.hmcindia.co.in)

