

## METERING BINS & SCALES

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- LIVE BOTTOM PITS
- BS (WET)
- BCD (WET)
- BBT (WET)
- BBS
- SILOBIN
- FRB
- BBSO
- BCD (DRY)
- BCDS
- BCD.OSB
- BBPL
- BBT-BBT60 (DRY)
- SILOBIN B
- BT & BN
- BS (DRY)
- BSF
- BPM
- BPP

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• MDF • PB • INS. BOARD • PALLET BLOCKS • PELLETS • WASTE • LIME



## DOSING BINS

### LIVE BOTTOM PITS

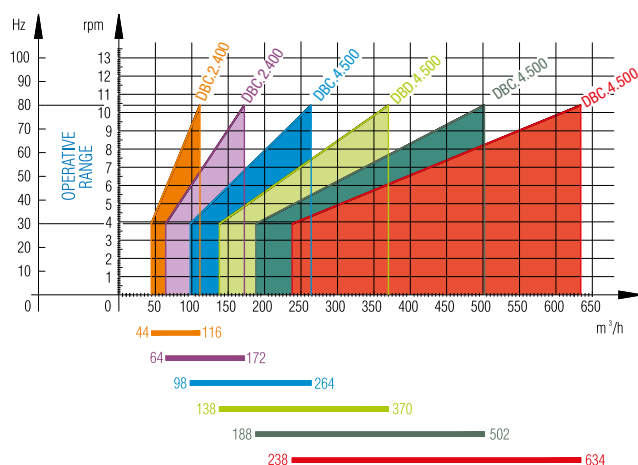
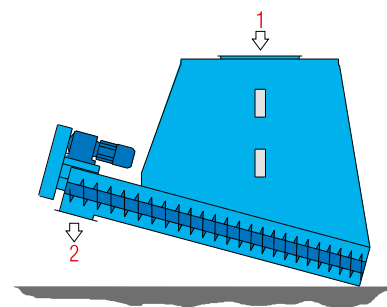
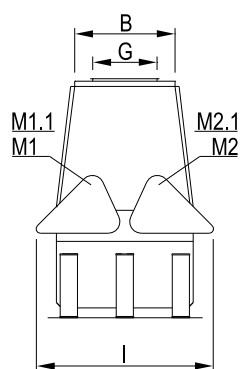
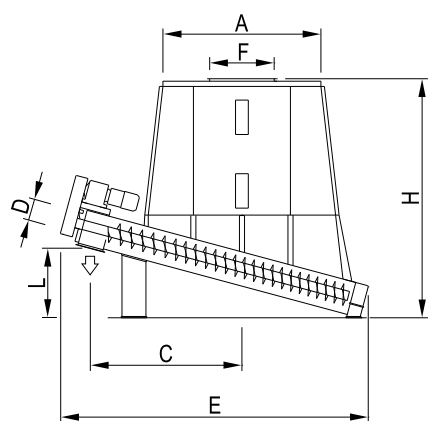
FOR CHIPS, SAWDUST, SHAVINGS, WET & DRY PARTICLES

#### TECHNICAL FEATURES

• Versatile storage-dosing live bottom pits: DB.6-9-12 with open-top for feeding with front loader – DBC.4 closed execution for metering of chips – DBD.4 special application for metering of Driers – DB1.1 & 2.2 for simultaneous metering of two downstream • Destorage system based on live bed made up of modules of two or three dosing screws (parallel or opposed construction) • Separate drive for each series of dosing screws • Level controls.

#### BENEFITS

/ Storage-dosing of fractioned materials, wet or dry, such as chips, sawdust, shavings, particles, etc. • Accurate dosing of several downstream machines, e.g.: roll screens – cleaners or sifters for chips, sawdust and shavings – knife ring flakers – hammermills – driers – dry screens – dry mills • No bridge formation • No material demixing • Wide range of extraction capacity: running the dosing screw modules separately, alternatively or all together – driving each motor with a frequency converter • High dosing accuracy from progressive pitch screws • High efficiency and reliability • Low maintenance.



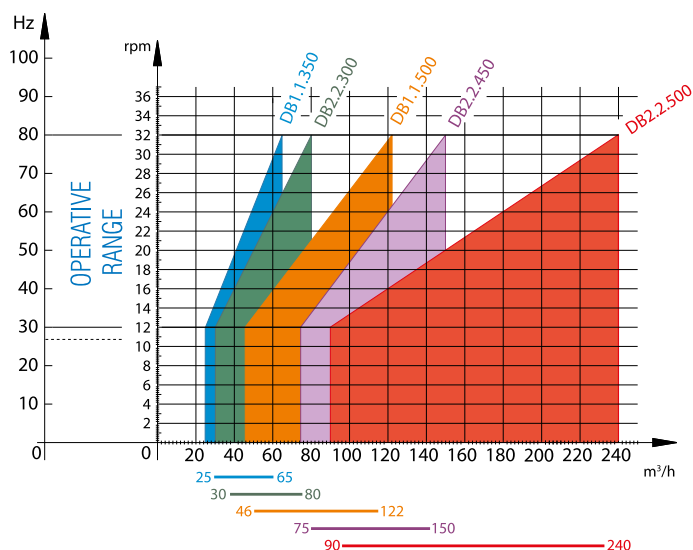
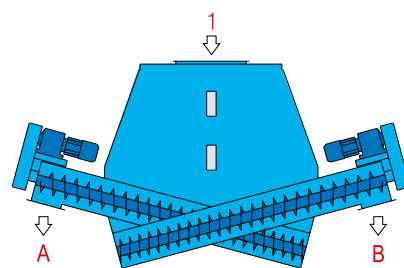
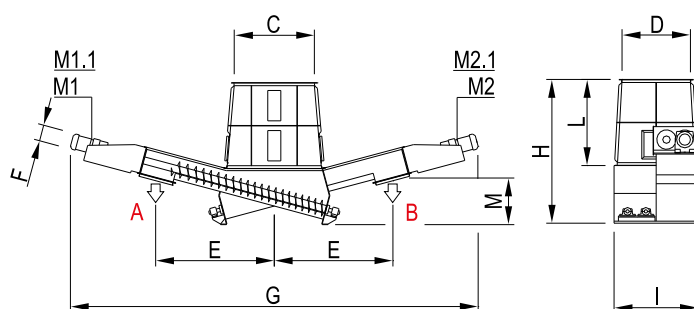
1 = FEEDING  
2 = DISCHARGE  
M1-M2 = SCREW ROTATION  
M1.1-M2.2 = FAN FOR COOLING

## LIVE BOTTOM PITS - CLOSED TOP

FOR CHIPS ONLY & SPECIAL APPLICATION TO METER THE DRYER FEEDING BY CONVEYORS

MODEL	BIN CONTENT m³	THROUGH-PUT m³/h	OVERALL DIMENSIONS mm										INSTALLED POWER kW**				WEIGHT APPROX. kg
			A	B	C	D	E	F	G	H	I	L	M1	M1.1	M2	M2.1	
<b>DBC.2.400</b>	5	SEE DIAGRAM	2310	975	2420	400	4470	2230	800	3300	995	1005	9,2	0,18	-	-	4300
<b>DBC.4.500</b>	30	SEE DIAGRAM	3845	2506	3340	500	7180	1500	1500	5570	4140	1615	11	0,18	11	0,18	19000
<b>DBD.4.500*</b>	30	SEE DIAGRAM	3600	1600	3685	500	8260	1200	1400	5390	2400	1405	45	0,27	45	0,27	13000
<b>DBC.4.500</b>	50	SEE DIAGRAM	3845	2506	3340	500	7180	1500	1500	5570	4140	1615	18,5	0,18	18,5	0,18	19000
<b>DBC.4.500</b>	60	SEE DIAGRAM	3845	2506	3340	500	7180	1500	1500	6570	4140	1615	22	0,18	22	0,18	20000

\*For dryer application \*\*According to type of material



1 = FEEDING  
A-B = DISCHARGE  
M1-M2 = SCREW ROTATION  
M1.1-M2.2 = FAN FOR COOLING

CAPACITY FOR EACH  
FLOW A AND B

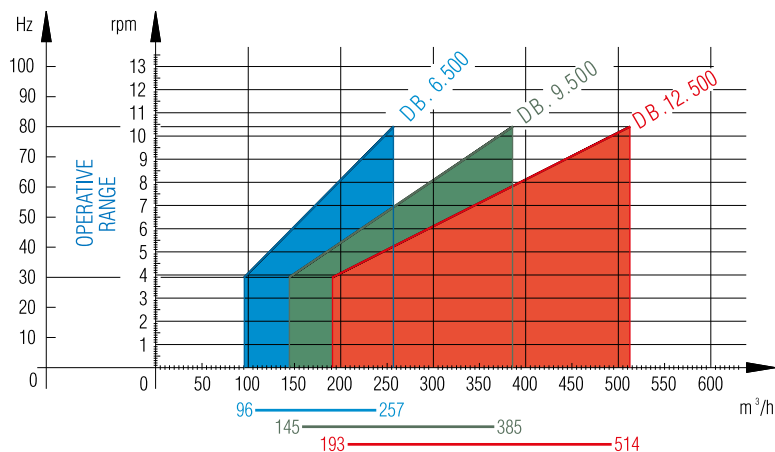
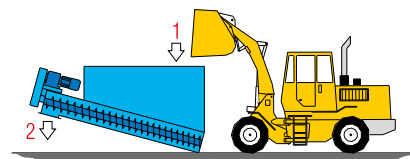
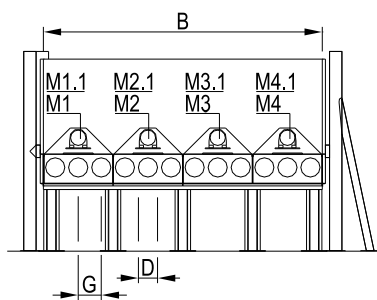
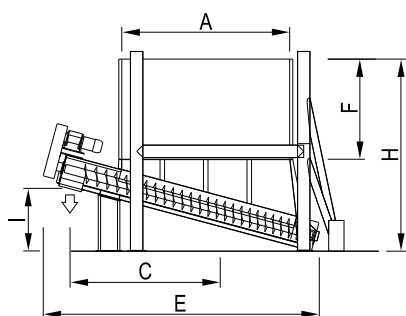
## LIVE BOTTOM PITS - CLOSED TOP WITH TWO EXTRACTIONS

