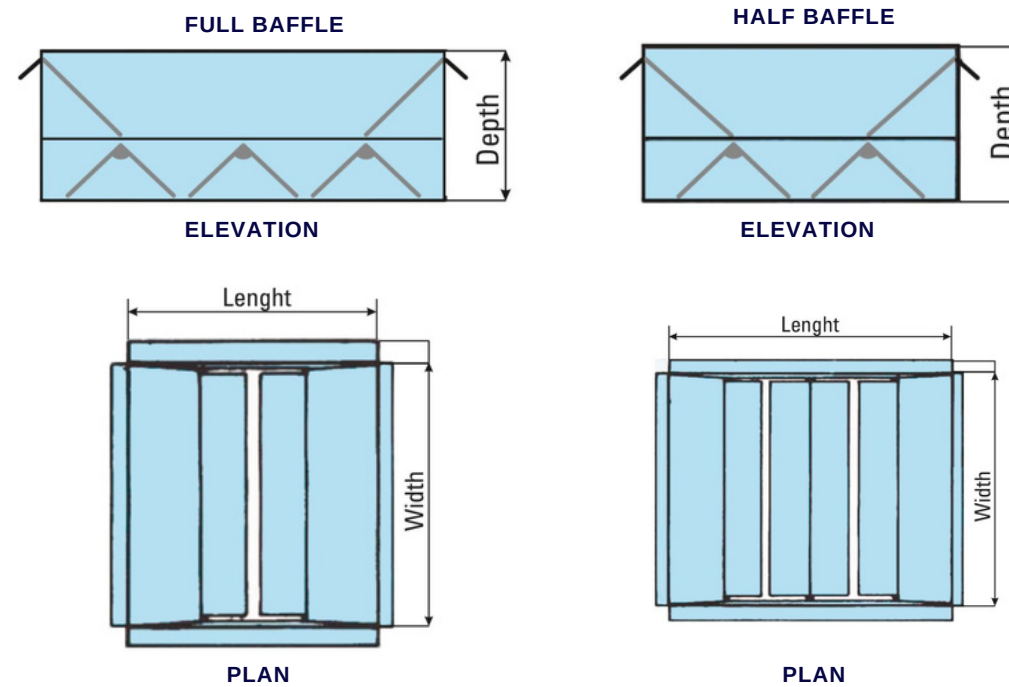


# BURNLEY® BAFFLES

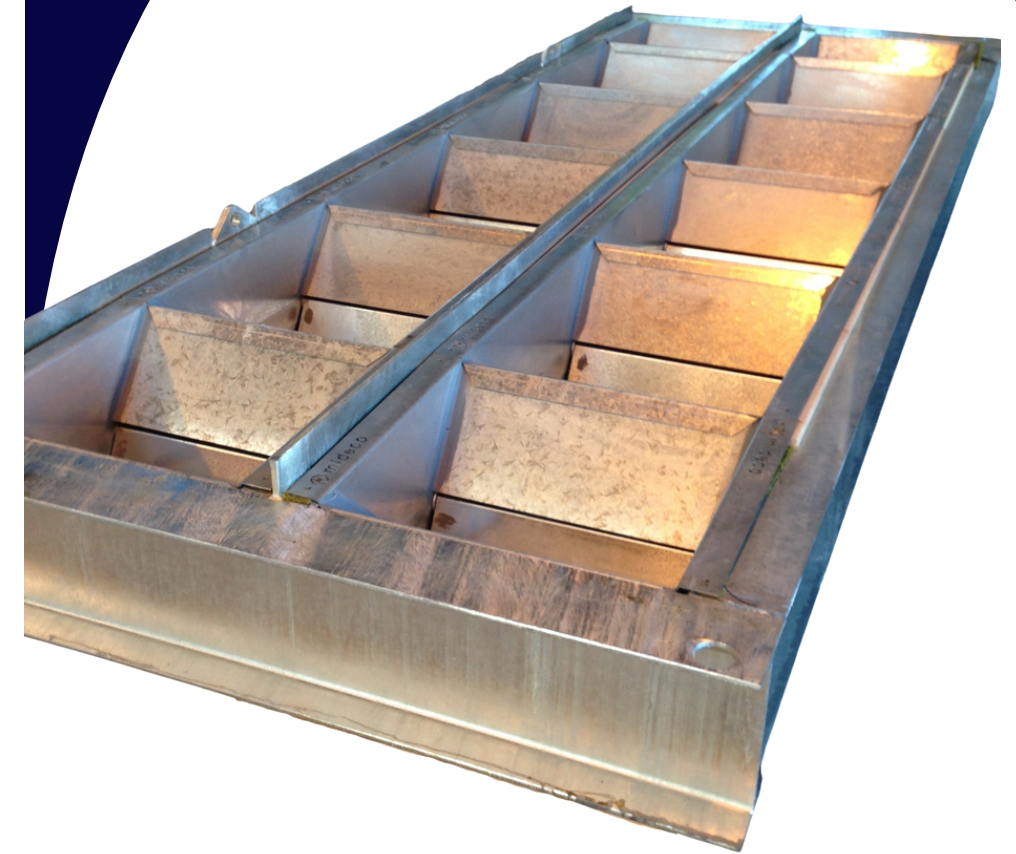


The internationally patented dust suppression device, Burnley® Baffles is specifically designed to reduce the escape of dust from dump hoppers and chutes handling dry granular raw materials such as grains and ores. The clouds of dust that escape during the materials handling process pose extreme health risks to anyone nearby. The exposure to such silica dust can lead to the development of silicosis, lung cancer and chronic obstructive pulmonary disease. When applied to a hopper alone, the Burnley Baffles can eliminate up to **80%** of dust, and with the application of an additional dust collector directly to a hopper, **100%** of dust can be eliminated.

## EXAMPLE OF BURNLEY® BAFFLES CONSTRUCTION



Baffle lengths and widths vary between models and specific applications. Depths are preset depending on the application and therefore the model. Simply provide the hopper length, width and preferred beam spacing, Mideco can do the rest.



# BURNLEY® BAFFLES



**mideco**  
Your Partner in Environment Technology



