



Controlled Air Design (800) 635-0298 www.controlledairdesign.com

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GRINDING | DEBURRING | Polishing | Sanding | Thermal Cutting | Welding DRY DUST

OVERVIEW

The Coral IPERJET DF MAX dust collection system is the same as our IPERJET DF except it allows for more air flow for larger applications. The Coral IPERJET DF MAX is unique as we designed it to have horizontally fixed filter cartridges which makes servicing much easier for your maintenance team.

The Coral IPERJET DF MAX is suitable for applications that require the removal and filtration of welding fumes and dust as well as small quantities of chips from many different applications.

The Coral IPERJET DF MAX collection system is the ideal solution for all applications where extraction, collection and removal of pollutants are required so that indoor air can be returned to the working environment. With today's utility costs constantly rising, evacuating conditioned but contaminated air from the plant floor outdoors is no longer possible. The Coral IPERJET DF allows filtered air to safely be returned to the work environment.

Working Principle

The Coral IPERJET DF MAX is designed so that incoming air enters the top of the unit and travels down the back side, the contaminated air then makes a 180° turn and travels straight up into the filter chamber. Due to the rapid change in direction, heavy solids fall out of the air stream and are deposited into a collection bin located at the back of the unit.

Contaminated air then passes through our specially designed high efficiency filter cartridges where 99% of the harmful solids are removed.

The Coral electronically controlled pneumatic back pulse system keeps our high efficiency filter cartridges operating at peak efficiency. The controller constantly monitors the condition of the filter cartridges by using differential pressure, always checking the inlet pressure against the outlet pressure. Once the controller detects that the filter cartridges are clogging, a cleaning cycle is initiated. During the cleaning cycle, high pressure compressed air (7 bar - 101 psi) is released inside the filter cartridges creating a shock wave that forcibly pushes the collected solids off the cartridges. The solids fall by gravity to a second lower collection bin for removal.

A Coral high-performance fan mounted on the top of the IPERJET DF MAX assures a high suction capacity and quiet operation.

HORIZONTAL CARTRIDGES

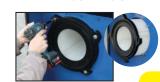
What makes our system unique is the horizontal mounting of the specially designed Coral filter cartridges. This allows operators easy access and a quick maintenance of the filtering cartridges when required. Simply open the door, loosen four retaining bolts, twist and remove.

IPERJET OF MAX 9-12 FIBER FILTERING CARTRIDGES



Pressure switch





THE HORIZONTAL POSITION OF THE CARTRIDGES ALLOWS AN EASY ACCESS AND A QUICK MAINTE-NANCE OF THE FILTERING AREA.

ELECTRIC CONTROL BOARD

IPERJET DF MAX 18-24



Pressure switch

ECONOMIZER



Collection bins

IPERJET DF MA

Welding Fume collector filter with 9-12 or 12-18 horizontal cartridges



OPTIONS



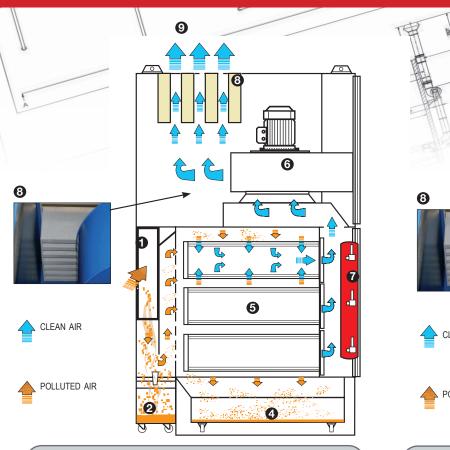
-INLET CONNECTION

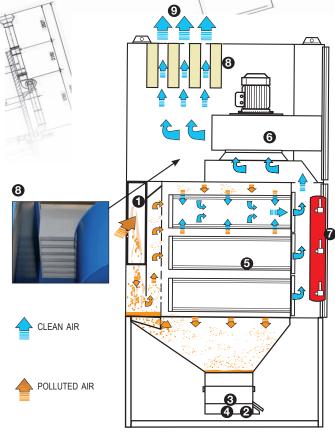
WITH ACTIVATED CARBONS



CHNICAL FEATURES

OPERATING PRINCIPLE





IPERJET DF MAX - DFMAX TC 9-12

- 1.POLLUTED AIR INLET
- 2 COLLECTION BIN FOR COARSE DUSTS
- 3·Hopper
- 4 COLLECTION BIN FOR FINE DUSTS
- **5**•FILTERING CARTRIDGES
- **6**•Fan
- 7 · COMPRESSED AIR TANK

