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KS/QSD2897

15th September 2025

Fittingly
Sutherland Road
Longton
Stoke-on-Trent
ST3 1HZ

FOR THE ATTENTION OF MR Robert Scanlan

Dear Sir

Further to the writer's recent site survey, we take pleasure in submitting our budget quotation for the supply, delivery & installation of the new filtration system to serve your new premises.

As discussed, we have initially allowed for a filter unit that will serve all 6 intended machines however, as we understand it you will only have 4 machines to install to begin with which will move from your current location.


A further CNC & Edgebander will then be ordered to be installed following this. We would intend for all 6 of these machines to go onto one fan set (pending the receipt of the machine types).

Our quotation is based on the below assumptions:

- 1) All 6 machines to be in use 12 hours per day, 7 days per week
- 2) Each CNC to have a 250mm extract head
- 3) Each edgebander to have 7 x 100mm ports or as close to
- 4) Waste to discharge into a trailer system, one trailer only
- 5) Air volume requirement for site once all machines are installed – 37,664m³/hr
- 6) CNC's to operate 2500pa with edgebanders at 2000pa

ATEX



In summary, the **ATEX** Regulations relate to all equipment intended for use in potentially explosive atmospheres. This is defined as machines and apparatus which separately or jointly, are intended for the transfer or storage of material and which are capable of causing an explosion through their own potential sources of ignition.

Only equipment and protective systems that meets the requirements of the 'Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 1996,7' **should be used and installed. Such equipment will be marked - CE **

Cyclo Filter System Specification

This is from our 'AFT Range' of filters with its non-blocking filter sleeve arrangement together with careful airflow modelling makes this range of filters highly efficient in terms of: -

- Continuous on-demand filter sleeve cleaning for continuous running without loss of suction.
- With an inner ventilated jacket lowering 'can' velocity, aiding filter cleaning.
- Filter sleeves have anti-static dust release coatings to ensure excellent secondary 'cake' release.
- 95% pre-separation giving a continuous waste output for large waste volume applications.
- Small footprint for compact sites.


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|--|--|
| <input type="checkbox"/> Filter System | Air Plants Cyclo Filter CF112 |
| <input type="checkbox"/> Intended Use | ST1 wood dust/chip - 5µm to 20mm |
| <input type="checkbox"/> ATEX Reference | CE  II 2 D c T80°C - ATEX Internal / Non-Zone External |
| <input type="checkbox"/> Filter Media | 165 dia. 400 g/m ² Anti-Static polyester needle felt with external dust release coating. |
| <input type="checkbox"/> Total filter surface area | 223M ² |
| <input type="checkbox"/> Filtration Velocity | 2.62M/M |
| <input type="checkbox"/> Total Explosion Vent area | 3.84M ² |
| <input type="checkbox"/> ATEX Explosion Protection | CE  II D Membrane panels pstat 0.1 bar g (1.1 Bar a) |
| <input type="checkbox"/> External Finish | Prime Quality Galvanized (BS2929) Z2 class 2A |
| <input type="checkbox"/> AFT Cleaning system | Automatic reverse jet cleaning (on demand) |
| <input type="checkbox"/> Compressed Air Consumption | 345 ltr/min (20 sec intervals @ 6 bar clean and dry) |
| <input type="checkbox"/> Cleaned Air | Return air capability to avoid unnecessary heat losses in factory. |
| <input type="checkbox"/> Dust Entry | Tangential inlet 95% pre separation |
| <input type="checkbox"/> Waste removal | Rotary Valve |



Rotary Valve Airlock

The Air Plants ATEX rated Rotary Valve is designed to be robust, reliable and energy efficient: -

- Solid through drive shaft giving strength and reliability.
- End bearings with triple lip seals to prevent dust emission.
- Moulded blades from our unique compound ensure high flexibility with low wear rates.
- Engineered to be efficient, reliable with minimal service requirements.