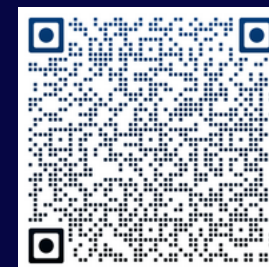
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## PRINCIPLES OF OPERATION - 80% DUST MANAGEMENT

When a hopper receives the product, the air in the hopper is displaced. Given the shape of the hopper, there is only one way it can go, which is up against and through the product flow. This air is flowing quickly and picks up the fine particles in the product flow and carries it out of the hopper, this is how the dust escapes.

It should be noted that the air is not flowing out of the hopper surface evenly. There are certain areas where the air is flowing quickly carrying the dust, and in other areas where there is all but no air movement. Air speed carries the dust.

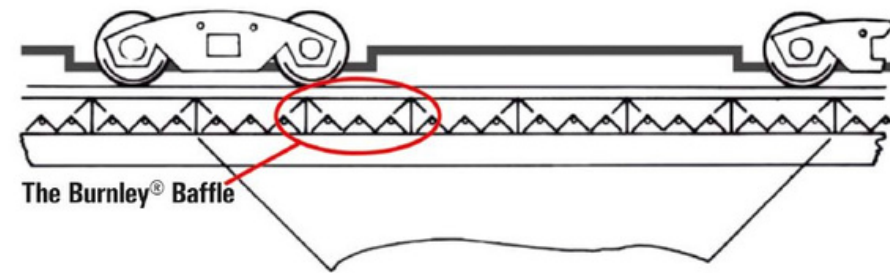
Burnley® Baffles form a mechanical resistance against this airflow. They create the resistance equally across the whole hopper, on the open area. This process slows the high air speed and averages the air speed across the whole hopper area, thus making it slower. By slowing this airspeed, dust escape is eliminated.