FOR CHIPS, SAWDUST, WET & DRY PARTICLES FEEDING BY CONVEYORS

MODEL	BIN CONTENT m³	THROUGHPUT m³/h		OVERALL DIMENSIONS mm								
		A	B	C	D	E	F	G	H	I	L	M
DB1.1.350	2	25 - 65	25 - 65	1400	700	2075	350	5296	2411	930	1500	632
DB1.1.500	3	46 - 122	46 - 122	2000	900	3000	500	7392	2500	1370	1000	1150
DB2.2.300	3	30 - 80	30 - 80	1400	1200	2075	315	7335	2480	1472	1500	820
DB2.2.450	8	75 - 150	75 - 150	1600	1600	2606	450	6480	3280	2080	2000	1005
DB2.2.500	8	90 - 240	90 - 240	2000	1500	3296	500	7965	3430	2326	2000	1225

MODEL	INSTALLED POWER kW				WEIGHT APPROX. kg
	M1	M1.1	M2	M2.1	
DB1.1.350	4,0	0,08	4,0	0,08	2500
DB1.1.500	11,0	0,18	11,0	0,18	4000
	9,2	0,18	9,2	0,18	
DB2.2.300	5,5	0,08	5,5	0,08	4000
DB2.2.450	11	0,18	11	0,18	6500
DB2.2.500	9,2	0,18	9,2	0,18	8000
	11,0	0,18	11,0	0,18	

Solutions for different throughputs, layout arrangements and type of material are available upon request.



1 = FEEDING  
2 = DISCHARGE  
M1-M2-M3-M4 = SCREW ROTATION  
M1.1-M2.2-M3.3-M4.4 = FAN FOR COOLING

## LIVE BOTTOM PITS - OPEN TOP

FOR CHIPS, SAWDUST, SHAVINGS WET & DRY PARTICLES FEEDING BY FRONT LOADER

MODEL	BIN CONTENT m³	THROUGH-PUT [30 - 80 Hz] m³/h	OVERALL DIMENSIONS mm									INSTALLED POWER kW								WEIGHT APPROX. kg
			A	B	C	D	E	F	G	H	I	M1	M1.1	M2	M2.1	M3	M3.1	M4	M4.1	
DB. 6.500	Chips 50	96-257	4372	4508	3719	500	7195	2608	750	5000	1540	11	0,18	11	0,18	-	-	-	-	19500
												15	0,07	15	0,07	-	-	-	-	
	Sawdust 40	96-257	4372	3632	3719	500	7195	2608	600	5000	1540	11	0,18	11	0,18	-	-	-	-	19500
												15	0,07	15	0,07	-	-	-	-	
DB. 9.500	Chips 75	145- 385	4372	6762	3719	500	7195	2608	750	5000	1540	11	0,18	11	0,18	11	0,18	-	-	28500
												15	0,07	15	0,07	15	0,07	-	-	
	Sawdust 60	145- 385	4372	5448	3719	500	7195	2608	600	5000	1540	11	0,18	11	0,18	11	0,18	-	-	28500
												15	0,07	15	0,07	15	0,07	-	-	
DB. 12.500	Chips 100	193 - 514	4372	9016	3719	500	7195	2608	750	5000	1540	11	0,18	11	0,18	11	0,18	11	0,18	37500
												15	0,07	15	0,07	15	0,07	15	0,07	
	Sawdust 80	193 - 514	4372	7264	3719	500	7195	2608	600	5000	1540	11	0,18	11	0,18	11	0,18	11	0,18	37500
												15	0,07	15	0,07	15	0,07	15	0,07	



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## BELT SCALES

**BS**

FOR CHIPS, SAWDUST, SHAVINGS, FIBER, WET PARTICLES

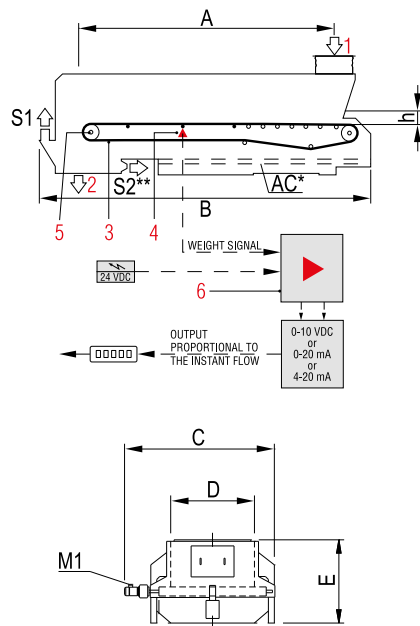
### TECHNICAL FEATURES

• Weighing-dosing of chips, sawdust, shavings, wet & dry particles • Belt conveyor provided of weighing bridge and precision load cell • Weighing belt automatic tensioning system • Self-centering system for the weighing belt • Drive system • Encoder to detect the actual speed of the weighing belt • Calibration chain • Microprocessor including all functions for electronic calibration.

### BENEFITS

• Very high weighing accuracy, higher than  $\pm 0,5\%$  related to full scale value • Employment range from 20 to 100% of full scale value • Full scale value, freely settable • Easy testing by calibrating chain • High efficiency and reliability • Very low maintenance.

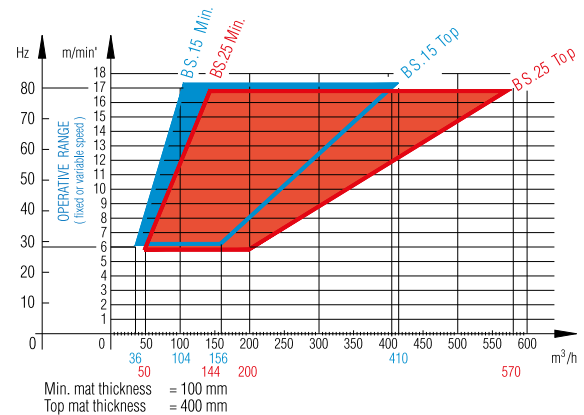
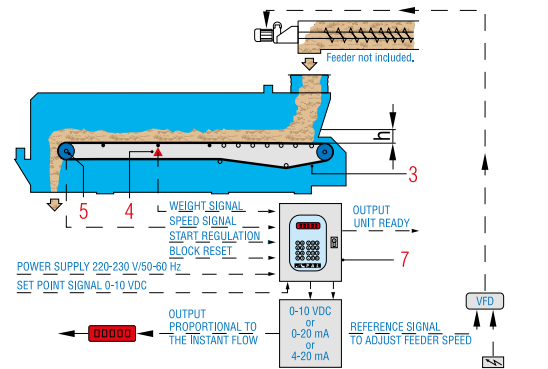
## FLOW DETECTOR SYSTEM



- 1= FEEDING  
2= DISCHARGE  
3= WEIGHING BELT  
4= LOAD CELL  
5= ENCODER  
6= LOAD CELL AMPLIFIER  
7= MICROPROCESSOR  
M1= DOSING BELT DRIVE  
S1= SUCTION

S2\*\*= not needed with option AC (Autocleaning System)  
AC\*= autocleaning system based on pneumatic moving floor (OPTION)

## FLOW REGULATOR SYSTEM



MODEL	OVERALL DIMENSIONS mm					INSTALLED POWER kW	
	A	B	C	D	E	MAT THICKNESS h	M1*
BS.15/2580	2580	3750	2140	1000	1410	Min. = 100 Top = 400	0,55
BS.15/3500	3500	4950	2140	1000	1410		0,55
BS.15/6000	6000	7170	2140	1000	1410		0,55
BS.25/2580	2580	3750	2540	1400	1410		0,75
BS.25/3500	3500	4950	2540	1400	1410		0,75
BS.25/6000	6000	7170	2540	1400	1410		0,75

