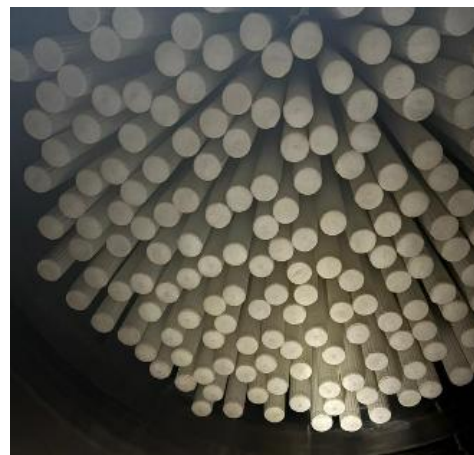


DUSTLESS – BAG HOUSE (DBH)

DBH T2E DXS are bag filters designed to offer the best operating performance with compactness, standard sizes and the best energy saving techniques, through low pressure drop and reduced compressed air consumption, through supersonic nozzles specially developed by us.

>> Options

- CIPable with our DRN nozzles or not;
- Equipped with our DPH pneumatic hammers or not;
- Bottom fluidizer with our DPS plates or not;
- Equipped with DSS-2-280 for reduced air consumption or not;
- Insulation in the cone and/or cylinder;
- Heating in the cone by recirculating hot water (half-cane);
- With or without sequencer (many customers choose to control pulse valves by PLC);

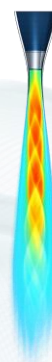


>> Required

- Equipped with specially developed DAS nozzles to achieve supersonic speed in the air, increasing the venturi effect and achieving a much more effective blow (DAS nozzles are not sold separately);
- Fire protection;
- Prepared for explosion protection system (suppression/explosion window);
- Access door in the clean part, in the cone and side;

>> Engineering

- 160mm diameter sleeves
- Length up to 7m
- Market-proven air-to-dust ratio
- Low speeds in and out of sleeves



BAGHOUSE DATA							
Sleeves	Diam	Fluidizer (mm)	DPH Hammers	CIP sup areas	CIP nozzles	Fire Nozzles	Blow Off Valves
432	5.712	1.700	4	12	480	23	48
364	5.236	1.700	4	10	400	17	44
308	4.760	1.500	4	10	350	16	40
260	4.284	1.500	4	8	290	14	36
212	4.032	1.000	4	6	244	12	32
170	3.332	1.000	2	6	215	9	28
125	2.856	800	2	4	145	8	24
90	2.726	800	2	4	109	8	20
58	1.904	800	2	2	77	7	16
32	1.428	800	2	2	45	6	12

DUSTLESS – BAG HOUSE (DBH)

MASS / FOUNDATION APPROXIMATE					
Sleeves	Sleeve length (mm)	Mass (kg)	M Oper. (kg)	Emergency. Dry(kg)	Emergency. Water (kg)
32	4.500	6.430	6.410	14.810	20.108
58	4.500	7.687	7.894	16.294	21.817
90	4.500	9.235	9.721	18.121	23.921
125	4.500	10.927	11.719	20.119	26.221
170	4.500	13.000	14.200	22.600	29.200
212	4.500	15.000	16.600	25.000	31.600
260	4.500	17.456	19.425	27.825	35.095
308	4.500	20.500	22.700	31.100	39.100
364	4.500	22.000	25.000	33.400	41.400
32	6.000	7.430	7.173	15.690	20.988
58	6.000	8.687	8.754	17.261	22.783
90	6.000	10.235	10.700	19.194	24.993
125	6.000	11.927	12.828	21.308	27.410
170	6.000	14.000	15.500	24.000	30.600
212	6.000	16.000	18.000	26.400	33.000
260	6.000	18.456	21.037	29.464	36.733
308	6.000	21.500	24.500	32.900	40.900
364	6.000	23.000	27.000	35.400	43.400
32	7.000	8.430	8.262	16.662	21.961
58	7.000	9.687	9.870	18.270	23.793
90	7.000	11.235	11.848	20.248	26.048
125	7.000	12.927	14.012	22.412	28.515
170	7.000	15.000	16.700	25.100	31.700
212	7.000	17.000	19.300	27.700	34.300
260	7.000	19.456	22.359	30.759	38.028
308	7.000	22.500	25.900	34.300	42.300
364	7.000	24.000	28.400	36.800	44.800

Note: The values presented here are approximate as they depend on accessories, etc.
 Mass: Total mass of empty equipment with sleeves and cages.
 M. Oper.: Mass of the empty equipment considering 10mm of dust accumulated in the internal parts
 Dry Emergency: M. Oper. + Full cone
 Emergency Water (kg): Emergency Drought + Fire Water for 10 minutes

DUSTLESS – BAG HOUSE (DBH)

PROCESS DATA			
Sleeves	Max. CIP flow RATE (m3/h)	Fire protection flow rate (m3/h)	Compressed air consumption (NM3/h)
432	64	58	474
364	64	42	371
308	56	40	330
260	58	35	270
212	65	30	220
170	57	23	200
125	58	20	150
90	44	20	90
58	62	18	70
32	36	15	60

FLUIDIZER DATA			
Fluidizer (mm)	Air flow rate (kg/h)	Diam. Entr. (mm)	CIP nozzles
800	550	160	3
1.000	1.000	250	3
1.500	1.800	350	4
1.700	2.800	400	4
2.000	4.000	500	4

ACTIVE VOLUME APPROX. (m3)			
Sleeves	4,500 (mm)	6,000 (mm)	7,000 (mm)
32	12	18	22
58	16	20	26
90	22	28	32
125	30	38	42
170	39	49	56
212	50	62	70
260	66	78	86
308	78	92	104
364	94	113	126
432	125	149	166

