PAL

CHIPS CLEANERS

CLEANING TOWER, DRY CLEANER FOR CHIPS,
AIR CHIPS CLEANER, WATER PIT

/ Cleaning Tower

- totally integrated system for the removal of pollutants from the chips flow (metals, stones, plastic, fiber, glass, sand, ...);
- available system capacity from 100 to 200 m^3/h b.d.;
- adsorbed power from 4 to 6 kW/ton.

/ Dry Cleaning (DCC)

- design for the removal of every kind of heavy pollutants from chips flow;
- available machine capacity from 40 to 180 m^3/h b.d.;
- low energy consumption, 0,5-0,6 kW/m^3/h.

/ Dry Cleaning (ACC)

- designed for removal of heavy pollutants from recycled chips flow;
- provided of special filtering valve for the separation of light pollutants;
- no dust emissions.

/ Wet Cleaning

- designed to remove heavy pollutants from oversize particles;
- opposite discharge of good material and pollutants;
- sensors to control water level.

COMPLETE CHIPS CLEANING SYSTEM

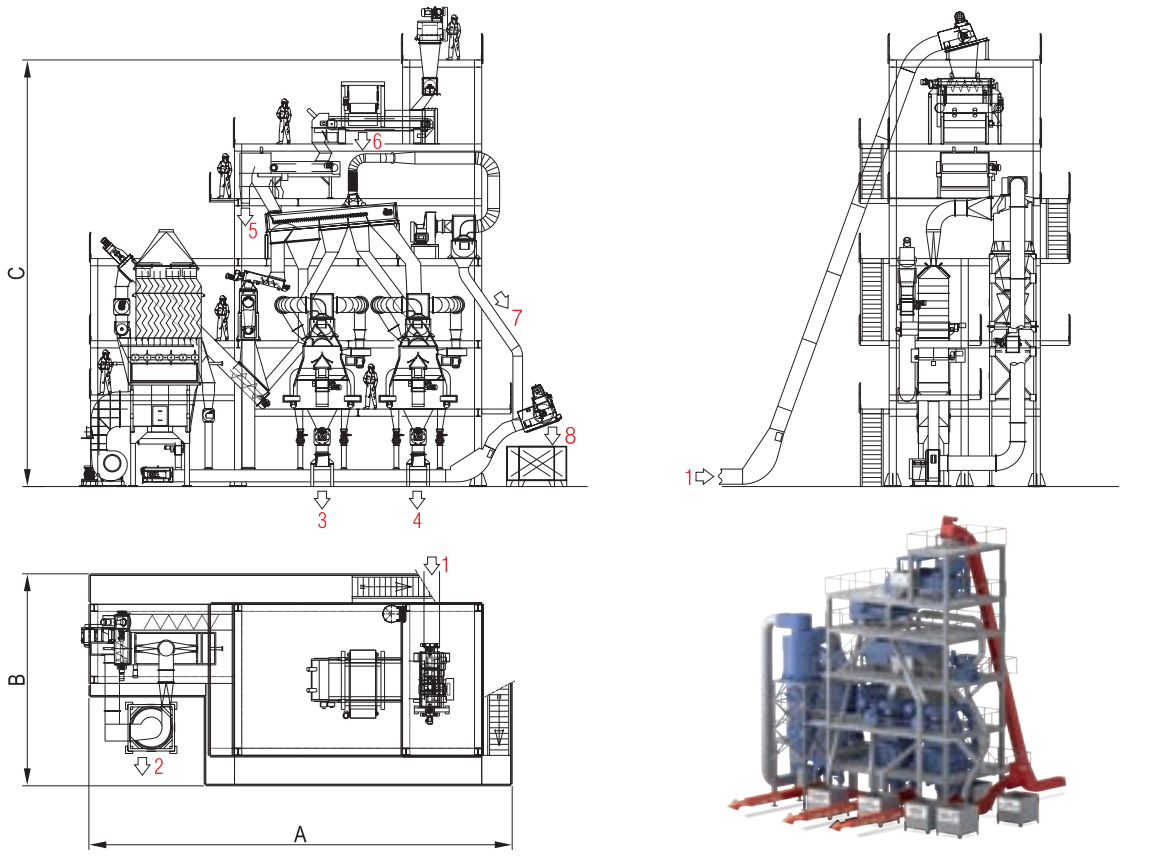
04 **CLEANING TOWER**

TECHNICAL FEATURES

/ Complete chips cleaning system including: ferrous metal removed • non ferrous metal removed • heavy pollutants removed • light pollutants removed • plastics, foils and papers removed • clean fines separation • clean micro chips separation • clean macro chips separation.

