





# ECONOTUBE TUBULAR BAG FILTER

#### Overview

The Econotube is a reverse jet cleaned tubular bag filter unit. It is designed to run continuously on a wide range of various industrial processes, handling many different types of fine and coarse dusts.

It is usually applied to more arduous duties, is more forgiving to difficult applications and has developed over the years into a consistently reliable filter unit, adopted by many companies across the UK.

It has numerous configurations that can be adapted to suit most applications dependent on system requirements and is usually applied to extraction systems with a larger air volume.

#### **Product Features**

- 12 standard L length x 12 deep models with filter sizes from 104m² to 358m²
- 5 standard L length x 8 deep models with filter sizes from 49m<sup>2</sup> to 89m<sup>2</sup>
- $\bullet \hspace{0.5cm} \textbf{13 standard S length x 8 deep models with filter sizes from 40 m}^2 \hspace{0.1cm} \textbf{to 163} \hspace{0.1cm} m^2$
- Larger non standard models available on request
- Robust welded mild steel construction
- Range of filter media available to suit different applications
- Highly efficient reverse jet cleaning system by compressed air
- Explosion relief features provided as a standard option
- Fully weatherproofed units as a standard option
- Stainless steel construction available

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# **Tubular Bag Filter**

#### Standard Specification

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Dirty air case:	3mm mild steel fully welded panel construction				
Clean air case:	3mm mild steel fully welded panel construction				
Collection hopper:	3mm mild steel fully welded panel construction				
Support legs:	Mild steel rolled steel section, fully welded construction				
Filter cages:	Galvanised mild steel wire construction. Top hat, internal venturi with crimpe end caps				
Access ladders and handrails:	Included in galvanised construction				
Compressed air header tank:	Certified header tank according to CE directives 87/404 & 90/488.  Temperature range -10 to +55°C. Maximum pressure 8 bar. Requires clean, dry oil free supply at quantity indicated depending on size.				
Access ladders and handrails:	Included in galvanised construction				
Diaphragm vavles:	1" diameter port, aluminium diecast body with nitrile seals. Pressure range 30-860 kPa. Temperature range -40 to +82°C.				
Sequential controller:	Solid state PCB. Two electronic timers allow adjustment for duration of pulse and interval between pulses. Voltages of 110v, 220v and 240v AC single phase 50Hz can be accepted by the board in all cases giving an 110v output to the pilot valves. IP65 Polycarbonate enclosure.				
Paint finish:	To HGDC standard paint finish (copy available on request) in colour to suit customers choice.				



Image 1 - Photograph showing compressed air header tank, diaphragm valves connected to blow bars, bulkheads in clean air section, sequential controller with solenoid valves and serial number plate with CE marking.

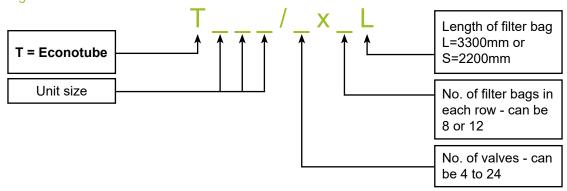


Image 2 - Each Econotube is fitted with tubular filter bags that are manufactured in our sewing room. The type of media is selected to suit the application requirements



**Tubular Bag Filter** 

Filter Designation



#### **Example - Econotube T208/14X12L:**

208m² filter area, 14 valves, 12 filter bags in each row and L length filter bags x 3300mm long.

Larger models and specials are available on request. We have the facilities to offer tailored solutions to meet customers needs. For information and advice please contact **sales@heatongreen.co.uk** or telephone our UK head office on **01924 430430** to speak to one of our sales team.

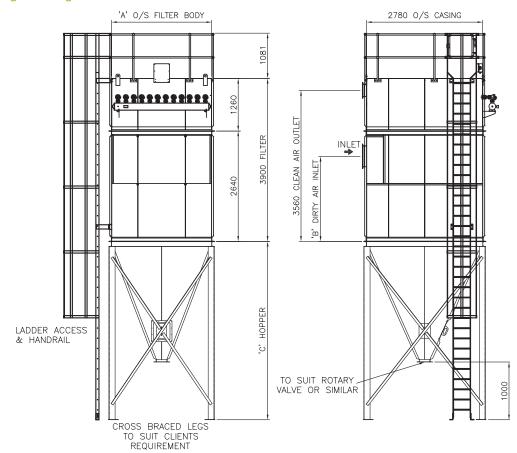


Econotube T1279/8612L 1279m² filter area, 86 valves, 12 filter bags in each row, L length filter bags x 3300mm lg