CLOTH AREA (m2)			
Sleeves	4,500 (mm)	6,000 (mm)	7,000 (mm)
32	72	97	113
58	131	175	204
90	204	271	317
125	283	377	440
170	385	513	598
212	480	639	746
260	588	784	915
308	697	929	1084
364	823	1098	1281
432	977	1303	1520

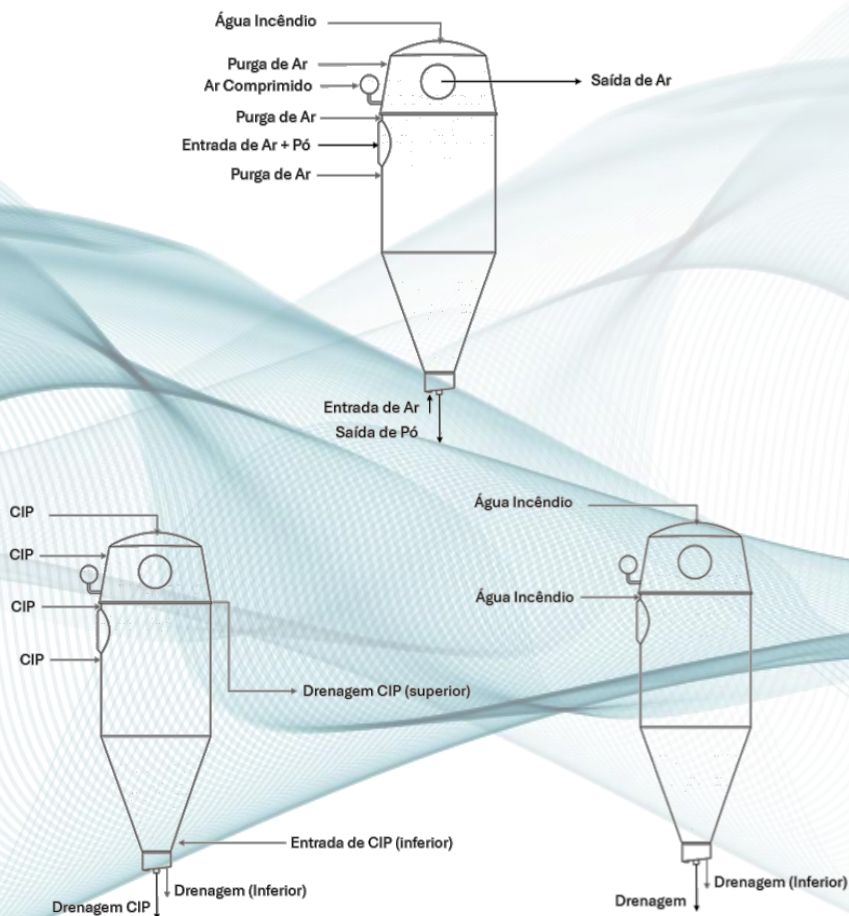
DUSTLESS – BAG HOUSE (DBH)

» Design:

- Maximum Internal Operating Pressure: 5 kPa_g
- Maximum Pressure Drop: 2 kPa
- Design Temperature: 110 °C
- Maximum Sleeve Length: 7 m
- Maximum internal pressure, P_{red}: 50 kPa_g
- Filtration efficiency: < 10 mg/Nm³ar, depending on operating conditions
- Classification of "dirty" side explosion: Zone 20
- Side "clean" blast rating: Zone 22
- External side classification: Unrated
- Compressed air: ISO 8573.1

PARAMETER	LIMIT	CLASS
Residual oil content	< 0.01ppm	1
Particle size	< 1 µm	0
Particulate Concentration	< 1ppm	-
Dew point under pressure	< -20°C	3

» Flow Charts:



DUSTLESS – BAG HOUSE (DBH)

Safety Instruction:

 **Area Classification:**


DBH must be evaluated for the risk of explosion of combustible dusts, according to NFPA 68, NFPA 69, NFPA 652 and ABNT NBR ISO 80079-10-2 standards.

 **Power and Utilities Shutdown:**


Before beginning any maintenance or adjustment procedures, make sure that the equipment involved is turned off and disconnected from the power supply and utilities, whether water, steam, or any other type of fluid involved.

 **Rotary Valve:**

Bag filters usually have an associated rotary valve, pay attention to this equipment.

 **Cleaning Routine:**

Bag filters can operate under a cleaning routine. Before starting any operation or maintenance, make sure the routine is disabled;

 **Pressure and Vacuum Check:**


Bag filters can operate under pressure. Before beginning any operation or maintenance, check that the internal pressure of the equipment has been completely relieved. Avoid releasing pressure quickly or abruptly, as this can create a risk of injury.

 **Temperature Check:**


Bag filter can operate under high temperature. Before starting any operation or maintenance, wait for the temperature of the equipment to return to temperatures suitable for handling.

 **Safety Valve:**

The equipment may under no circumstances be operated in a condition of temperature/pressure higher than that indicated as the design temperature/pressure. If there is a risk of overpressure on the equipment, whether due to an incorrectly held valve, pump *shutoff* pressure or any other reason, the equipment needs to be protected by safety devices.

 **Maintenance:**

Replacement of all gaskets is necessary in order to avoid leakage of product and/or chemical elements. The standard service life of the gaskets is 1 (one) year. Depending on the type of material being used, the lifespan can be reduced.



During the operation and maintenance of the air ejector, it is mandatory to use appropriate PPE (Personal Protective Equipment), such as:

- Safety helmet;
- Goggles;
- Gloves;
- Safety boots;
- Ear protector;
- Among others;