\*Standard supply: fixed speed  
Option: variable speed with inverter

MODEL	CAPACITY BULK MATERIAL		AC COMPRESSED AIR Nm³/h	SUCTION						WEIGHT APPROX. kg
				THROUGHPUT WET MATERIAL m³/h		THROUGHPUT DRY MATERIAL m³/h		AIR SPEED m/s	SUCTION PRESSURE Pa	
	S1	S2**		S1	S2**					
BS.15/2580	410	According to bulk density	0,02	800	1150	710	1020	29	200	1360
BS.15/3500	410			800	1150	710	1020	29	200	1560
BS.15/6000	410			800	1150	710	1020	29	200	2220
BS.25/2580	570			800	1150	710	1020	29	200	1840
BS.25/3500	570			800	1150	710	1020	29	200	1850
BS.25/6000	570			800	1150	710	1020	29	200	2580

\*\*Not needed with option AC (Autocleaning System)





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## METERING BINS

**BCD**

FOR WET PARTICLES

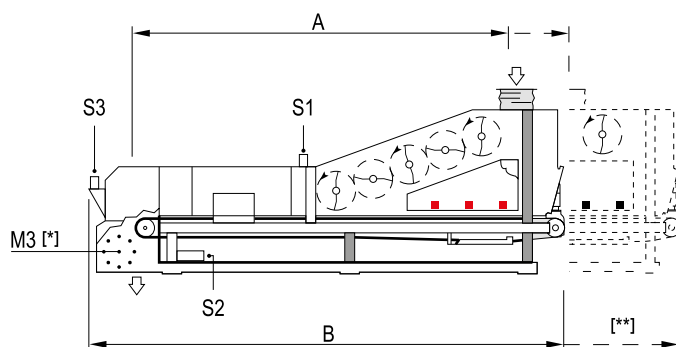
### TECHNICAL FEATURES

- Metering of wet particles to the Dryers or dry particles to the Glue Blenders • Belt conveyor fitted with weighing bridge and precision load cell • Weighing belt automatic tensioning system • Self-centering system for the weighing belt • Dosing bin provided with levelling combs • Drive systems • Encoder for measuring speed of weighing belt • Calibration chain • Microprocessor.

### BENEFITS

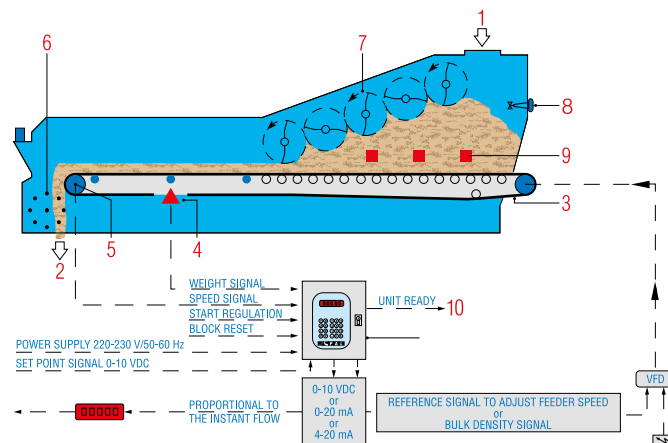
- Very high weighing-metering accuracy higher than +/- 0,5% relating to instant flow • Accuracy is guaranteed for all throughput values and not related to the full scale value as in conventional systems • Employment range from 10 to 100% of full scale value • Full scale value, freely settable • Easy testing by calibrating chain • High efficiency and reliability • Very low maintenance.





[\*] Option  
 [\*\*] BCD 21

- 1= FEEDING
- 2= DISCHARGE
- 3= WEIGHING BELT
- 4= LOAD CELL
- 5= ENCODER
- 6= NEODYMIUM (OPTION)  
UNIT TO REMOVE FERROUS METALS
- 7= LEVELLING COMBS
- 8= EMERGENCY LEVEL
- 9= OPERATING LEVELS
- 10= MICROPROCESSOR
- M1= DOSING BELT DRIVE
- M1.1= FAN FOR COOLING
- M2= LEVELLING COMBS DRIVE
- M3= NEODYMIUM STAND DRIVE
- S1-S2-S3= SUCTION



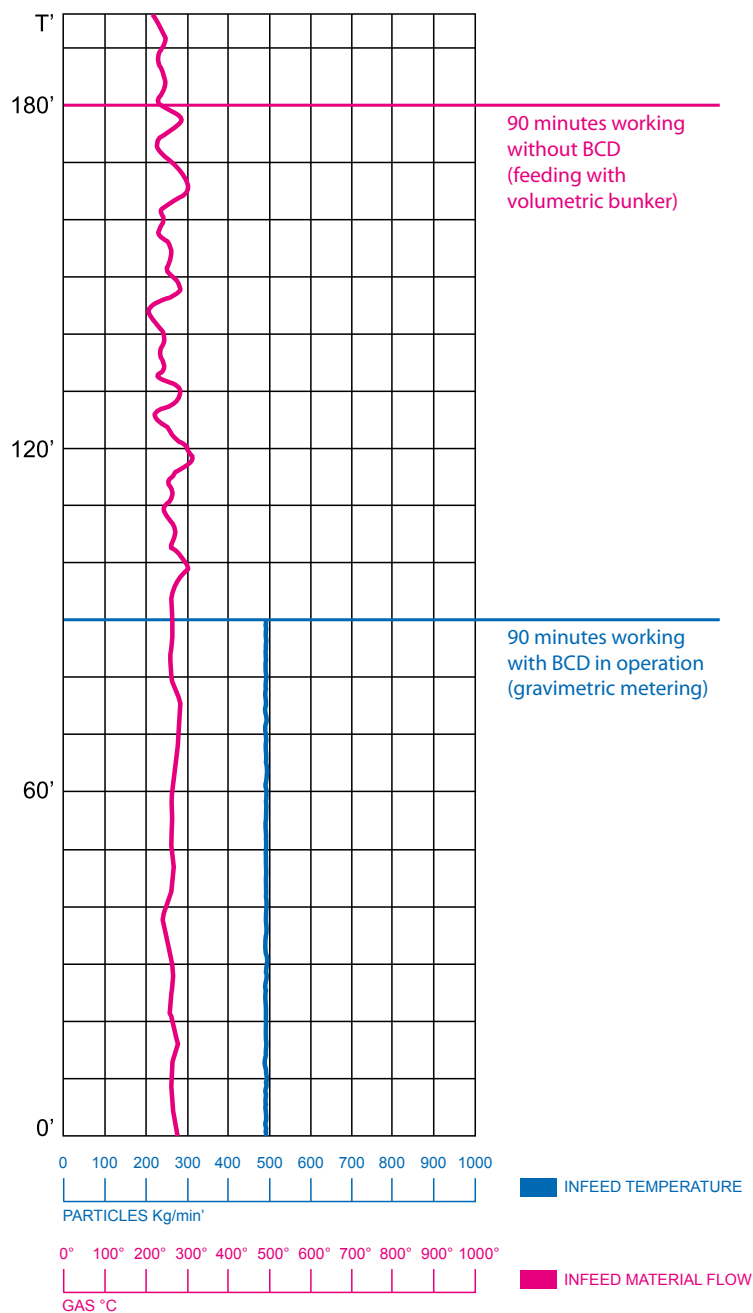
MODEL	OVERALL DIMENSIONS mm					INSTALLED POWER kW			
	A	B	C	D	E	M1	M1.1	M2	M3*
BCD 4	3240	4270	1810	750	1745	0,37 ÷ 1,1	0,078	1,5	2,2
BCD 12	4688	5800	2250	900	2125	0,37 ÷ 1,5	0,078	2,2	2,2
BCD 21	5344	8022	2400	1300	2600	0,37 ÷ 1,5	0,078	4,0	2,2
BCD 30	5785	8886	2600	1500	2800	0,57 ÷ 2,2	0,078	7,5	2,2

\*Option

MODEL	BULK MATERIAL		BIN VOLUME m³	SUCTION								WEIGHT APPROX. kg
	TOP m³/h	RANGE kg/h in according of bulk-density		WET MATERIAL THROUGHPUT m³/h			DRY MATERIAL THROUGHPUT m³/h			AIR SPEED m/s	SUCTION PRESSURE Pa	
				S1	S2	S3	S1	S2	S3			
BCD 4	40	500/3500	0,9	2 x 800	1 x 1150	2 x 800	2 x 710	1 x 1020	2 x 710	29	200	1960
BCD 12	120	600/12000	1,7	2 x 800	1 x 1150	2 x 800	2 x 710	1 x 1020	2 x 710	29	200	3260
BCD 21	210	1000/21000	4,2	2 x 800	1 x 1150	2 x 800	2 x 710	1 x 1020	2 x 710	29	200	6000
BCD 30	300	5000/30000	6,0	2 x 800	1 x 1150	2 x 800	2 x 710	2 x 1020	2 x 710	29	200	7000

## BCD TO GET A BETTER DRYING

The diagram records the working conditions of a particles drier fed with and without our BCD metering scale. It evidences that the BCD system gives better stability to the drying operations increasing the performances (10-15%) and consequently reducing costs.



### Premise

- Drying process takes long time to accomodate new parameter inputs and heat requirement variation capacity is extremely limited
- Conventional but, mainly continuous pressing processes, require stable mixtures-moisture of particles.