BENEFITS

/ Efficiency of the cleaning system up to 90-95% **/** Low content of wood particles in the rejected fractions **/** Saving of wood by cleaning also the very fine fraction **/** Reduced the footprint of the installation **/** Reduced absorbed power to 5-6 kW/ton/hour **/** Reduced maintenance costs **/** Low investment with better and durable performance.



1= FEEDING
2= COARSE FINES
3= MICRO CHIPS
4= MACRO CHIPS
5= NON-FERROUS METALS
6= FERROUS METALS
7=PAPER, PLASTIC AND FOILS
8= HEAVY POLLUTANTS

Not binding data. We reserve the right of modification at any time without prior notice.

04 CLEANING TOWER

MODEL	OVERALL DIMENSIONS APPROX. mm			CAPACITY BULK CHIPS m^3/h
	A - LENGTH*	B - WIDTH*	C - HEIGHT*	
CT.100	16600	8800	17000	100
CT.150	17600	8800	17800	150
CT.200	18600	8800	18700	200

*Dimensions according to needed layout

CHIPS CLEANERS

04.01.A

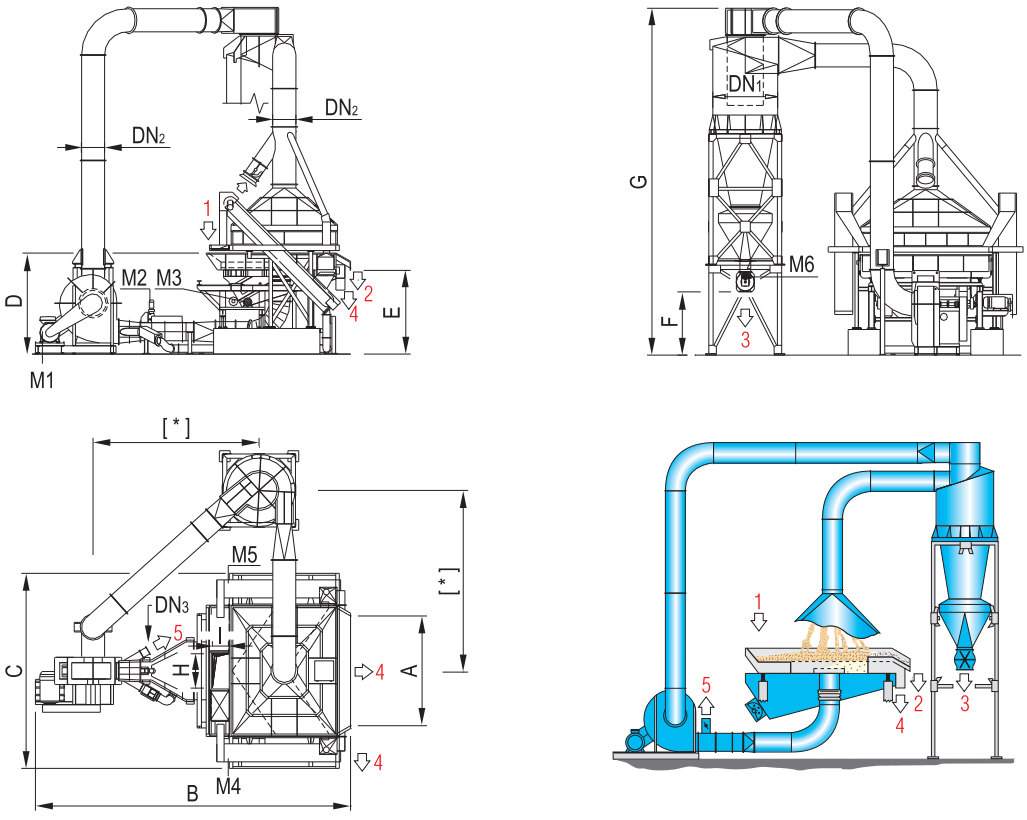
DCC - DRY CLEANER FOR CHIPS

TECHNICAL FEATURES

/ High-tech chip cleaning system suitable to remove every kind of heavy pollutants from the chips, i.e. sand, stones, minerals, etc. / Special design for recycling-high polluted chips / Cleaning chamber provided of perforated screens and front step to stop heavy pollutants / Very strong oscillators for cleaning chamber / High pressure pneumatic circuit provided of adjustable speed pulsator / Special re-classifiers to separate the heavy pollutants from chip flow / Suction hopper and cyclone in order to prevent pollution.

BENEFITS