- 8 Additional vertical SOUNDPROOFING PANELS (OPTIONAL)
- 9 ·CLEAN AIR OUTLET

OPTIONALS MEDIA

IPERJET DF MAX TRU - DFMAX TC TRU 9-12

IPERJET DF MAX - DF MAX TRU M/CEL

POLYESTER/PTFE COATING

CELLULOSE

M-PES/AX/EXAM ACCREDITED POLYESTER/ALUMINUM COATED/ANTISTATIC

M PES+ PTFE/MEMBRANE

M PES/TF

M PES/OWR

POLYESTER/TEFLON MEMBRANE

Ø 325 H 1200

POLYESTER/OLEO-HYDROPHOBIC

M-NANOTECH Ø 325 H 1200 - Ø 325 H 1000

CELLULOSE WITH NANOFIBERS

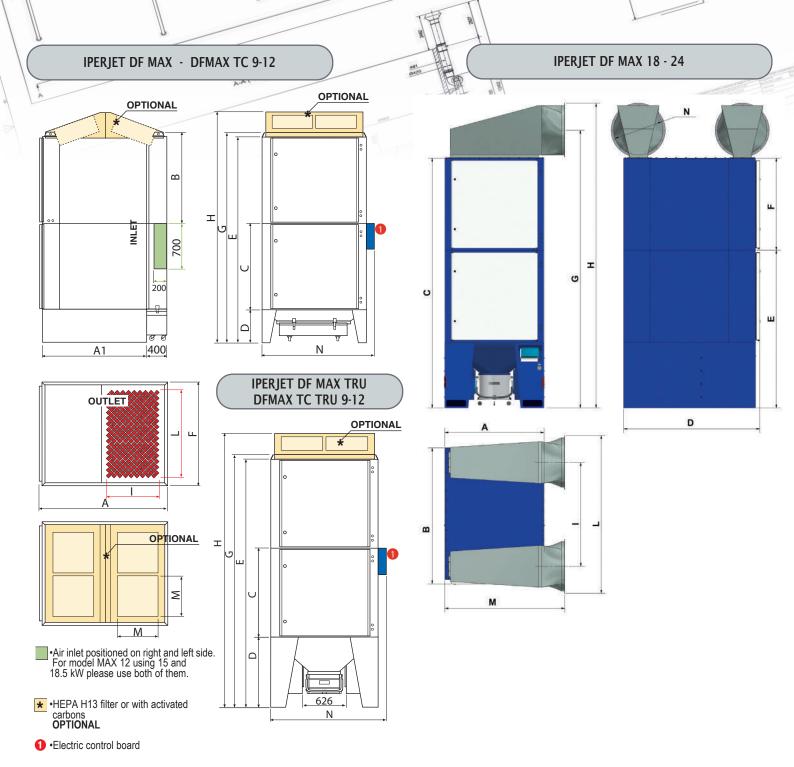
FIBER FILTERING CARTRIDGES

	DF MAX 9	DF MAX 12	DF MAX 9	DF MAX 12	DF MAX 18	DF MAX 24	DF MAX 18	DF MAX 24	
Number of cartridges	9	12	6	9	18	24	18	24	
IFA/BGIA RATING	M PES (STANDARD) POLYESTER		M-NANOTECH CELLULOSE WITH NANOFIBERS		M PES (STAN	DARD) Polyester	M-NANOTECH CELLULOSE WITH NANOFIBERS (OPTIONAL)		
FILTERING SURFACE	10 -15-20 HP 2034 sq.ft	15-20-25 HP 2712 sq. ft	7,5 HP 10 HP 2131 sq.ft 2583 sq.ft	20 HP 3875 sq.ft	4069 sq.ft	5425 sq.ft	7750 sq.ft	10333 sq.fT	
CARTRIDGE DIMENSIONS	Ø13-H 47 INCHES		Ø13-H 39 INCHES	Ø13-H 47 INCHES	Ø13-H 47 INCHES		Ø13-H 47 INCHES		

WELDING FUMES IPERJET DF MAX METAL DUSTS AND FUMES	DF M	IAX - DF MAX 9	TRU	DF MAX - DF MAX TRU 12			DF MAX TC- DF MAX TO		CTRU 12
THERMAL BREAK		15 HP	20 HP	15 HP	20 HP	25 HP	7,5 HP	10 HP	20 HP
No. of Evolution arms suggested with the flow rate	6	7	8	7	9	10			
of 1300 m³/h each arm Ø 6 inches		6	7	6	9	10	1		
Suggested air inlet connection 7,9x27,5 inches to dia	Ø 15,74"	Ø 16,53"	Ø 18,89"	Ø 15,74"	Ø 18,89"	Ø 20,47"			
	Ø 12,40"	Ø 13,77"	Ø 14,96"	Ø 13,77"	Ø 15,74"	Ø 16,53"	Ø 11,02"	Ø 11,81"	Ø 14,96"
AIR TRANSPORT SPEED INSIDE THE PIPE	18 м/ѕ	19 м/ѕ	17 м/ѕ	18 м/ѕ	19 м/ѕ	18 м/ѕ	22,6 м/s	23,8 м/ѕ	22,7 м/s
	25 м/s	25 м/s	25 м/ѕ	23 м/s	25 м/s	25 м/ѕ			