### State of the art drying

The most common dryer metering technique consists of infeeding volumetrically controlled wet particle flow/s, for instance, by means of silo extractors.

The above system is not precision guaranteed as real flows and heat demand are influenced by several factors, such as silo levels, high compressibility of wet particles, extractor ineffectiveness, moisture contained in particles, etc. causing:

- unstable particle mixtures ( $\pm 15-20\%$ )
- too fast variation of heat requirement ( $\pm 15-20\%$ )
- unstable final moisture (over under thickness and blown boards).

## DRIERCON

DRIERCON is an integrated system for drying optimization which controls-analizes-compares:

– formulation-gravimetric metering of particle mixtures (scales) – particles moisture (moisture detectors or pre-set values) – available heating capacity from drier.

### PLC-linked DRIERCON offers

• Constant-gravimetric metering of wet particle mixtures • Constant-gravimetric metering of particle mixtures based on pre-set dry formulations • Constant-gravimetric metering of particle mixtures based on stable heat requirement.

### BENEFITS

• Constant particle mixing • Stable final moisture • Up to 10-15% increase in drier efficiency • Prompt and reliable process cost analysis • Improved pressing cycle.

### BCD continuous metering scales & MAMMUTH in drying operations

The working conditions in the drying field are particularly affected by external variables such as humidity, temperature, etc.

These years have seen a widespread general trend towards the improvement of combustion control (understood as control of the quantity of thermal energy delivered) on the basis of the testing of the final state of humidity of the product.

The systems based on testing the humidity and subsequent adjustment of the drier to bring the values into the preset field have not been successful. Such systems may be compared to bolting the stable door immediately after the horse has left.

The inertias are such a handicap that they eliminate the advantages or create greater damage.

The favourable experiences achieved with the installation of BCD continuous metering scales in the field of adhesive application have been extended almost at once, owing to likeness, to the drying field, in which: – we operate to meter “thermal energy” not “adhesive” in a flow of particles – humidity is the main variable.

The first installations of the BCD scale for gravimetric metering of constant flows of damp particles in the driers gave exceptionally good results and showed at once that the old volumetric systems should be pensioned off quickly.

The diagram has been recorded owing to the kind permission of the S.I.L.L.A (Mauro Saviola Group) and is an eloquent confirmation of our statements.

The BCD continuous metering scale reduces the maximum range of the input temperature from 50°C recorded with good volumetric metering to only 18°C recorded with the BCD scale at work.

In proportion to the nominal 280° a good 11% of efficiency is recovered by the use of the BCD scale alone.

This represents just a first step in economics which can be readily achieved by the mere installation of a BCD metering scale.

A second step can be taken by use of the integrated control system of the DRIERCON drying process.







• MDF • PB • OSB • INS. BOARD • PALLET BLOCKS • PELLETS • WASTE • LIME



IMAL  
PAL  
GROUP

## METERING BINS

**BBT**

FOR WET PARTICLES

### TECHNICAL FEATURES

• Volumetric dosing of wet and dry particles for dosing bin only • Gravimetric metering of wet and dry particles for dosing bin & belt scale • Excellent dosing-metering solution for dryers, process mills and blenders.

#### Dosing Bin

• Strong-modular bin provided with: inspection windows – electronic levels for filling control – fire-extinguishing system for dry materials – explosion protection system for dry materials • Front scalping-fluidizing rolls • Drive systems • Pre-wiring of all electrical fittings up to a junction box • Weighing belt with load cell • Tensioning-centering system for the belt • Drive system • Calibration chain • Microprocessor including all functions for electronic calibration • Accuracy for wet particles better than +/- 2,5% relating to instant flow • Accuracy for dry flakes better than +/- 2,0% relating to instant flow • Continuous-constant feeding of material with constant running of dosing bin • Employment range from 10 to 100% of nominal throughput.

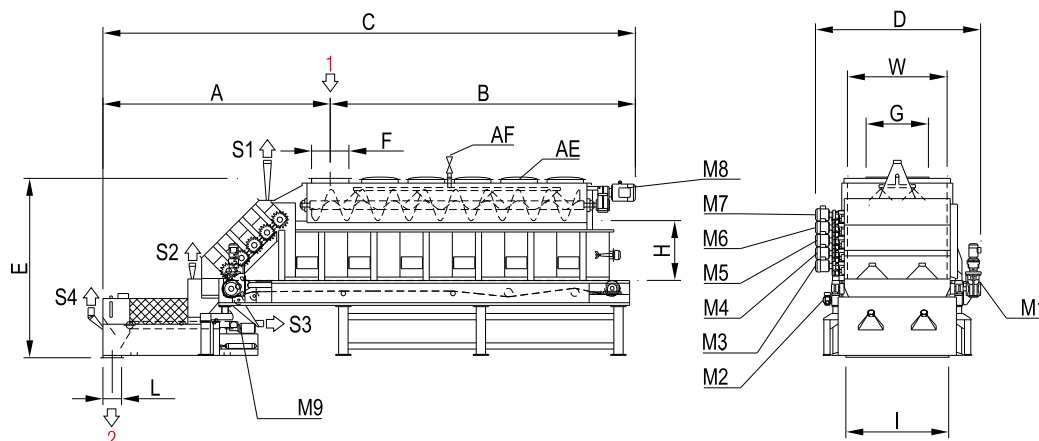
#### Belt scale

• Weighing belt with load cell • Tensioning-centering system for the belt • Drive system • Calibration chain • Microprocessor including all functions for electronic calibration.

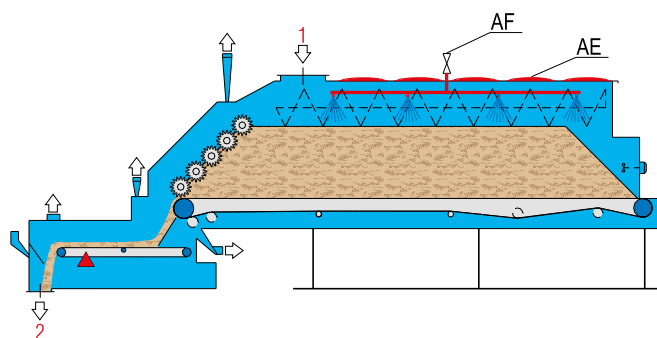
### BENEFITS

• Perfect mixing of particle flow from scalping rolls milling the front section • High-stable volumetric accuracy • Very high weighing-metering accuracy • Accuracy is related to instant flow and not to the full scale value as in conventional systems • High efficiency and reliability • Low maintenance • Accuracy from dosing bin + belt scale higher than +/- 0,5% relating to instant flow! • Employment range from 10 to 100% of full scale value • Full scale value is freely settable • Easy testing by calibrating chain.





- 1= FEEDING  
 2= DISCHARGE  
 S1-S2-S3-S4= SUCTION  
 M1= FEEDING BELT ROTATION  
 M2= CLEANING DEVICE COMAND  
 M3-M4-M5-M6-M7= FRONT MILL ROTATION  
 M8= LEVELLING SCREW ROTATION  
 M9= DOSING BELT DRIVE  
 FOR DRY MATERIAL:  
 AF= FIRE-EXTINGUISHING SYSTEM  
 AE= EXPLOSION VENTS



MODEL	OVERALL DIMENSIONS mm									USEFUL SECTION mm	
	A	B	C	D	E	F	G	I	L	H	W
BBT 24	3700	4810	8660	2300	2840	600	750	1250	300	1000	1200
BBT 36	3700	4810	8660	2700	2840	600	1150	1650	300	950	1600
BBT 56	8050	8650	17300	3475	5268	600	1550	1980	800	3000	2000
BBT 60-20	4600	6005	10755	3190	3735	600	1550	1650	300	1500	2000

MODEL	CAPACITY BULK MATERIAL			BIN VOLUME m³	INSTALLED POWER kW					
	m³/h	t/h	RATIO		M1*	M1.1	M2	M3...M7	M8	M9
BBT 24	240	According to bulk density	1:6	6	0,55	0,07	0,37	1,10	2 x 2,20	0,55
BBT 36	360			8	0,75	0,07	0,37	1,10	4 x 2,20	0,55
BBT 56	600			70	0,37	0,37	0,37	1,50	4 x 3,00	0,75
BBT 60-20	600			20	1,50	0,07	0,37	1,50	4 x 3,00	0,75

\*For SL - CL

MODEL	COM- PRESSED AIR Nm³/h	AF** H <sub>2</sub> O – 6 bar		SUCTION										WEIGHT APPROX. kg	
				THROUGHPUT WET MATERIAL m³/h				THROUGHPUT DRY MATERIAL m³/h				AIR SPEED m/s	SUCTION PRESSURE Pa		
		DN	l/min	S1	S2	S3	S4	S1	S2	S3	S4			BIN	SCALE
BBT 24	0,05	50 G 2"	560	1 x 1780	2 x 800	1 x 800	2 x 800	1 x 1600	2 x 710	1 x 710	2 x 710	29	200	6500	900
BBT 36		50 G 2"	560	1 x 1780	2 x 800	1 x 800	2 x 800	1 x 1600	2 x 710	1 x 710	2 x 710	29	200	8000	1200
BBT 56		65 G 2 1/2	840	2 x 1780	2 x 800	1 x 1780	2 x 800	2 x 1600	2 x 710	1 x 1600	2 x 710	29	200	28000	2000
BBT 60-20		65 G 2 1/2	700	2 x 1780	2 x 800	1 x 1780	2 x 800	2 x 1600	2 x 710	1 x 1600	2 x 710	29	200	14000	1200

\*\*AF = Fire-extinguishing system (Option for dry materials)



• OSB



## METERING BINS

**BBS**

STORAGE AND METERING STRANDS

### TECHNICAL FEATURES

• Volumetric dosing of wet and dry particles • Excellent dosing-metering solution for driers, process mills and blenders.

