

## **GRAVIMETRIC SEPARATORS**

Classification of particles and removal of pollutants in a single machine





CMC TEXPAN's gravimetric separators provide for the classification of particles according to their weight, size and thickness, as well as for the removal of pollutants.

The core of a gravimetric separator is a fluidizing and classification chamber, crossed by a counter airflow (that's to say an airflow blown opposite to the direction of the falling material stream).

The material is introduced into the fluidizing chamber from the top and it gently settles in the lower section of the chamber, ensuring an uniform distribution of particles across the whole area, without any breakages.

An airflow with preset speed, injected by a fan into the distribution chamber, provides for fluidization of particles, as well as for their classification according to the physical principle of gravity.

Particles suitable for production will be brought by the air flow into the upper section of the chamber, and they will be conveyed to the cyclone unit, while heavy and coarse material, unsuitable for production will settle on an inclined perforated plate, then it will be removed by a rotary air device and discharged outwards by means of a rotary valve.







## **Advantages:**

- extremely versatile: gravimetric separators are individually studied and designed to comply with each installation scenario and type of processed material;
- preservation of particle shape (no breakages);
- better quality of particleboard panels;
- reduction in consumption of glue;
- mitigation of fire hazards.

GRAVIMETRIC SEPARATORS - SINGLE BODY - STANDARD RANGE								
ТҮРЕ	Chamber diam. mm		Installed					
		Dry S.L. particles [1] t/h	Dry C.L. particles [1] t/h	Dry oversize particles [1] t/h	Recycl. wood- fines [1] t/h	Wet sawdust [1] t/h	power kW [2]	
GS 1,5	1.500	2,9	4,9	5,9	3,6	7,8		
GS 2,0	1.700	3,8	6,4	7,7	4,7	10,2		
GS 2,5	1.850	4,6	7,6	9,2	5,6	12,2		
GS 3,0	2.050	5,6	9,4	11,3	6,9	15,0		
GS 3,5	2.150	6,2	10,4	12,4	7,6	16,6		
GS 4,0	2.300	7,1	11,9	14,3	8,7	19,1	varies	
GS 4,5	2.450	8,1	13,6	16,3	10,0	21,8	according to	
GS 5,0	2.650	9,6	16,0	19,2	11,7	25,6	plant layout	
GS 6,0	2.850	11,1	18,5	22,2	13,5	29,6		
GS 7,5	3.150	13,5	22,6	27,1	16,6	36,2		
GS 8,0	3.300	14,9	24,9	29,9	18,2	39,8		
GS 9,0	3.450	16,3	27,1	32,6	19,9	43,4		
GS 10,0	3.650	18,1	30,2	36,2	22,1	48,3		
GS 12,0	4.100	22,3	37,2	44,6	27,3	59,5		

GRAVIMETRIC SEPARATORS - DOUBLE BODY - STANDARD RANGE								
	Chamber	Throughput vs. processed material						
TYPE	diam. mm	Dry S.L. particles [1] t/h	Dry C.L. particles [1] t/h	Installed power kW [2]				
GS 10,5	2 x 2.650	19,2	32,1					
GS 12,0	2 x 2.850	22,2	37,0	varies according to plant layout				
GS 15,0	2 x 3.150	27,1	45,3					
GS 16,0	2 x 3.300	29,9	49,8					
GS 18,0	2 x 3.450	32,6	54,3					
GS 20,0	2 x 3.650	36,2	60,4					
GS 24,0	2 x 4.100	44,6	74,4					

- [1] based on standard bulk density and moisture content values
- [2] depending upon layout, size and length of piping line and cyclone

