

The Mogensen Divergator is a patented static grizzly screen. It is, because of its design, nonblinding and self-cleaning. It contains no moving parts. The device consists of a system of bars arranged in two planes set at an angle to each other. Alternate bars are set in alternate planes, i.e. one up and one down. The effective spacing between the bars becomes progressively greater along the length of the bars: hence the selfcleaning properties of the Divergator. The Divergator will not usually make very sharp separations. An exception would be the case, in which a small amount of coarse oversize material has to be removed from a product.

FEATURES

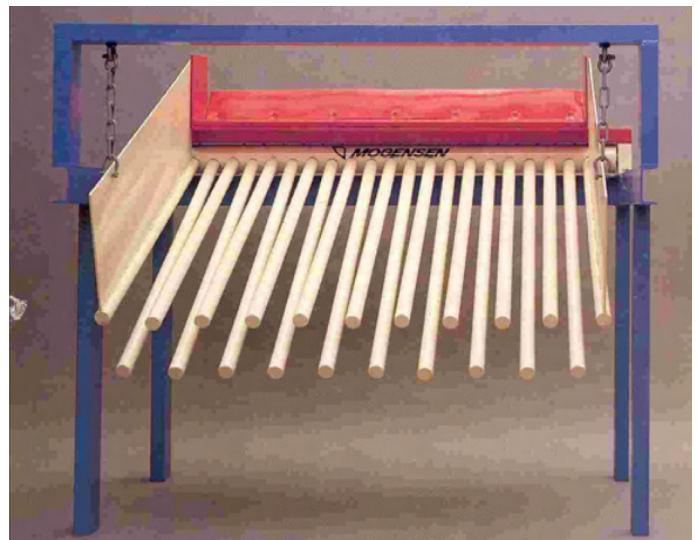
- No Moving Parts
- High Capacity
- Anti-Blinding
- Compact • Versatile
- Can be fixed or mobile, can be arranged for different problems, different feed widths.

THE DIVERGATOR IS NORMALLY USED AS FOLLOWS:

Diverter gates can be fabricated from or equipped with a wide range of construction materials depending on the characteristics of the bulk material being handled. Some examples of construction materials for different applications are:

1. To protect a crusher (i.e. remove fines which do not need to be crushed).
2. To protect a vibrating screen from very coarse material.
3. To make products inexpensively in cases when the separations required are not very sharp
4. As a simple and effective shedder plate for conveyor belt protection.

Divergators may be used individually to suit a particular problem and location. They have been installed in various sizes ranging from 1/2 metre to 3 metres wide. They should be installed, so that it is possible to adjust the slope. Divergators are normally supplied with side-plates. Divergators maybe fed using conveyors, feeders or mechanical shovels. be the case, in which a small amount of coarse oversize material has to be removed from a product.



INSTALLATION INSTRUCTIONSFEED

It is essential that the feed to the Divergator be parallel to the bars and at a velocity of 0.8 to 1.0 metres per second (160 ft/min to 200 ft/min). The feed should be across the full width of the Divergator and should land on the bars as close to the beam as possible.

1. Feed by Vibratory feeder:

When the Divergator is fed by a vibratory feeder the velocity tends to be too low. To overcome this problem a short chute should be placed between the feeder and the Divergator at an angle steep enough to give the required velocity (see Fig. 1) The slope of the chute should approximate the rill angle of the material being fed to the Divergator.

2. Feed by Conveyor:

Where the feed is from a conveyor which has a velocity of more than 1.0 metre/sec (200 ft/min) the feed velocity must be reduced to an acceptable level. To achieve this reduction and to spread the feed, ideally a surge bin and feeder should be used. If this is impractical, a system of dirt boxes or impact plates may be used (see fig. 2). If the belt speed is low then a direct feed onto the Divergator is in order (see Fig. 3) or alternatively the Divergator can be fed via a dirt box which would assist in spreading the feed where a narrow conveyor is being used. If the feed material is very sticky and tends to agglomerate, it should be fed directly onto the bars so that it is broken up by the impact. N.B. this method results in excessive wear on the bars if the feed is abrasive and should be avoided if possible.