#### Dosing Bin

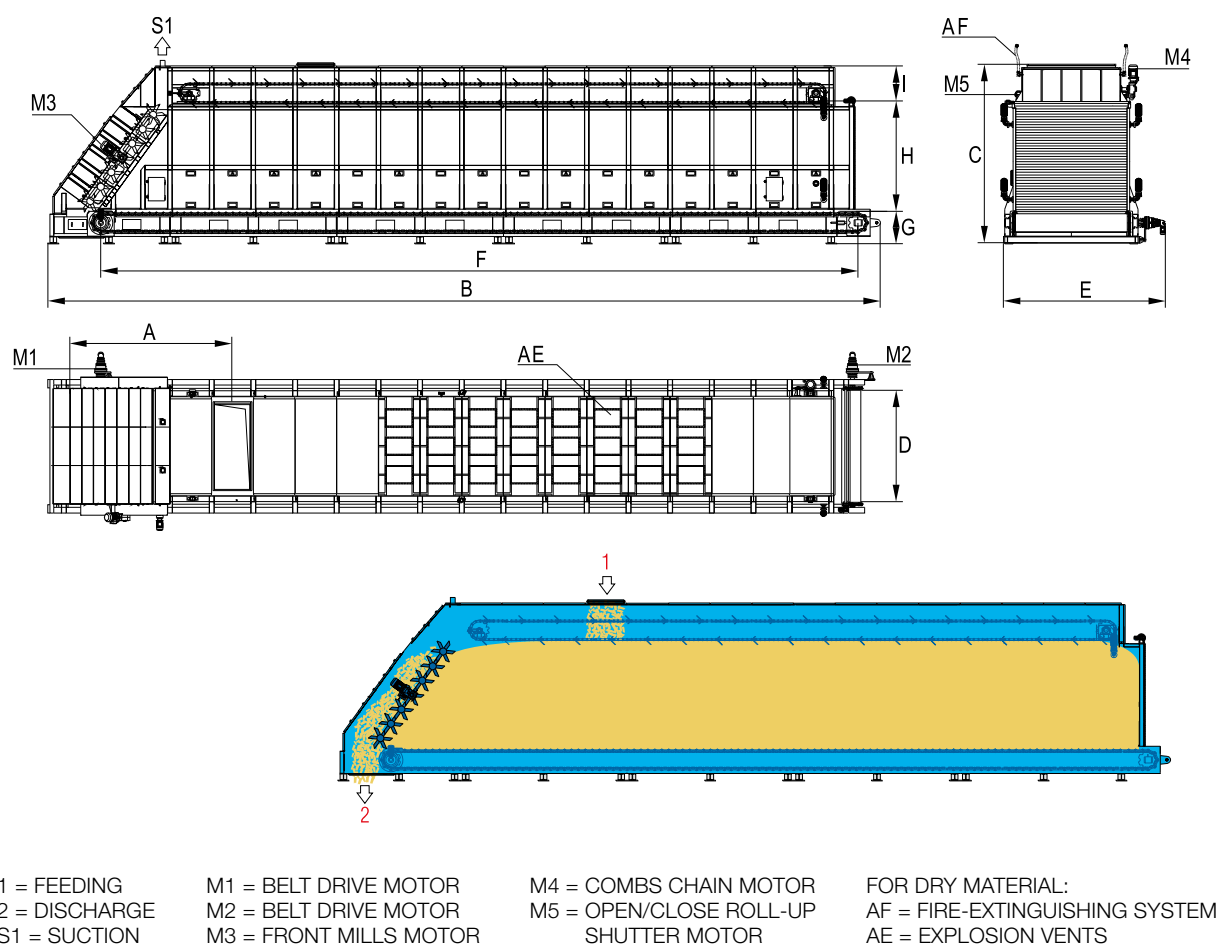
• Strong modular bin provided with: inspection windows – electronic levels for filling control – fire-extinguishing system for dry materials – explosion protection system for dry materials • Levelling chain • Dosing belt provided with: automatic tensioning system – self-centering system – cleaning brush • Front scalping-fluidizing rolls • Drive systems • Pre-wiring of all electrical fittings up to a junction box.

#### Volumetric accuracy from Dosing Bin

For wet/dry flakes: +/- 2,5 % relating to instant flow • Pre-condition: continuous-constant feeding of material and constant running of dosing bin • Employment range: 10-100% of nominal throughput.

### BENEFITS

• Perfect mixing of particle flow from scalping rolls milling the all front section • High-stable volumetric accuracy • Very high weighing-metering accuracy • Accuracy is related to instant flow and not to the full scale value as in conventional systems • High efficiency and reliability • Very low maintenance.



MODEL	OVERALL DIMENSIONS mm								
	A	B	C	D	~E	F	G	H	I
<b>BBS 100</b>	5435	14961	5950	3000	4830	12250	1145	3500	1305
<b>BBS 150</b>	5435	20961	5950	3000	4830	18250	1145	3500	1305
<b>BBS 200</b>	5435	23961	5950	3000	4830	21250	1145	3500	1305
<b>BBS 300</b>	5435	32961	5950	3000	4830	30250	1145	3500	1305
<b>BBS 400</b>	8432	29961	6450	4000	5830	27250	1145	4000	1305

MODEL	CAPACITY BULK MATERIAL		BIN VOLUME m³	INSTALLED POWER kW									
	m³/h	t/h		M1	M1.1	M2	M2.1	M3	M3.1	M4	M4.1	M5	M6
BBS 100	200÷940	According to bulk density	100	0,75-2,2	0,093	0,75-2,2	0,093	15	0,124	4	0,093	7,5	0,5
BBS 150	200÷940		150	0,75-2,2	0,093	0,75-2,2	0,093	15	0,124	4	0,093	7,5	0,5
BBS 200	200÷940		200	0,75-5,5	0,093	0,75-5,5	0,093	15	0,124	4	0,093	15	2,5
BBS 300	200÷940		300	1,5-7,5	0,124	1,5-5,5	0,093	22	0,124	5,5	0,093	22	0,5
BBS 400	200÷1440		400	1,5-7,5	0,124	1,5-5,5	0,093	22	0,124	5,5	0,093	22	0,5

MODEL	AF** H <sub>2</sub> O - 6 bar		SUCTION		NET WEIGHT APPROX. kg
			THROUGHPUT WET MATERIAL m³/h	THROUGHPUT DRY MATERIAL m³/h	
	DN	l/min	S1	S1	
<b>BBS 100</b>	50 G 2"	1000	2x2050	2x1800	40400
<b>BBS 150</b>	50 G 2"	1000	2x2050	2x1800	55200
<b>BBS 200</b>	50 G 2"	1000	2x2050	2x1800	62600
<b>BBS 300</b>	50 G 2"	1000	2x2050	2x1800	84800
<b>BBS 400</b>	50 G 2"	1000	2x2050	2x1800	103200





• PB • OSB • MDF



## STORAGE BIN

### SILOBIN

STORAGE AND METERING OF DRY OR GREEN MATERIAL

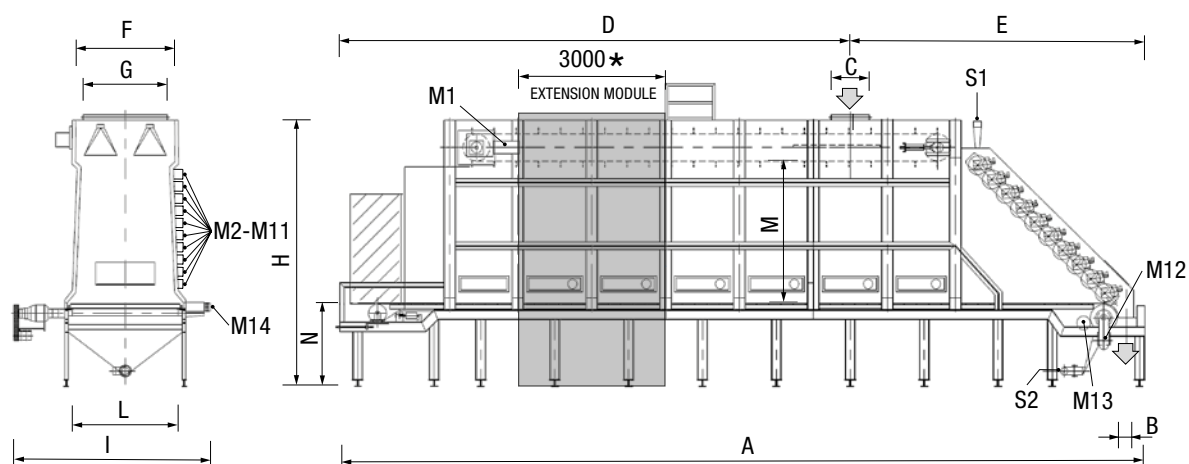
The particles are stored in a bin in which there is a conveyor belt controlled by a frequency converter and a set of comb rollers, which fluidise the particles in order to obtain a constant material flow.

