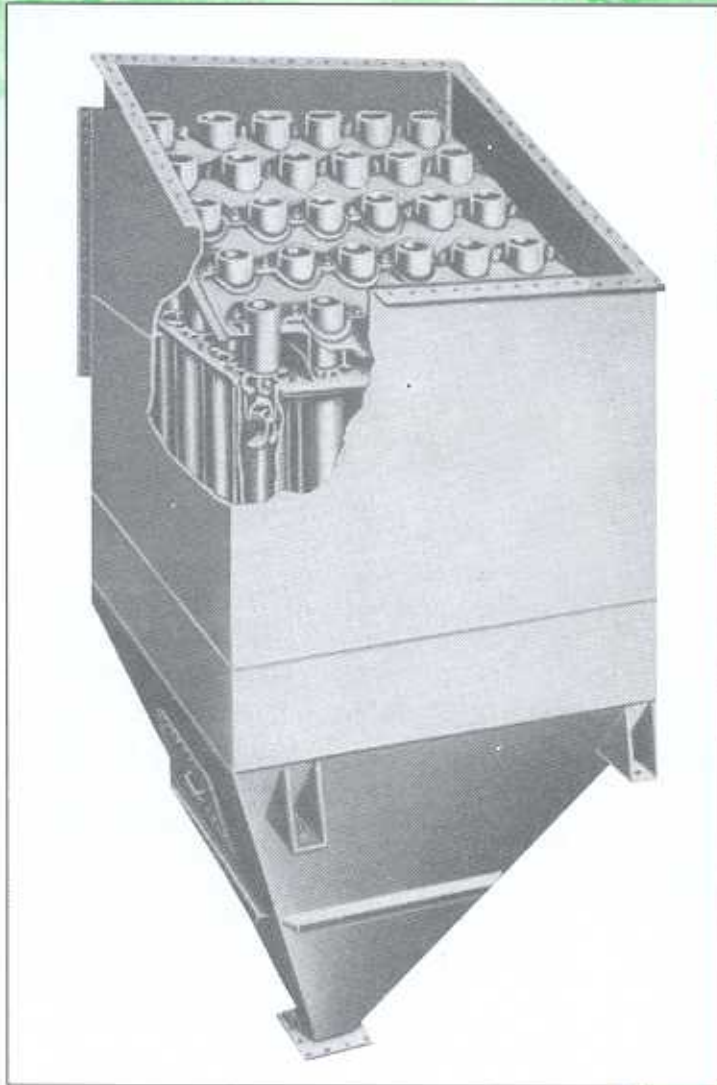


# DUSTACLONE

The Multiple Tube Mechanical Dust Collector



The multi-tube-shop-assembled DUSTACLONE from Thermax consists of a housing containing a number of collection tubes, each of which is, in fact, a centrifugal dust collector. The dust laden gas entering the dirty air plenum moves downwards into the collecting tube (refer figure overleaf), being guided by a helical vaned annular ring. These vanes impart a smooth spiral movement to the gas, setting up a high centrifugal action.

As the gas descends in a cyclonic pattern, the dust is thrown outwards and is discharged through peripheral slots in a shave-off boot. A vortex is formed at the bottom of the centrifugal tube and the clean gas forms an inner whirl which ascends vertically into a discharge (outlet) tube, and then collectively out of the unit through the outlet plenum.

All the collectors are completely assembled to the extent practical for shipment, resulting in minimum erection man-hours and handling at the installation site.

Standard models in the Dustaclone - S range are available :

- for gas volumes from 2,000 to more than 1,00,000 m<sup>3</sup>/hr
- with tubes varying in number from 2 to 100

## Features & Benefits

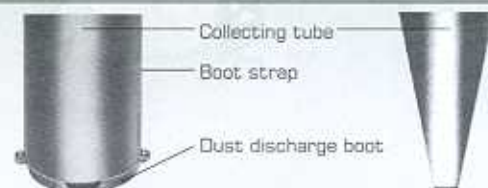
### 1. Centrifugally cast - uniform thickness

Even the slightest shift of  $1/5^0$  in core placement can cause a reduction in thickness by 3 mm, leading to tube failure in a shorter time due to wear and tear.

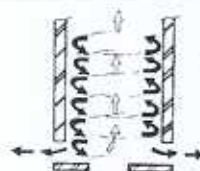


### 2. Replaceable dust discharge boot - saves on replacement cost

Wear due to abrasion is maximum at the base of a collecting tube. A sturdy cast iron boltable boot at the base of the Dustaclone facilitates quick, economical replacement.



### 3. Peripheral dust discharge - avoids dust reentrainment



#### Peripheral dust discharge

The shave off boot releases the dust to the hopper before the reverse roll occurs.



#### Axial dust discharge

In a Conventional collector, the gas makes a vortex reverse roll, thereby reentraining the already collected dust.

### 4. Integral mounting flange - effective sealing

There is an integral collar with lip and four holes for bolting.



#### 4 Bolt Design

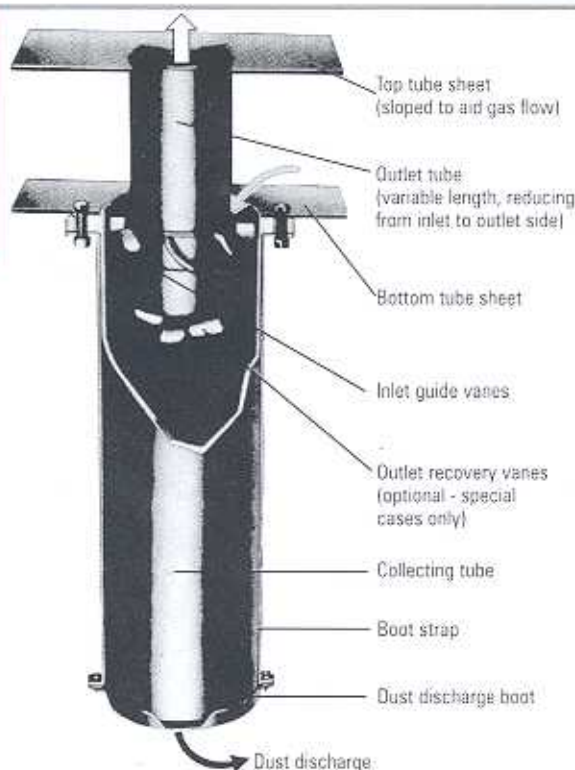
Provides effective sealing between clean and dirty air zones, Does not warp and leak.



#### Situation in a typical 2 bolt design

Warpage  
Re-entrainment of collected dust

## Cyclonic Collection Tube Assembly



## Our other products / systems

### ➤ Air Pollution Control

- Cyclones & Spray Cyclones
- Bagfilters and Baghouses
- Electrostatic Precipitators - Dry and Wet
- Scrubbers - Particulate and Gaseous
- Dedusting and Fume Extraction Systems
- Flue Gas Desulphurization (FGD) Systems
- Coal Preparation Plants
- Pushing Emission Control Systems for Coke Ovens

### ➤ Air Purification Systems

- Purafil range - Chemical Air Filters for removal of corrosive, toxic and odorous gases - equipment and media

The division also undertakes turnkey projects to offer complete technology on air pollution control and its management.



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In view of our constant endeavour to improve the quality of our products we reserve the right to alter or change specifications without prior notice.

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