Viledon 2018/19

FREUDENBERG FILTRATION TECHNOLOGIES

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Engineering Projects

- We received and enquiry from South 32 to design and supply a filter house for their blower rooms. There is an opportunity to manufacture 8x filter houses to retrofit the existing underperforming air intake filter houses.
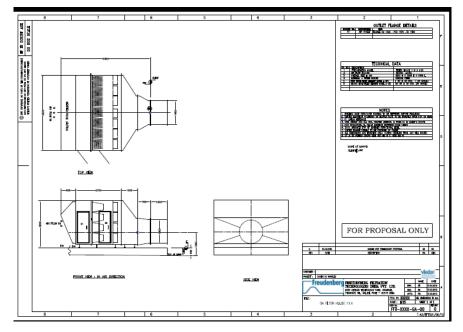
Procedure:

- Site visit to understand the airflow requirement

Calciner 3 - Blowers								
Tag #	Function	Blower make	Blower model	Blower speed (RPM)	Discharge Pressure (kPa)	Intake Volume (m3/min)	Intake Volume (m3/hr)	Intake Volume (m3/s)
B050301	Primary air	Aerzen	GMc17.16	985	40	200	12000	3.333333333
B050302	Primary air	Aerzen	GMc17.16	985	40	200	12000	3.333333333
B050303	Primary/Secondary air	Aerzen	GM315L	985	40	200	12000	3.333333333
B050304	Secondary air	Aerzen	GMc17.16	985	40	200	12000	3.333333333
B050305	Secondary air	Aerzen	GMc17.16	985	40	200	12000	3.333333333
B050306	Secondary air	Aerzen	GMc17.16	985	40	200	12000	3.333333333
B050307	Seal pot	Aerzen	GM35S	1450	50	12.75	765	0.2125
B050308	Seal pot	Aerzen	GM35S	1450	50	12.75	765	0.2125
B050309	Air lift	Aerzen	GMb16.F13	1500	40	118	7080	1.966666667
B050310	Air slide	Aerzen	GMa 12.6	1465	40	8.75	525	0.145833333
B050312	Secondary air	Aerzen	GMc17.16	985	40	0	0	0
B050325	Preheat burner air	Hibon	NX26	2960	40	71.1	4266	1.185
					Total	**1423**	**85401**	**23.72**
		Design ventilation capacity (including 15% additional capacity)				**1637**	**98211**	**27.28**

Engineering Projects (cont)

- Send design enquire to FFT India engineering hub to offer design and drawings.

- FFT India offer a GA drawing to depict matrix

- In this case 7x4 matrix to accommodate the

  required airflow of 98000m3/h

- Develop Cost calculations spreadsheet to

  calculate margin.

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Engineering Projects (cont.)

- Client then requests fixed pricing.

- Input tracking sheet information for submission and approval from FFT engineering project head Sabine Gellert

Guidebook FFT Engineering Projects				Appendix 1	
Tracking Sheet for Bids					
General Data:					
Tracking sheet issued by: Andrew Van Der Merwe			Date: 28/11/2018		
Project #:	Project name: South32			Bid Rev #:	
Product: Filter house	Bid project manager: And				
Customer: South32	Customer order:		Customer proposal: x		
Bid submission date: 30/11/18	Budget x	Fixed Price	Validity:		
Country customer: Australia		Country project: Australia/India			
Single business: x	Follow-up:	Frame agreement:			
Incoterms:		Installation:		Supervision: x	
New equipment:	Retrofit: x		Repair:		
Project start date: Feb-19	Delivery dates: Feb 2019 intallation				
Planned order project manager: Engeenering from FFT Indis(confirmed by quotation)					
Technical Evaluation:					
Project description: Manufacture Air-Inlet Filter house 7x 4 316 Stainless Steel					
Technical risks: Normal Retrofit risks, first time vendour however their Budget price is +/- 10%					
have a good facilty and have manufactured duct work for Chevron Weatstone					
Req. Performance Data: no requested perfomance data from customer					
Temperature and humidity profil of plant location available:		required: x			
Customer's techn. specifications available: x	known from previous projects:	checked:			
Experience check:					

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Engineering Projects (cont.)

- Once approval is received, FFT India engineering hub offers quote for manufacturer drawings

- A proposal can then be offered to the client for fixed pricing full turnkey project design supply and install(optional depending on resources) filter house.

- References in WA

- Monodelphous Filter house refurbishment and new elbow silencer $580k

- Air Liquide Kwinana – 2 x 2 stage new filterhouse for compressor $200k

- Kleenheat Gas Refurbishment $180k

- South 32 Potential 8 x filterhouses @$120k each.

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Engineering Projects (cont)

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Engineering Projects (cont)

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Engineering Projects (cont)

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Thank you.

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