The storage bin is composed of standard modules: • front module, complete with independent comb rollers • central module (made up of various units depending on dosing capacity) • end module, complete with inspection door • screw or rakeback conveyor system to spread the material evenly inside the bin.

#### MAIN FEATURES

- Very sturdy construction • Automatic belt tracking system • Plexiglas window for internal inspection • Rear door for inspection • Explosion relief panel (optional) • Electronic level control • Side seals to prevent material spillage
- Large diameter drive rollers to reduce belt tensioning.





**\*EXTENSION MODULE**

NOTE: Silobin capacity may be extended with the addition of 3000 mm modules, increasing the volume of the 2000 version by 18 m<sup>3</sup> and the volume of the 2500 version by 23 m<sup>3</sup>.

MODEL	OVERALL DIMENSIONS mm											
	A	B	C	D	E	F	G	H	I	L	M	N
<b>SILOBIN 56/2000</b>	16345	350	1000	10605	5610	2000	1700	5400	3990	2090	3100	1180
<b>SILOBIN 72/2000</b>	19345	350	1000	13605	5610	2000	1700	5400	3990	2090	3100	1180
<b>SILOBIN 108/2000</b>	25345	350	1000	19605	5610	2000	1700	5400	3990	2090	3100	1180
<b>SILOBIN 134/2000</b>	29845	350	1000	24105	5610	2000	1700	5400	3990	2090	3100	1180
<b>SILOBIN 56/2500</b>	10645	350	1000	4905	5610	2500	2200	5400	4490	2590	3100	1180
<b>SILOBIN 72/2500</b>	13645	350	1000	7905	5610	2500	2200	5400	4490	2590	3100	1180
<b>SILOBIN 108/2500</b>	19645	350	1000	13905	5610	2500	2200	5400	4490	2590	3100	1180
<b>SILOBIN 134/2500</b>	24145	350	1000	18405	5610	2500	2200	5400	4490	2590	3100	1180

MODEL	MAX THROUGHPUT kg/h	MAX BIN VOLUME m <sup>3</sup>	INSTALLED POWER kW					TOTAL SUCTION S1 - S2 m <sup>3</sup> /h	TOTAL WEIGHT kg
			M1	M2-M11	M12	M13	M14		
<b>SILOBIN 56/2000</b>	60000	70	7.50	0.75	2.20	0.37	0.37	4500	25000
<b>SILOBIN 72/2000</b>	60000	86	7.50	0.75	2.20	0.37	0.37	4500	28000
<b>SILOBIN 108/2000</b>	60000	118	7.50	0.75	2.20	0.37	0.55	4500	34000
<b>SILOBIN 134/2000</b>	60000	141	7.50	0.75	2.20	0.37	0.55	4500	40000
<b>SILOBIN 56/2500</b>	60000	70	7.50	0.75	2.20	0.37	0.37	4500	26000
<b>SILOBIN 72/2500</b>	60000	86	7.50	0.75	2.20	0.37	0.37	4500	29000
<b>SILOBIN 108/2500</b>	60000	118	7.50	0.75	2.20	0.37	0.55	4500	35000
<b>SILOBIN 134/2500</b>	60000	141	7.50	0.75	2.20	0.37	0.55	4500	41000



• MDF



## FIBRE RETENTION BIN

**FRB**

BELT CONVEYOR TO HOLD THE FIBRE BEFORE FEEDING IT TO THE LUMP SEPARATOR

### THE MACHINE HAS BEEN DESIGNED TO:

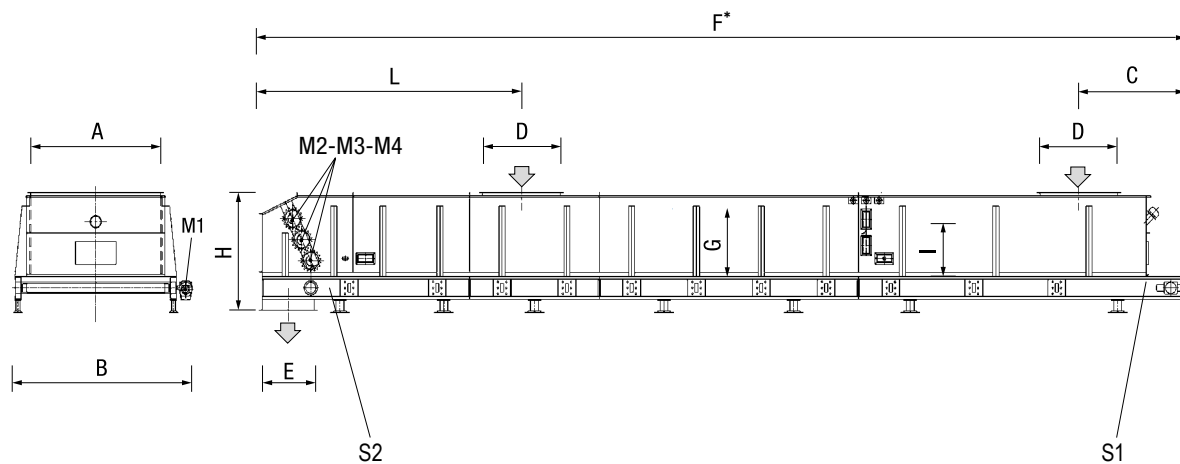
- Hold the fibre for a few minutes before it enters the lump separator, to complete the drying process of the glue onto the fibre
- Obtain a continuous and homogeneous feed along the whole width of the lump separator.

The machine is composed of a belt conveyor on which a retention bin is mounted, and a set of doffing rolls, installed at the belt outlet, have the task of opening the fibre, before it enters the lump separator.

A level control, which can actually “sense” the height of the mat, keeps the height of the mat constant inside the bin. The height signal is then transmitted to the control system, which will provide to the consequent variation of belt motor frequency so as to increase or decrease speed as the need arises (the PLC control system and inverter are not included in the supply).

### MAIN FEATURES

- Very sturdy construction
- Automatic belt tracking system
- Fibre discharged using rotating comb shafts to optimise and fluidise fibre flow
- Internal parts in contact with the fibre made from hot-galvanized iron
- Brush for cleaning conveyor belt
- “Direct mat contact” level control.



MODEL	OVERALL DIMENSIONS mm									
	A	B	C	D	E	Max F*	G	H	Max I Mat. height	L
<b>FRB 10-20</b>	2000	3000	1500	1500	1000	10000	1400	2150	1100	3000
<b>FRB 15-20</b>	2000	3000	1500	1500	1000	15000	1400	2150	1100	3000
<b>FRB 20-20</b>	2000	3000	1500	1500	1000	20000	1400	2150	1100	5000
<b>FRB 10-25</b>	2500	3500	1500	1500	1000	10000	1400	2150	1100	3000
<b>FRB 15-25</b>	2500	3500	1500	1500	1000	15000	1400	2150	1100	3000
<b>FRB 20-25</b>	2500	3500	1500	1500	1000	20000	1400	2150	1100	5000

\*N.B. maximum length reached

MODEL	MAX THROUGHPUT kg/h	WEIGHT kg	MAX BIN VOLUME m³	TOTAL SUCTION S1-S2 m³/h	MAX. INSTALLED POWER kW			
					M1	M2	M3	M4
<b>FRB 10-20</b>	40000	9500	19	6220	1.5	1.5	1.5	1.5
<b>FRB 15-20</b>	40000	11000	30	6220	1.5	1.5	1.5	1.5
<b>FRB 20-20</b>	40000	13000	41	6220	1.5	1.5	1.5	1.5
<b>FRB 10-25</b>	40000	10500	23	6220	1.5	1.5	1.5	1.5
<b>FRB 15-25</b>	40000	13500	37	6220	1.5	1.5	1.5	1.5
<b>FRB 20-25</b>	40000	15500	50	6220	1.5	1.5	1.5	1.5