TECHNICAL FEATURES

DIMENSIONS



IPERJET DF MAX	Α	A 1	В	С	D	Е	F	G	Н	I	L	M	N	
DF MAX - DF MAX TC 9	75	57	53	50	19	119	59	122	132	32	49	24	67	inches
DF MAX TRU - DF MAX TC TRU 9	75	-	53	50	39	139	59	142	152	32	49	24	67	inches
DF MAX - DF MAX TC 12	82	66	53	55	19	124	59	127	138	32	49	24	69	inches
DF MAX TRU - DF MAX TC TRU 12	82	-	53	55	39	144	59	147	161	32	49	24	69	inches
DF MAX 18	59	-	81	150	81	94	55	164	178	62	90	71	24	inches
DF MAX 24	59	-	81	150	81	94	55	166	183	62	95	71	29	inches

PERFORMANCE

IPERJET DF MAX	DF N	MAX9 - DF MAX9		DF MAX9 TC - DF	MAX9 TC TRU				
	4708 cfm	5591 cfm	6474 cfm	0040 - 5	0504 - 6 -				
Air flow	4120 cfm	5002 cfm	5886 cfm	2943 cfm	3531 cfm				
Fan	PRH450/R	PRH450	PR500/R	PRA280	PRA320				
Power / Number of poles	10 HP	15 HP	20 HP	7,5 HP	10 HP				
R.P.M	3450	3450	3450	3450	3450				
A	5,15 IN H:O	5 IN H ₂ O	6,5 IN H ₂ O	4,1 in H:O	5,8 in H ₂ O				
AVAILABLE STATIC PRESSURE AT UNIT INLET	6,3 IN H:O	6,3 in H ₂ O	7,5 in H [.] O	4,1 IN ∏:O	3,6 IN H:U				
Average sound level	80 dB	82 dB	83 dB	73 dB	76 dB				
AVERAGE SOUND LEVEL	78 dB	79 dB	80 dB	71 dB	74 dB				
BIN DUST HOLDING CAPACITY	36÷60 gal	36÷60 gal	36÷60 gal	36÷60 gal	36÷60 gal				
BIN DUST HOLDING CAPACITY TRU	13 gal	13 gal	13 gal	13 gal	13 gal				
W EIGHT	3152 lb	3196 lb	3306 lb	3152 lb	3196 lb				
Working tank header pressure		Max 101 PSI							
ELECTRICAL FEEDING OF VALVE 24 VAC									

* VERTICAL SOUNDPROOFING (OPTIONAL)	WELDING FUMES METAL DUSTS			THERMAL CUT				
IPERJET DF MAX	DF MA	X12 - DF MAX12	2 TRU	DF MAX12 TC - DF MAX12 TC TRU				
Air flow	5297 cfm	7357 cfm	8240 cfm	5297 cfm				
AIR FLOW	4708 cfm 6474 cfr		7357 cfm	3297 CIIII				
Fan	PRH450	PR500/R	PR500/R	PRA360				
Power / Number of Poles	15 HP	20 HP	25 HP	20 HP				
R.P.M	3450	3450	3450	3450				
Available static pressure at unit inlet	6,3 in H ₂ O	5,8 IN H2O	6 IN H₂O	9,5 in H₂O				
AVAILABLE STATIC PRESSURE AT UNIT INLET	7,4 in H:O	7,3 IN H2O	7,8 in H₂O	9,5 IN ∏2O				
AVERAGE SOUND LEVEL	80 dB	82 dB	83 dB					
AVERAGE SOUND LEVEL	78 dB	79 dB	80 dB	80 dB				
BIN DUST HOLDING CAPACITY	50÷79 gal	50÷79 gal	50÷79 gal	13 gal				
BIN DUST HOLDING CAPACITY TRU	13 gal	13 gal	13 gal	13 gal				
WEIGHT	3417 lb	3483 lb	3527 lb	3417 lb				
Working tank header pressure	Max 101 PSI							
ELECTRICAL FEEDING OF VALVE	24 VAc							

IPERJET DF MAX	DF MAX18	DF MAX24	DF MAX18 DF MAX24 M-NANOTECH M-NANOTECH			
Air flow	11771 cfm	17657 cfm	11771 cfm	17657 cfm		
BIN DUST HOLDING CAPACITY	13 gal	13 gal	13 gal	13 gal		
Wеібнт	3139 lb	3274 lb	3218 lb	3307 lb		