/ Removal of any type of heavy pollutants, i.e. sand, stones, minerals, etc. / Unbeatable cleaning efficiency / Dramatic reduction (up to 40-70%) of raw material cost using recycled chips / Cost reduction till 50% for knives and wearing parts of knife ring flakers / High reliability / Very low maintenance cost / Low energy consumption, i.e. 0,5-0,6 kW/m3/h of bulk chips Installation free from pollution.



FOR DRY MATERIAL ONLY:
1= POLLUTED CHIPS
2= CLEAN CHIPS
3= VOLATILE WOOD PARTICLES
4= HEAVY POLLUTANTS
5= EXHAUST AIR

M1= FAN DRIVE
M2= PULSATOR
M3= EXCITER

M4= RECYCLE BELT
M5= RECYCLE BELT
M6= ROTARY VALVE OUT

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04.01.A

DCC - DRY CLEANER FOR CHIPS

OVERALL DIMENSIONS mm

MODEL	A	B	C	D	E	F*	G*	H	I	DN_1	DN_2	DN_3
DCC 50 MC	942	5965	3390	1932	1518	2287	7211	500	500	1120	450	150
DCC 70 MC	1524	7481	3550	2480	1981	1762	7909	700	500	1400	450	150
DCC 100 MC	2304	7590	4550	2697	2230	1750	8748	900	500	1600	500	1150
DCC 150 MC	3038	8725	5400	2800	2361	1750	9605	1000	500	1800	640	200
DCC 250 MC	3738	10588	6140	3300	2887	2186	11680	1200	500	2000	750	200

*Dimensions according to needed layout

MODEL	CAPACITY BULK CHIPS m^3/h	INSTALLED POWER kW							EXHAUST AIR m^3/h	WEIGHT APPROX. KG
		M1	M2	M3	M4	M5	M6	TOTAL		
DCC 50 MC	40	37	0,75	4,0	0,75	-	1,5	44,00	2000	8090
DCC 70 MC	60	45	0,75	7,5	0,75	0,75	1,5	56,25	2200	11500
DCC 100 MC	90	55	0,75	15,0	0,75	0,75	1,5	73,75	2500	13710
DCC 150 MC	130	75	0,75	15,0	0,75	0,75	1,5	93,75	4500	17000
DCC 250 MC	180	132	1,10	22,0	0,75	0,75	1,5	158,10	4500	21000