Tubular Bag Filter

3300mm long filter bag x 12 wide

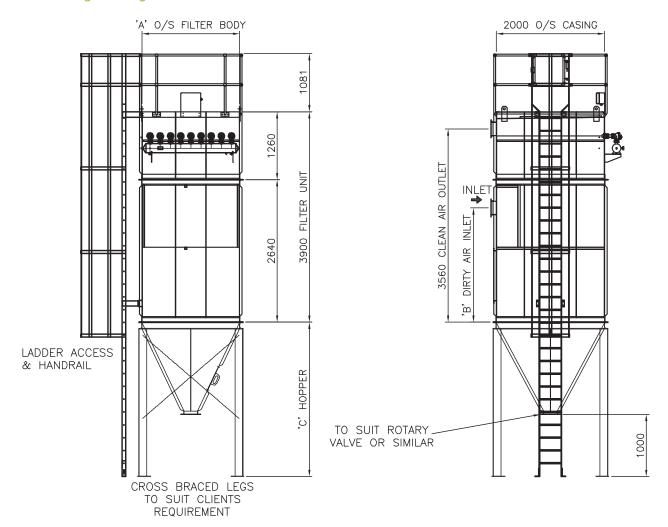


Filter Ref	Area m²	Α	В	С	No. of Hoppers	Compressed air requirements free air delivered @ m³/hr 6 bar
T104/7x12L	104	1440	2220	3000	1	27
T119/8x12L	119	1630	2195	3000	1	27
T132/9x12L	132	1820	2170	3200	1	27
T149/10x12L	149	2010	2145	3200	1	27
T164/11x12L	164	2200	2120	3200	1	27
T178/12x12L	178	2390	2095	3500	1	27
T208/14x12L	208	2770	2070	3500	1	33
T238/16x12L	238	3150	2045	3500	1	33
T268/18x12L	268	3530	2020	3000	2	33
T298/20x12L	298	3910	1970	3000	2	33
T328/22x12L	328	4290	1950	3000	2	33
T358/24x12L	358	4670	1925	3000	2	33



**Tubular Bag Filter** 

3300mm long filter bag x 8 wide

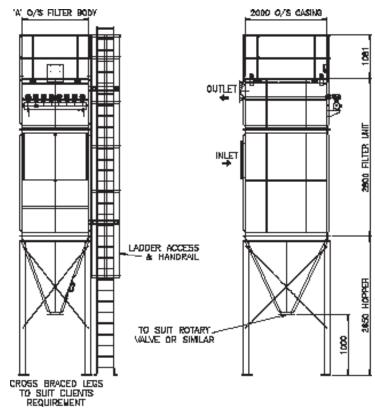


Filter Ref	Area m²	Α	В	С		Compressed air requirements free air delivered @ m³/hr 6 bar
T49/5x8L	49	1060	2220	3000	1	15
T59/6x8L	59	1250	2220	3000	1	15
T69/7x8L	69	1440	2220	3000	1	15
T79/7x8L	79	1630	2220	3000	1	15
T89/9x8L	89	1820	2220	3000	1	20



Tubular Bag Filter

2200mm long filter bag x 8 wide



Filter Ref	Area m²	А	No. of	Compressed air requirements
T06/4×0C	200	070		free air delivered @ m³/hr 6 bar
T26/4x8S	26	870	1	15
T33/5x8S	33	1060	1	15
T40/6x8S	40	1250	1	15
T46/7x8S	46	1440	1	15
T53/8x8S	53	1630	1	15
T60/9x8S	60	1820	1	20
T66/10x8S	66	2010	1	20
T73/11x8S	73	2200	2	20
T79/12x8S	79	2390	2	20
T93/14x8S	93	2770	2	20
T107/16x8S	107	3150	2	20
T121/18x8S	121	3530	2	20
T135/20x8S	135	3910	2	20
T142/22x8S	142	4290	2	20
T163/24x8S	163	4670	2	20



### Tubular Bag Filter

#### **Explosion Relief**

Many dusts handled are potentially explosive albeit they would have to form a dust cloud, there must be sufficient oxygen to support the explosion and a source of ignition.

In the case of the Economech filter unit, it has been certified internally as Category 2D, it cannot create ignition sources in normal operation, nor in the event of a foreseeable malfunction. This makes the equipment compatible with a Zone 21 internal volume. However, if there is the potential of an ignition source from the process, then the DSEAR Regulations require provision of explosion protection, for example, explosion relief.

The ATEX Directive has put the onus on the owner of the plant to provide the necessary information to enable the supplier to correctly size the explosion relief panel(s). The explosibility of the dust, given as its Kst value, will enable the explosion relief panel(s) to be calculated using the standard EN14491:2006. Panels are manufactured to the standard EN 14797:2006. When fitted, the panel(s) should be installed so that, in the event of an explosion, it would discharge into a safe designated area. A rupture indicator would also be included with each panel in order that, in the event of a rupture, a signal can be relayed to the electrical control panel to initiate shutdown of the fan set fitted to the filter unit.



Above photograph shows two Econotube filter units fitted with certified explosion relief panels.

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