

JET III TYPE DUST COLLECTORS

High collection efficiency | Low initial cost | Low maintenance cost | Low operating cost



JET III is a wholly new design in pulse JET dust collectors, offering the high collection efficiency by increasingly stringent environmental regulation, plus true economic is achieved by a new state of the art system designed to reduce maintenance, labor, parts and energy cost.

Available in a full range of standard cloth areas, JET III also offers flexible sizing and efficient space saving installation.

While sizing, access and housing construction of a dust collector are important, the critical features are the internals. Inside, JET III shows its superiority in these exclusive areas:

Variation of the tube sheet / bag length can be tailored to a particular application and dust condition. This flexibility enables relatively small sized houses to be employed on large volume jobs, lowering capital cost. Smaller modules (19 to 521 sq. meter of cloth area) are square in plan and large volume modules (460 to 1195 sq. meter of cloth area) are rectangular. Both design features specially designed inlet connection for efficient gas flow and long filter bag life.

Access to the unit is provided by an integral, full height, weather proof, walk in, clean air plenum. Where heat or other factors present special problems or where bags in excess of 144 inches long are used, manually operated, hinge roof doors are available.

Tube sheet and bag attachment

Venturi and cage

Pulse cleaning system

JET III housing is constructed of 10 gauge hot rolled steel sheets stiffened for 20" WG. All JET III units are completely fabricated before shipment for easy, economical field erection. Square modules are shipped as assembled, one piece unit complete with flanged inlet & outlet connection. Due to restriction in certain geographic areas, the air header and valves assemblies may be shipped as a sub-assembly for field installation. The large volume modules are shipped in three, pre-matched sections for easy job-site completion.

The following pages describe these exclusive features of JET III that yield real benefits in operation and economy for you.

Tube Sheet & Bag Attachment

- Die-formed cups for added strength
- Positive seal against dust leakage
- Fast bag attachment, without tools
- Simple, one step bagging
- Improves clean side work area



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Tube Sheet:

JET III uses deep drawn cup tube sheet. The bag cups are drawn, eliminating weld, which could fail or leak. The tube sheet is seal welded into the housing to enable a positive seal against dust penetration. Also the tube sheet's flat & smooth upper surface simplifies difficult maintenance and housekeeping.

Bag Attachment:

JET III tube sheet features patented "Snap ring" bag sealing. Unlike other design where bag installation often is a two man, two step operations external to the filter, JET III offers a fast, one man & one step process. Our tube sheet, acting as a natural bagging fixture, allows cage insertion directly into the tube sheet and bags. This simple and one step attachment creates the only seal necessary .eliminating the need for secondary seal such as "O" rings or gaskets.

In fact, it would be difficult to install a bag, which did not seal properly. On major interchange of bags can be dropped to the dirty side hopper below to maintain a true, clean side work environment.

JET III filter bags are available with complete range of high quality bags in all popular synthetic fabrics including high temperature fabrics.

Venturi and Cage

- Design to save compressed air cost
- Self align Venturi for easy installation and efficient pulse cleaning
- Simple interlock for quick assembly
- Quality bag support cages

The high gain throat of JET III newly designed venturi is capable of cleaning more surface area of filter media with less compressed air. This provides effective cleaning of 6" diameter and up to 14 feet long bags of JET III while the collector is on stream. The venturi of JET III may be supplied in aluminum or cast iron.

The venturi is self align in the bag support cage and tube sheet for easy installation and maximum cleaning efficiency. No fittings, clamps, gaskets and attachment are required to secure the assembly. JET III features the industry's the simplest yet the most effective venturi and cage assembly. This assembly requires only the single snap interlock of the venturi within the cage. The weight of the cage is supported by the venturi flange. The standard bag support cage is made of heavy gauge wire to provide maximum support for long filter bag life.

This rugged construction maintains alignment and critical dimensional relationship between bag and cage. Cages are specifically designed to withstand rough handling during installation and subsequent bag change outs. Carbon steel is standard material. Stainless Steel cages and corrosion resistant coating are available for special applications.

Pulse cleaning system

JET III features unique designed pulse jet cleaning system. Resulting from extensive research, JET III pulse cleaning hardware is designed to clean with minimum air mption and maximum energy savings. More filter cloth area is cleaned per horsepower than in conventional design. The JET III system is tested for the critical industry applications in the field. The JET III cleaning system can also contribute to



prolonging filter bag life. JET III air valves mounted on the header and manifold combine to offer a highly effective cleaning system.

1. JET III Header :

The compressed air header is square in section for space saving, positive alignment and convenient for the bolting of air valves. This eliminates leakage common to other designs.

The header assemblies are sectioned to permit local isolation for maintenance without shut down the total system. These sectioned headers provide rapid depletion of the header pressure. The system requires a maximum line pressure of 90 PSI for energy conservation.

2. JET III Combined Solenoid Diaphragm Air Valve.

Special solenoid diaphragm valves are fitted to square headers. The air dump valve, matched to the new venture provides the air for cleaning up to 15 bags per row. ●

Fewer valves per square meter of cloth mean less maintenance and fewer parts in inventory. The valve also allows the convenience of remote pilot control (for low cost electrical installation) with no loss of efficiency across the air valve. The design of air valve is simple to replace, however this is ever become necessary.

