

HI-FOAM DUST SUPPRESSANT

FOR CRUSHERS AND CONVEYOR SYSTEMS

- > Introduced at specific points in the crushing and conveying circuit
- > A small amount of foam treats a large amount of crushed material
- > Prevents dust particles from becoming airborne
- > Does not release dust downstream transfer and unloading points
- > Greatly extends water and reduces water requirements
- > Minimal moisture increases when moisture limits are critical
- > For a fine coating through the material mass or as a total dust blanket effect

DESCRIPTION

During the mineral extraction and crushing processes, dust is released in to the environment at different volumes during the unloading, conveying, screening, stacking and loading operations. The volume of dust is dependent upon the nature of the mineral, the materials moisture content and percentage of fine particles.

Typically, water is added at numerous points throughout the process to increase the dust extinction moisture content (DEM) of the material. Large volumes of water are required which can lead to material handling issues.

Using Hi-Foam greatly reduces water addition requirements whilst treating a much larger volume of material with dust suppression being delivered throughout the whole material supply chain.



APPLICATION

The Hi-Foam dust suppression solution is created by the controlled mixing of compressed air, water and Hi-Foam product.

The dosing system injects the Hi-Foam solution concentration between 0.2% and 1.6% concentration - this can be manually adjusted to suit the conditions.

The foam is activated in expansion chambers where the air, water and Hi-Foam product react. Each expansion chamber is capable of supplying foam to up to six dosing points.

EXPECTED RESULTS

As dust particles become thoroughly coated and wetted out through contact with the foam, their weight increases stopping dust lift off.

The treated dust particles will then continue their journey through subsequent crushing, screening and transfer points to the final destinations without ever getting airborne.