• OSB



## STORAGE BIN FOR OSB

**BBSO**

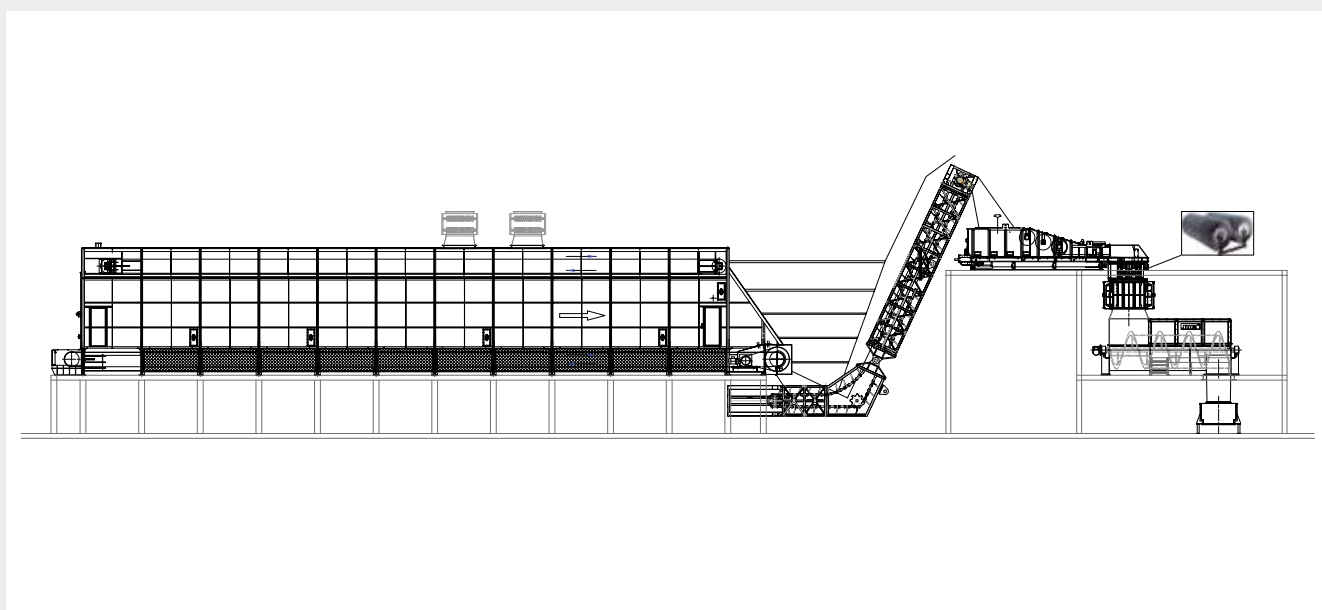
STORAGE AND METERING OF DRY OR GREEN STRANDS

The picker rolls located at the front of the strand bin ruin and break the strands leading to consequent issues with OSB panel quality and excessive resin consumption. IMAL has designed a solution which resolves this problem by eliminating the picker rolls from the bin. The strands are continually metered to the continuous scale and blender by a system of inclined belt conveyors, and controls and levels mounted on the bin.

### MAIN FEATURES

- Very sturdy construction
- Automatic belt tracking system
- Plexiglas window for internal inspection
- Rear door for inspection
- Explosion relief panel (optional)
- Electronic level control
- Side seals to prevent material spillage
- Large diameter drive rollers to reduce belt tensioning.







• PB



## WEIGHING AND METERING BIN

**BCD**

HIGH PRECISION METERING AND WEIGHING SYSTEMS

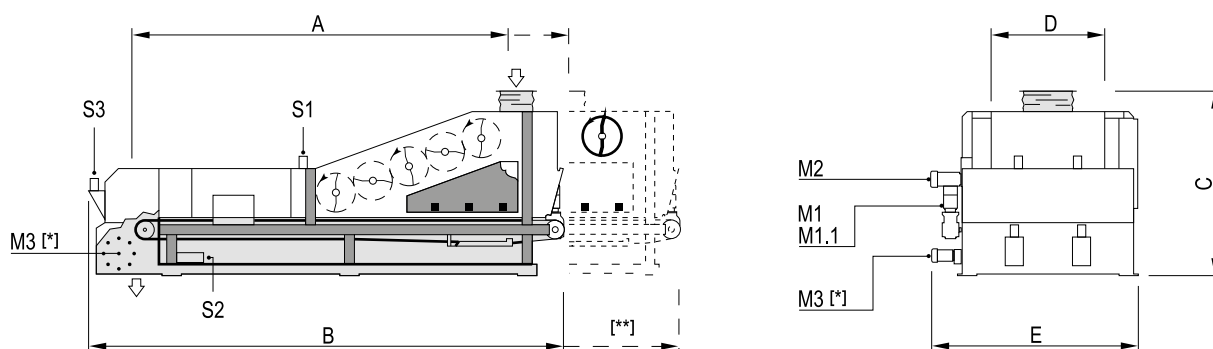
The BCD metering bins have been specifically designed to meter low to medium flows of light and dusty material, enabling a perfect flow adjustment even in cases of irregular material feed.

### MAIN FEATURES

- Sturdy, vibration free construction
- Comb roll bin feeding system to form an even mat
- Weighing bridge (unbeatable high precision system) to optimise the ratio between the actual weight (material) and the tare (belt)
- Encoder to measure weigh belt speed
- Anti-static, high performance, zig-zag jointed weigh belt
- Large diameter drive drum to minimize belt tension
- Incorporated self-tensioning/self-centering weigh belt system
- High tech microprocessor for flow rate control
- Filling level signal
- Sprinkler nozzles for fire-extinguishing system.

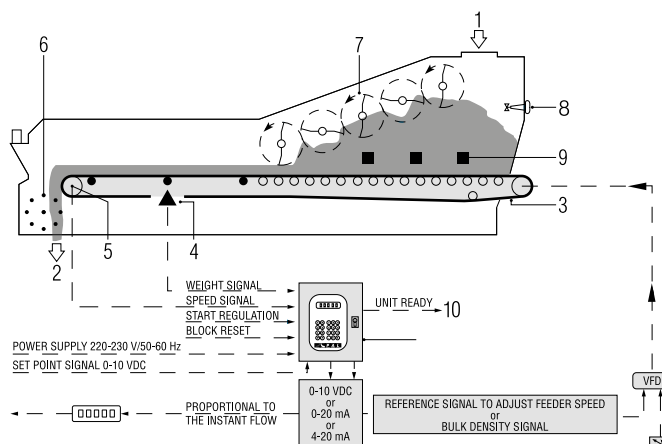
### ADVANTAGES

- Extremely versatile and suitable for various materials • including wet or dry chips, particles, dust, etc.
- Weighing system not affected by tare
- Extremely simple to calibrate
- Ferrous metal removal system on request
- High precision and repeatability
- Simple and easy to maintain.



[\*] Option  
 [\*\*] BCD 21

- 1= FEEDING
- 2= DISCHARGE
- 3= WEIGHING BELT
- 4= LOAD CELL
- 5= ENCODER
- 6= NEODYMIUM (OPTION)  
UNIT TO REMOVE FERROUS METALS
- 7= LEVELLING COMBS
- 8= EMERGENCY LEVEL
- 9= OPERATING LEVELS
- 10= MICROPROCESSOR
- M1= DOSING BELT DRIVE
- M1.1= FAN FOR COOLING
- M2= LEVELLING COMBS DRIVE
- M3= NEODYMIUM STAND DRIVE
- S1-S2-S3= SUCTION



MODEL	OVERALL DIMENSIONS mm					INSTALLED POWER kW				
	A	B	C	D	E	M1	M1.1	M2	M3*	M4 - Comb
BCD 4	3240	4270	1810	750	1745	0,37 ÷ 1,1	0,078	1,5	2,2	2,2
BCD 12	4688	5800	2250	900	2125	0,75 ÷ 1,5	0,078	2,2	2,2	2,2
BCD 21	5344	8022	2400	1300	2600	1,10 ÷ 1,5	0,078	4,0	2,2	3,0
BCD 30	5785	8886	2600	1500	2800	0,57 ÷ 2,2	0,078	7,5	2,2	3,0

MODEL	BULK MATERIAL		BIN VOLUME m³	SUCTION								APPROX. WEIGHT kg
	TOP m³/h	RANGE kg/h in according bulk-density		WET MATERIAL THROUGHPUT m³/h			DRY MATERIAL THROUGHPUT m³/h			AIR SPEED m/s	SUCTION PRESSURE Pa	
				S1	S2	S3	S1	S2	S3			
BCD 4	40	500/3500	0,9	2 x 800	1 x 1150	2 x 800	2 x 710	1 x 1020	2 x 710	29	200	1960
BCD 12	120	600/12000	1,7	2 x 800	1 x 1150	2 x 800	2 x 710	1 x 1020	2 x 710	29	200	3260
BCD 21	210	1000/21000	4,2	2 x 800	1 x 1150	2 x 800	2 x 710	1 x 1020	2 x 710	29	200	6000
BCD 30	300	5000/30000	6,0	2x 800	2 x 1150	2 x 800	2 x 710	2 x 1020	2 x 710	29	200	7000

## OPTIONS

• **NEODYMIUM UNIT:** Motorized roll to remove ferrous metals • **U:** Sprinkler nozzles for fire extinguishing system  
 • **C:** Calibrated chain for calibration and verification • **P:** electrical pre-wiring in a box on board the machine • **ATEX:** equipment meets EC directive 94/9/CE/ATEX 95 and is suitable for installation in Zone 22 (on the basis of Directive 99/92/CE ATEX 137), and that is, intended for use in potentially explosive atmospheres due to the presence of dust.





• OSB



## WEIGHING AND METERING BIN

### BCDS

HIGH PRECISION METERING AND WEIGHING SYSTEMS

The BCDS metering bins have been specifically designed to meter low to medium flows of light and dusty material, enabling a perfect flow adjustment even in cases of irregular material feed.