CHIPS CLEANERS

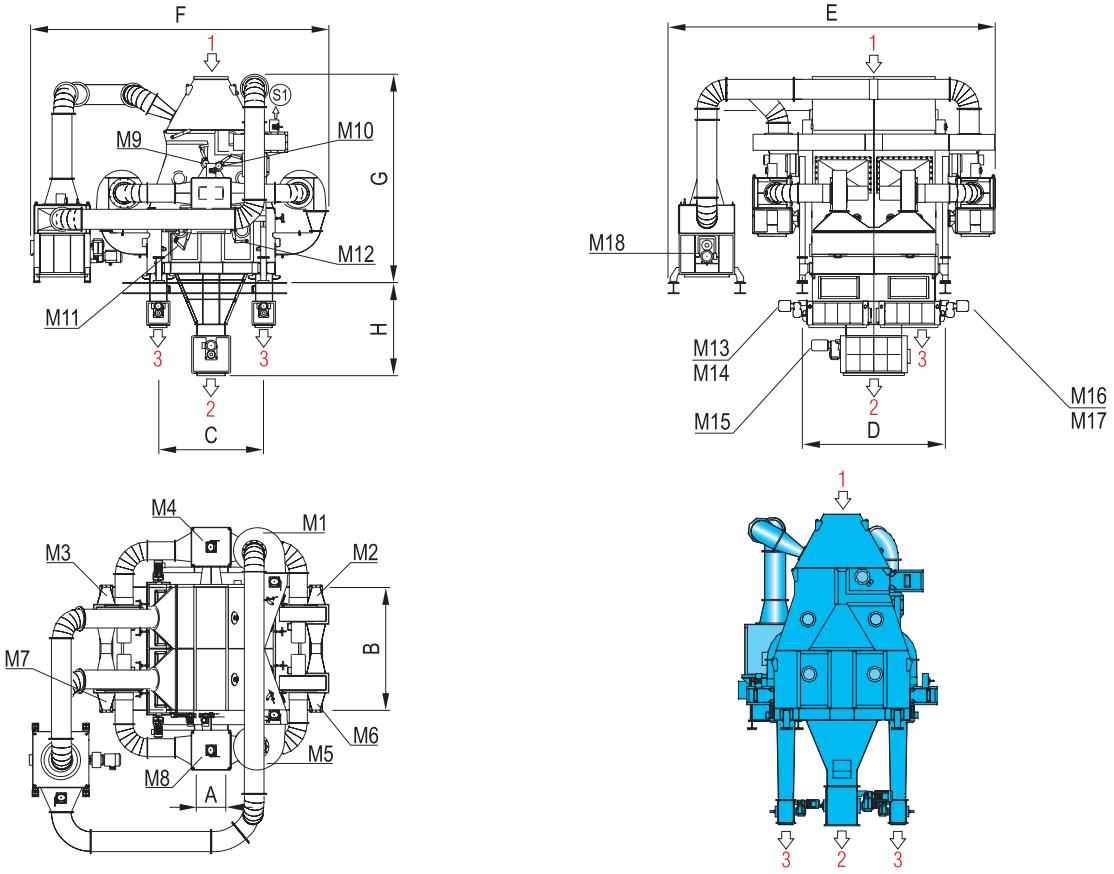
04.01.B **ACC - AIR CHIPS CLEANER**

TECHNICAL FEATURES

/ Highly advanced chip cleaning system for removing heavy pollutants such as stones, glass, minerals, heavy plastics, non ferrous metals etc., from the recycled chips flow **/** Separation of light pollutants by the Light Pollutant Separator LPS (Option) **/** Special self-cleaning design **/** High cleaning efficiency **/** Easy and immediate machine adjustment system **/** Modular construction for quick installation **/** Process air recirculation **/** Machine compliant with the ATEX IID standards.

BENEFITS

/ High cleaning efficiency **/** Small overall dimensions **/** Increase up to 100% of knife life in the knife ring flakers **/** Installation free from pollution **/** Low energy consumption **/** Low installation cost **/** Very low maintenance cost.



1= POLLUTED CHIPS
2= CLEAN MICRO OR MACRO CHIPS
3= HEAVY POLLUTANTS

M1-M2-M3-M5-M6-M7= FAN DRIVE
M4-M8-M18=FILTERING ROTARY VALVE
M9-M10-M11-M12= ACTUATOR DRIVE

M13-M14= POLLUTANTS
M16-M17= ROTARY VALVE
M15= OUT ROTARY VALVE

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04.01.B

ACC - AIR CHIPS CLEANER

OVERALL DIMENSIONS mm

MODEL	A	B	C min.	D	E*	F*	G	H min.
ACC.3-100	520	1095	1880	1465	2438	3228	3650	1630
ACC.3-200	520	2200	1880	2570	4336	3228	3650	1630

