



# **Unimaster® Range Collectors**

**The Universal Dust  
Control Unit**

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**Innovative Dust Control**

# The Complete Solution...



The Unimaster dust control unit is the most economical and effective solution for a diverse range of nuisance dust problems throughout industry. The Unimaster's unrivaled quality and versatility mean that it is suitable for a multitude of applications.



*Polymer powder sack unloading*

## Principle of Operation

### *Air Flow*

Contaminated air from the dust generation source is drawn through the inlet to the filter by the fan. Initially some pre-separation takes place as heavier dust particles lose momentum and fall into the collection bin or hopper. Finer dusts are carried up to the filter elements where they are retained on the outer surface of the filter fabric. The cleaned air is then passed through the filter fabric into the fan chamber and discharged.

### *Cleaning*

When the fan is switched off the filter fabric cleaning cycle is automatically activated. The collected dust is then dislodged from the filter elements and falls into the collection bin below.

*Asbestos weighing & compressing* ►►

▼ *Ceramic dust mixing*



# ...for a variety of nuisance dust problems...

## Dust Capture at All Points.....

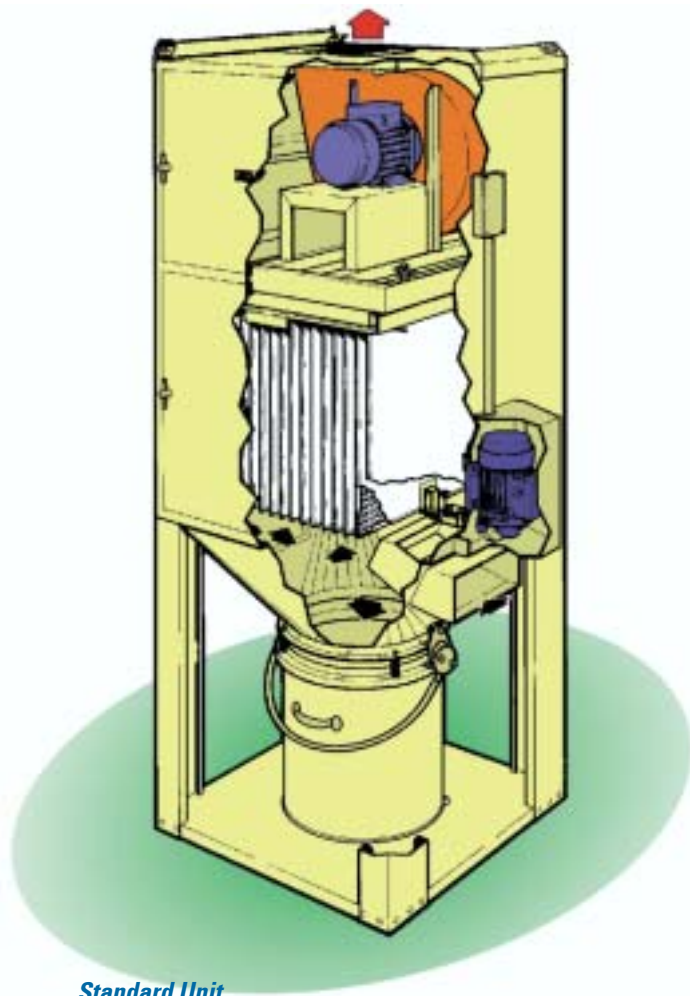


*Food packing*

The Unimaster is an ideal dust collector for intermittent operations in plant processes. Several small self-contained Unimaster units can be placed at the points of dust generation. This approach results in total dust capture and flexibility of operation.

This integrated concept brings many benefits:

- ▶▶ Lower capital cost
- ▶▶ Lower operating and energy costs
- ▶▶ Simplified maintenance
- ▶▶ Plant flexibility
- ▶▶ Minimization of safety hazards



*Standard Unit*

# ...designed for low energy consumption

## Universally Tried, Tested and Trusted...



### ►► Versatile range

*Over 500 combinations and numerous ancillaries.*

### ►► Compact

*With flat envelope shaped multipad filter to provide maximum fabric area for minimum floor space.*

### ►► Filter materials

*A range of fabrics to suit any application.*

### ►► Advanced fan design

*Reduced noise levels and enhanced efficiency and performance.*

### ►► Controller

*Easy to install/connect. Ensures the filtration efficiency is properly maintained.*