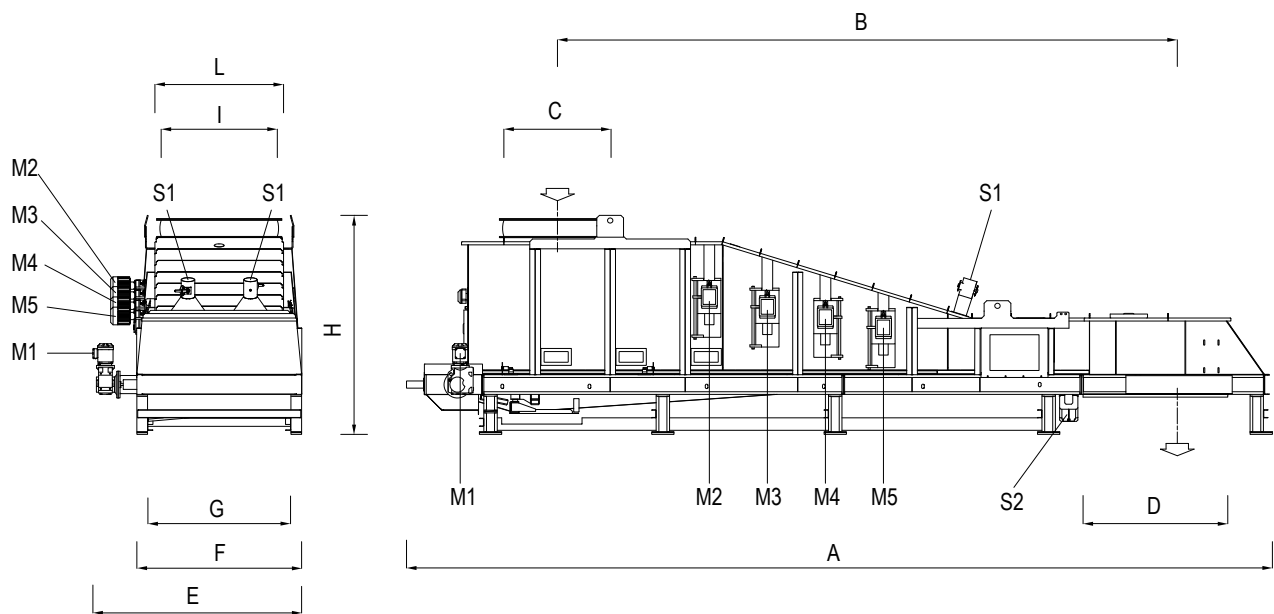
### MAIN FEATURES

- Sturdy, vibration free construction
- Comb roll bin feeding system to form an even mat
- Weighing bridge (unbeatable high precision system) to optimise the ratio between the actual weight (material) and the tare (belt)
- Encoder to measure weigh belt speed
- Anti-static, high performance, zig-zag jointed weigh belt
- Large diameter drive drum to minimize belt tension
- Incorporated self-tensioning/self-centering weigh belt system
- High tech microprocessor for flow rate control
- Filling level signal.

### ADVANTAGES

- Extremely versatile and suitable for various materials including wet or dry chips, particles, dust, etc.
- Weighing system not affected by tare
- Extremely simple to calibrate
- Ferrous metal removal system on request
- High precision and repeatability
- Simple and easy to maintain.





Precision: better than  $\pm 0,5\%$ .  
Range: 20-100% of the full scale.

MODEL	OVERALL DIMENSIONS mm										INSTALLED POWER kW	
	A	B	C	D	E	F	G	H	I	L	M1	M2-M5
<b>BCDS 25-5.5</b>	9700	6940	1200	1800	2400	1845	1600	2450	1300	1300	1.1÷1.5	4x2.2÷3.0
<b>BCDS 40-6.0</b>	8900	6610	850	1800	3100	2545	2300	2450	1600	2000	1.5÷2.2	4x3.0÷4.0
<b>BCDS 40-7.5</b>	10000	6760	2200	1800	3100	2545	2300	2450	1600	2000	1.5÷2.2	4x3.0÷4.0

MODEL	MAX THROUGHPUT kg/h	MAX BIN VOLUME m <sup>3</sup>	TOTAL SUCTION S1-S2 m <sup>3</sup> /h	WEIGHT kg
<b>BCDS 25-5.5</b>	25000	5.5	3060	6000
<b>BCDS 40-6.0</b>	40000	6.0	4080	6250
<b>BCDS 40-7.5</b>	40000	7.5	4080	6500

## OPTIONS

• **NEODYMIUM UNIT:** Motorized roll to remove ferrous metals • **U:** Sprinkler nozzles for fire extinguishing system  
• **C:** Calibrated chain for calibration and verification • **P:** electrical pre-wiring in a box on board the machine • **ATEX:** equipment meets EC directive 94/9/CE/ATEX 95 and is suitable for installation in Zone 22 [on the basis of Directive 99/92/CE ATEX 137], and that is, intended for use in potentially explosive atmospheres due to the presence of dust.



• OSB



## WEIGHING AND METERING BIN

### BCD.OSB

HIGH PRECISION METERING AND WEIGHING SYSTEMS

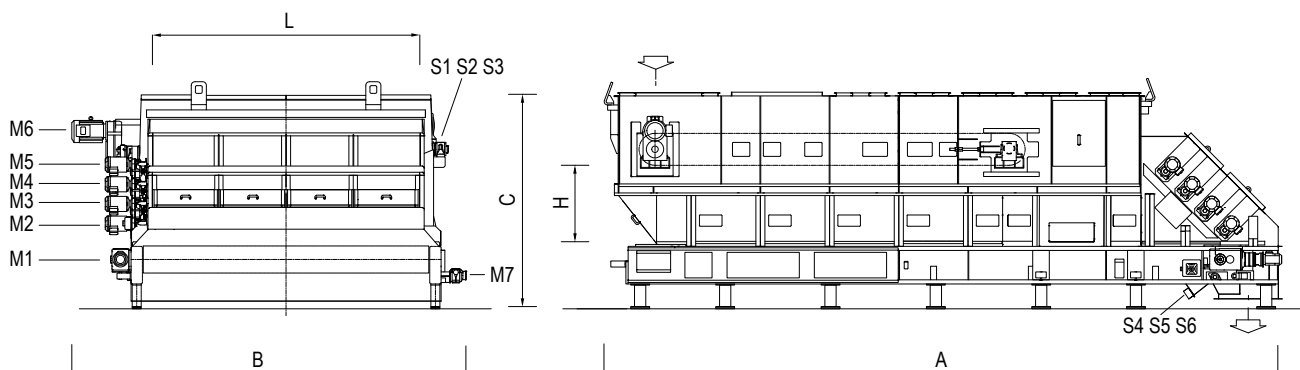
The BCD.OSB have been specifically designed to meter flow of strands. It consists of a belt with a storage/levelling area located at the top of the machine and a weighing area at the front end. Another important function of this scale is to create a mat of strands with a controlled konstant height at discharge.

#### MAIN FEATURES

- Sturdy, vibration free construction
- Levelling raceback device for bin feeding system to form an even mat
- Weighing bridge (high precision system) to optimise the ratio between the actual weight (material) and the tare (belt)
- Encoder to measure weigh belt speed
- Anti-static weigh belt
- Large diameter drive drum to minimize belt tension
- High tech microprocessor for weighing rate control
- Electronic levels systems
- Continuous discharge flow.

#### ADVANTAGES

- Extremely versatile and suitable for OSB
- Extremely simple to calibrate
- High precision and repeatability
- Simple and easy to maintain.



Precision: better than  $\pm 0,5\%$ .  
Range: 20-100% of the full scale.

MODEL	OVERALL DIMENSIONS mm					INSTALLED POWER kW			
	A	B	C	H max. mat height	L max. mat width	M1	M2-M5	M6	M7
<b>BCD.OSB 1500</b>	9000	3150	3000	800	1500	0,75	3	4	0,75
<b>BCD.OSB 2000</b>	9000	3750	3000	800	2000	0,75	3	4	0,75
<b>BCD.OSB 2750</b>	9000	4500	3000	800	2750	1,1	4	5,5	0,75
<b>BCD.OSB 3500</b>	9000	5250	3000	800	3500	1,1	5,5	7,5	1,1

MODEL	MAX THROUGHPUT kg/h	MAX BIN VOLUME m <sup>3</sup>	TOTAL SUCTION S1-S6 m <sup>3</sup> /h	WEIGHT kg
<b>BCD.OSB 1500</b>	22500	8.5	1350	13700
<b>BCD.OSB 2000</b>	30000	11	1350	14500
<b>BCD.OSB 2750</b>	40000	15	1800	17400
<b>BCD.OSB 3500</b>	50000	19	1800	19500

• **U:** Sprinkler nozzles for fire extinguishing system • **C:** Calibrated chain for calibration and verification • **P:** electrical pre-wiring in a box on board the machine • **ATEX:** equipment meets EC directive 94/9/CE/ATEX 95 and is suitable for installation in Zone 22 (on the basis of Directive 99/92/CE ATEX 137), and that is, intended for use in potentially explosive atmospheres due to the presence of dust.