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|---|--|
| <input type="checkbox"/> Rotary Valve Type | Air Plants 350RV Heavy-duty solid shaft valve |
| <input type="checkbox"/> ATEX Reference | CE  II 2 D c T80°C - ATEX Internal / Non-Zone External |
| <input type="checkbox"/> Valve Drive | 0.75 kw shaft mounted Helical gearbox 360Nm Output Torque |



Ducting Specification

| | |
|---|---|
| <input type="checkbox"/> Complies with | HSE-HSG258 |
| <input type="checkbox"/> Material | Prime Quality Galvanized (BS2929) Z2 class 2A |
| <input type="checkbox"/> Straight | Lock formed along length swaged, slip and clip joints |
| <input type="checkbox"/> Bends | Multiple lock formed gores Clipped ends |
| <input type="checkbox"/> Shoes | Swept 45 deg. |
| <input type="checkbox"/> Flex | Polyurethane Heavy duty |

Fanset Specification

The Air Plants **ATEX** rated HE fan is designed to be robust, reliable and energy efficient: -

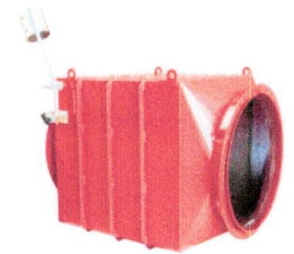
- Design efficiency, up to 85%
- Low noise characteristics
- Heavy duty flange and foot mounted motor for extra stability.

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|--|---|
| <input type="checkbox"/> Fan Reference-Type | Combifab FZ56-S710 |
| <input type="checkbox"/> ATEX Reference | I 2D Ex c IIIC T135°C Db / None |
| <input type="checkbox"/> Impellor type | High Efficiency backward blade |
| <input type="checkbox"/> Noise | 83 dB(A) at 1mtr free field |
| <input type="checkbox"/> Balancing | Dynamically balanced to Grade G 2.5 |
| <input type="checkbox"/> Drive | Direct Driven |
| <input type="checkbox"/> Casing | Heavy gauge mild steel |
| <input type="checkbox"/> External Finish | Primer/Finish Cromadex 480 Blue RAL5009 |
| <input type="checkbox"/> Motor | 75 Kw IP 55 Fan cooled metric motor |



Explosion Isolation Valve

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|--|---|
| <input type="checkbox"/> Dust Class | St1 & St2 |
| <input type="checkbox"/> Kst Max: | 300 bar.m/sec |
| <input type="checkbox"/> Max explosion pressure: | 0.50 bar to DN700 |
| <input type="checkbox"/> Max explosion pressure: | 0.25 bar to DN800 - DN1000 |
| <input type="checkbox"/> ATEX Reference | Ex II D CE 2049 Internal Zone 20 |



Control Panel Specification

| | |
|--|---|
| <input type="checkbox"/> Reference | Air Plants CP - Auto |
| <input type="checkbox"/> Features | Auto sequence Start - Auto sequence Stop |
| <input type="checkbox"/> Manufacture | In Accordance with IEE Wiring Regulations BS 7671:2001 17 th Edition |
| <input type="checkbox"/> Enclosure | IP 66 enclosure c/w Door Interlocked Isolator |
| <input type="checkbox"/> External Finish | RAL 7032 Grey |
| <input type="checkbox"/> Electrical supply | Suitable for 415v-3ph-50hz |

Supports Specification

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|--|--|
| <input type="checkbox"/> Duct attachment | Two piece split galvanized band |
| <input type="checkbox"/> Support | Galvanised thin wall tube/Threaded M10 Rod |
| <input type="checkbox"/> Fastening | Lindapter purlin clips |

Cost Summary

Our price for the new filter unit, control panel & rotary valve will be:



Our price for the fan set, E.I.V. damper & suction main will be:



Our price for the transfer fan & closed loop system will be:



Our price for the hire of the relevant access equipment & crane will be:



Our price for the project management & commissioning will be:



Clients Responsibility

- ❑ Three phase power supply to and from Control panel to electric motors and safety devices.
- ❑ Compressed air pipework & air supply (must be clean and dry).
- ❑ Provision of Concrete foundations, cutting and sealing holes where our equipment passes through.
- ❑ Fitting of lightening conductor to filter equipment.

Conditions of Sale

Your attention is drawn to our standard conditions of sale which are available by the link to our website (<http://www.airplants.co.uk/conditions.html>) email and in particular to our terms of payment which are as follows: -

- ❑ 30% of contract value with order
- ❑ 60% of contract value prior to delivery date.
- ❑ 10% of contract value on completion of installation

All payments must include VAT if applicable to the contract.

Trusting we have interpreted your requirements correctly, but should you have any queries please do not hesitate to contact the writer.

Yours faithfully

AIR PLANTS DUST EXTRACTION LIMITED

K D Sansome

K D Sansome

Service & Aftercare Manager