3. JET III Manifold:

The manifold pipe is jig drilled for the positive alignment of the blown holes with the center of the venture to assure maximum efficiency. Precision fit of the manifold within the plenum is positive to maintain this alignment. For inspection or removal of the bag, the manifold can be removed with a minimum effort and without special tools.

Cloth area

Cloth area is ranging from 19 to 521 Sq. Meters. Available with multiple hinged roof doors type RA & with full height walk- in plenum chamber type "TA"

SQUARE MODULES "RA" FILTER AREA AND OVER ALL DIMENSIONS (IN MM)

2.5 MM PLATE THICKNESS

MODEL RA Type 1000	NO. OF BAGS	Filter area (SQ. mtr)			A	B	C		
		96"	108"	120"			96"	108"	120"
1016	16	19	21	23	914	914	4890	5195	5500
1025	25	29	33	36	1124	1124	5067	5372	5677
1036	36	42	47	53	1321	1321	5245	5550	5855
1049	49	57	64	72	1524	1524	5448	5753	6058
1064	64	75	84	93	1727	1727	5626	5931	6236
1081	81	95	106	118	1930	1930	5855	6160	6465.



SQUARE MODULES "TA" OVER ALL DIMENSIONS (IN MM)

3.15 MM PLATE THICKNESS

MODEL	NO OF BAGS	A	B	C					
				108"	120"	132"	144"	156"	168"
0909	81	1955	1955	7315	7925	8535	9145	-	-
1111	121	2360	2360	7671	8281	8891	9501	-	-
1313	169	2770	2770	8026	8636	9246	9856	8230 «	8535
1515	225	3175	3175	8357	8967	9577	10187	8712	9017
1715	255	3555	3175	8687	9297	9907	10517	9042	9347

SQUARE MODULES "TA" & "RA" FILTER AREA AND MODULES "RA" OVER ALL DIMENSIONS (IN MM)

3.15 MM PLATE THICKNESS

MODE L	NO OF	FILTER AREA- Sq. mtr (TA & RA)							A	B	C						
		96"	108"	120"	132"	144"	156"	168"			96"	108"	120"	132"	144"	156"	168"
0909	81	95	106	118	130	142	-	-	1955	1955	6153	6458	6763	7068	7373	-	-
1111	121	141	159	177	194	212	-	-	2360	2360	6508	6813	7118	7423	7728	-	.
1313	169	197	222	247	271	296	321	345	2770	2770	6865	7170	7475	7780	8085	8390	8695
1515	225	263	296	328	361	394	427	460	3175	3175	7195	7500	7805	8110	8415	8720	9025
1715	255	298	335	372	409	447	484	521	3555	3175	7525	7830	8135	8440	8745	9050	9355

Large Volume JET III

Cloth area is ranging from 460 to 1195 Sq. Meters. Available with multiple hinged roof doors type "RA" & with full height walk-in plenum chamber type "TA".

RECTANGULAR MODULES "RA" & "TA" FILTER AREA AND OVER ALL DIMENSIONS (IN MM) 3.15 MM PLATE THICKNESS

MODEL	NO. OF BAGS	A	B	FILTER AREA-SQ MTR (TA & RA)			C		
				120"	144"	168"	120"	144"	168"
2115	315	5283	3175	460	552	644	7763	8373	8983
2415	360	5893	3175	525	630	735	7763	8373	8983
2715	405	6807	3175	591	709	827	7763	8373	8983
3015	450	7417	3175	657	788	919	7763	8373	8983
3315	495	8331	3175	722	867	1011	7763	8373	8983
3615	540	8941	3175	788	946	1103	7763	8373	8983
3915	585	9855	3175	854	1024	1195	7763	8373	8983



RECTANGULAR MODULES "TA" OVER ALL DIMENSIONS (IN MM)

3.15 MM PLATE THICKNESS

MODEL	NO. OF BAGS	A	B	C		
				120"	144"	168"
2115	315	5283	3175	8865	10084	11303
2415	360	5893	3175	8865	10084	11303
2715	405	6807	3175	8865	10084	11303
3015	450	7417	3175	8865	10084	11303
3315	495	8331	3175	8865	10084	11303
3615	540	8941	3175	8865	10084	11303
3915	585	9855	3175	8865	10084	11303

Salient features of the new generation Dust Collectors

Tube Sheet: Integrally drawn bag collar for positive bag sealing.

Snap Ring bag - It provides simple, one step bagging operation with tube sheet. Additional sealing is not required. No tool is necessary.

Venturi & Bag Support Cage - High gain throat design venturi improves cleaning efficiency and saves energy. Venturi and cage interlocks for the single piece assembly into the filter bag, no prior assembly of these components outside the filter housing is necessary.

Venturi cages are self align with the tube sheet and bag. No clamps or hold down device are required.

JET III Pulse Cleaning System – The compressed air header which is square & space saving, employs special bolt on air valves for leak proof alignment with the air distribution manifolds. JET III utilizes remote pilot valves for low cost field wiring.

JET III Timer - The modules employ the solid state electronic timer in NEMA - IV enclosure with 110V/220 V AC solenoids.

Auxiliaries - All modules are supplied with the standard access ladders, walkways and handrail to meet the requirement. The complete range of rotary air lock valves and material handling systems are available.

Standard Construction - JET III type 1000 modules are welded and fabricated from 12 gauge carbon steel and stiffened for 15" WG

Shipment - JET III type 1000 modules are shipped as one piece unit, including support legs, for simple and low cost installation.

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