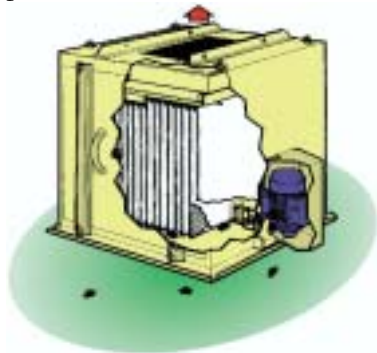
### ►► Cost effective

*No requirement for compressed air.*

*Cigarette making*

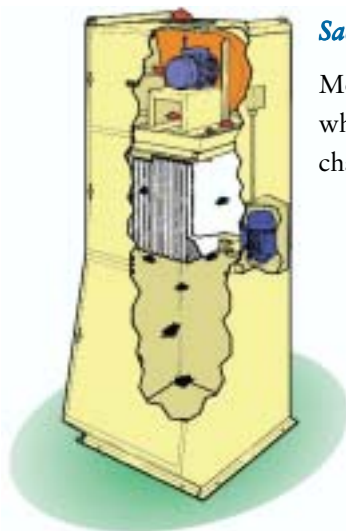
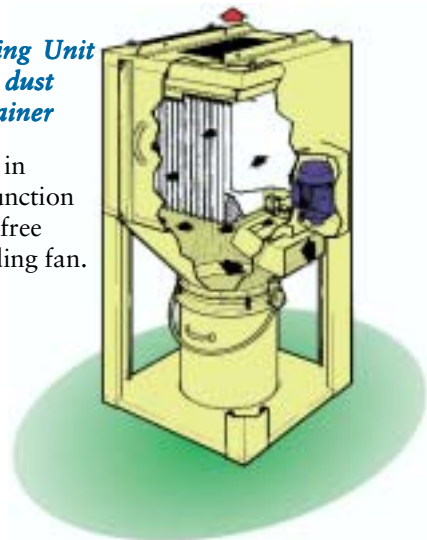
### **Venting Unit**

For venting systems and processes under positive pressure.



### **Venting Unit with dust container**

Used in conjunction with free standing fan.



### **Sack Tipping Unit**

Mounted above vessels which are manually charged.

### **Hopper Unit**

Suitable for location on dust container.



# A Complete Range of Accessories

## *Acoustic Diffuser*

Capable of reducing noise levels to well below 80db (A) measured at 11 feet from the unit.

## *Secondary Filter or Absolute Filter*

Can be fitted to Unimasters handling hazardous dusts. It also acts as a fail safe device should the main filter element become damaged.

## *Filtration Media*

Variety of filtration media available to suit many applications.

ie: *Polypropylene*  
*Polyester*  
*Polyester Anti-static*  
*PTFE Membrane Medias*

## *Static Earthing*

Should the material being handled generate a static charge this can be safely grounded.

## *Pressure balance pipe*

Ensures the stability of the dust collection bag allowing for the safe removal of collected material.



## *Explosion relief*

Bursting panels consist of a membrane with internal supporting mesh located on the dirty side of the unit.

*Also Available - a stainless steel version for most units*



## Typical End-Use Applications

- ▶▶ Abrasive Blasting
- ▶▶ Blending
- ▶▶ Cigarette Manufacturing
- ▶▶ Drilling
- ▶▶ Epoxy Powder Coating
- ▶▶ Food
- ▶▶ Granulator
- ▶▶ Hopper Venting
- ▶▶ IBC Bag Filling/Emptying
- ▶▶ Jewelry Polishing
- ▶▶ Knockout
- ▶▶ Laminar Flow Booth
- ▶▶ Mixing
- ▶▶ Nylon Brush Machines
- ▶▶ Optical Equipment Manufacturing
- ▶▶ Powder Spray Booths
- ▶▶ Quartz Grinding
- ▶▶ Routing
- ▶▶ Shot Blasting
- ▶▶ Transfer Points
- ▶▶ Unloading Operations
- ▶▶ Vibratory Screens
- ▶▶ Weighing
- ▶▶ Xanthan Handling
- ▶▶ Yeast Processing
- ▶▶ Zinc Polishing/Grinding



**Plastics profile cutter**



**Explosion stiffened unit,  
sculpting studio**



**Woodwaste**

*Torit reserves the right to alter design without notice. Freedom from patent restrictions must not be assumed*



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