*Dimensions according to needed layout

MODEL	CAPACITY BULK CHIPS m^3/h	EXHAUST AIR m^3/h			TOTAL INSTALLED POWER kW	WEIGHT APPROX. KG
		S1	S2	S3		
ACC.3-100	40	7000	1400	710	29,86	3200
ACC.3-200	80	2 x 7000	2 x 1400	2 x 710	43,36	6600

WET CHIPS CLEANERS

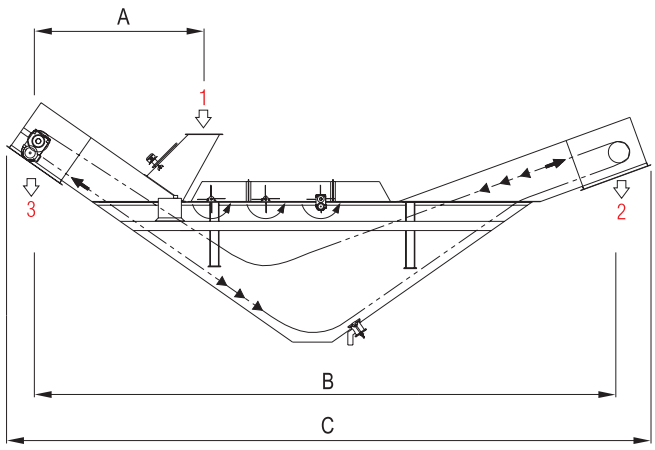
04.02.A **WATER PIT**

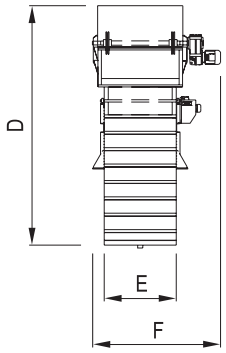
TECHNICAL FEATURES

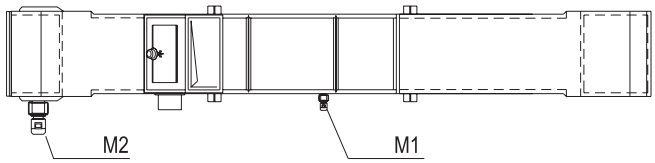
/ Wet cleaning system suitable to remove heavy pollutants out of the oversize chips **/** Working principle based on difference in bulk density of infeed materials **/** Chips flow is fed into a water pit where lighter materials float while the heavier pollutants such as stones, metals, etc. fall down and are removed by a chain conveyor **/** On the opposite side the same conveyor removes the floating material, wood, etc. after draining.

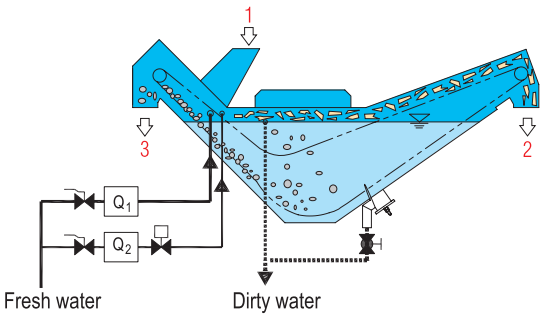
BENEFITS

/ Recovery of clean oversize chips to production **/** High reliability **/** Very low maintenance cost **/** Low energy consumption.









1= POLLUTED CHIPS
2= CLEAN CHIPS
3= HEAVY POLLUTANTS
Q1= FIRST FILLING WATER
Q2= COMPENSATION FILLING WATER
M1= GEAR MOTOR
M2= GEAR MOTOR

Not binding data. We reserve the right of modification at any time without prior notice.

04.02.A WATER PIT

OVERALL DIMENSIONS mm

MODEL	A	B	C	D	E	F
WP.850	2950	10100	11190	4157	850	1820
WP.1250	2950	10100	11190	4157	1250	2220

MODEL	CAPACITY BULK CHIPS		WATER CONSUMPTION l/min - top	INSTALLED POWER kW		WEIGHT APPROX. KG
	m^3/h	t/h		M1	M2	
WP.850	17	2,5	30	1,1	2,2	6230
WP.1250	35	5,2	43	1,1	2,2	7300

*With bulk density 150 kg/m3 b.d.