## PRINCIPLES OF OPERATION - 100% DUST MANAGEMENT

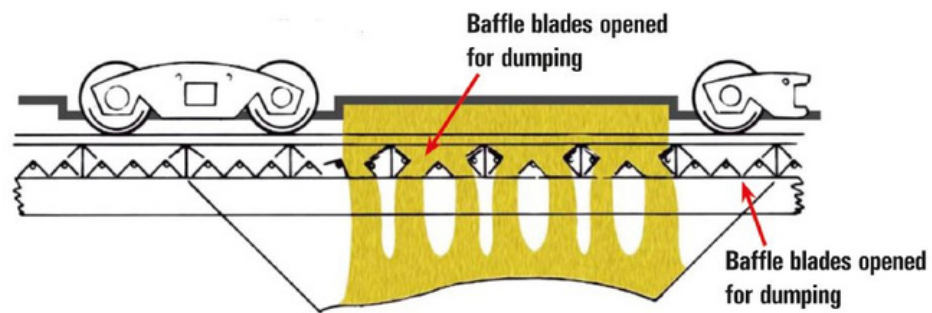
In order to completely eliminate the dust, the above principle applies, but a line of least resistance is applied under the Burnley® Baffles, taking complete control of the displaced air. The 100% dust management is achieved by putting negative pressure under the baffles, that is sucking. This process is most commonly done by connecting a Bag House with a fan, thus helps in drawing the air out of the hopper, catching the dust in the Bag House, and releasing the air to atmosphere. Mideco has the formulas, designs, and experience to do this efficiently.

## HOW IT WORKS

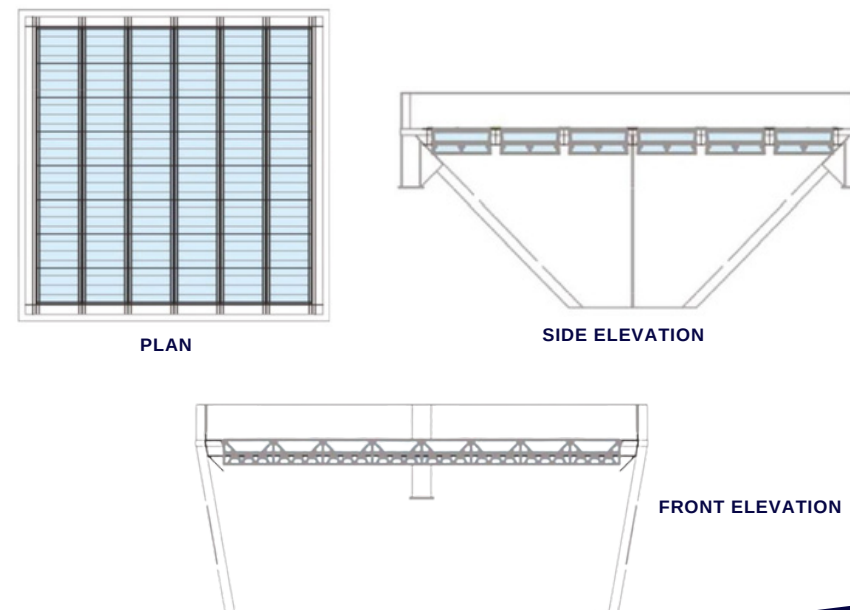
NO FLOW CONDITIONS. RAIL CAR UNLOADING



FULL FLOW CONDITIONS. RAIL CAR UNLOADING



EXAMPLE OF BURNLEY® BAFFLE INSTALLATION



## BEFORE



## AFTER



## COMPETITIVE ADVANTAGES

Solving the Problem

Improved Environment

Self Operating

Space Saving

Time Saving

Ease of Installation

Maintenance Free

Variety of Situations

Energy Saving

Financial Saving