

Data Sheet 142

Pre-Cleaner DELTA 142



Cimbria DELTA Pre Cleaner type 142 is a versatile screen cleaner specifically designed for pre cleaning of all cereals, maize, rape seed, peas and similar products before drying or storage using a 5 or 7 m² area in conjunction with a sophisticated aspiration system.

The screen cleaning effect is increased by Cimbria's highly effective pre and after suction system extracting light impurities from the material both at the machine inlet and outlet. The sucked waste, dust and light weight trash is deposited in one separate expansion chamber and conveyed to the machine outlet by a discharge auger which is equipped with a multiflap air lock system to prevent ingress of air, i.e. false air.

The expansion chamber is suitable for connection a separate exhaust fan or a central exhaust system.

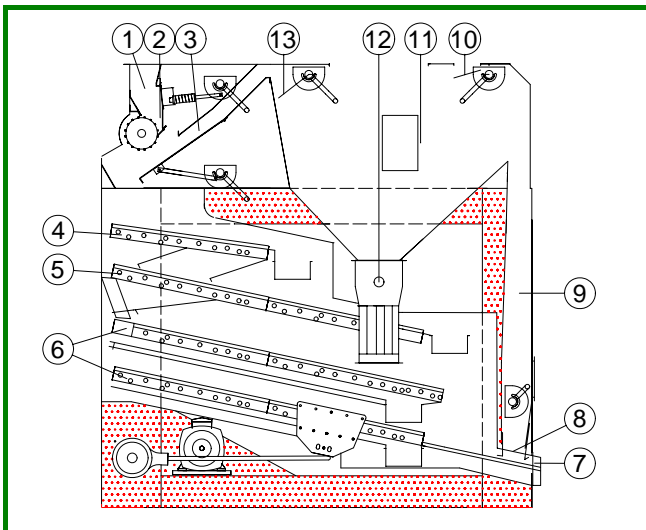
The type **DELTA 142.1** is using all the 5 m² screen area consisting of 1m² scalping screen and two rows of 2 m² pre or grading screens. (The third row is not applied). For standard pre-cleaning the top and bottom screen are used. When grading of Paddy for instance, the two lowest screens are used.

The type **DELTA 142.2** is using all the 7 m² screen area, where the two lowest rows work in parallel as grading screens.

The self cleaning screens with ball boxes are manufactured in a standard size so that they fit all other types of DELTA screen cleaners and are available with various round or oblong perforations according to the material to be cleaned. The ball boxes when changing the screens.

All the shutters and air valves are adjusted and controlled from the sacking off side of the machine.

Like all other DELTA screen cleaners the base and the frame of type 142 is build in heavy gauge pressed steel of a very rigid construction. The screen boats are manufactured of selected insect and moisture resistant marine plywood.



1. Inlet

The inlet is equipped with a ribbed feeding roller dispersing the material to be cleaned equally over the entire width of the machine. A buffer bin supplemented with a level control is recommended.

2. Feed valve

Spring loaded safety flap

3. Pre suction system:

The pre suction system removes dust and light weight trash before screening. The aspiration opening of the pre suction channel is adjustable thus achieving a variable air velocity.

4. Scalping Screen

The 1 m² scalping screen for separation of coarse impurities.

5. Pre screen

The 2 m² pre screen separates oversize material.

6. Grading screen / sand sieve

The two lowest rows of screens (4 m²) can be utilized as grading screen or sand sieve according to cleaning purpose.

7. Outlet for Cleaned Product

8. Air Screen

Lightweight particles are "air separated" at the screen which is positioned under the suction opening of the after suction channel. Air screens are delivered with two different types of wire mesh.

9. After Suction Channel

The light weight product separated at the air screen is conveyed in the after suction channel to the expansion chamber.

10. False air Intake

One false air flap for controlling the air quantity in both the pre- and after suction system.

11. Expansion Chamber

12. Screw Conveyor

One Screw conveyor discharges the products separated in the expansion chamber to the sacking off point.

CAPACITY GUIDE (max. 20% moisture):

Pre-cleaning:

Wheat and barley	30 t/h
Rape seed	25 t/h
Maize	25 t/h
Peas	25 t/h

Industrial Cleaning:

Type 142.1 (5 m ²)	15 t/h
Type 142.2 (7 m ²)	25 t/h

The capacity may vary depending on the waste quantity and the moisture content.

Overall dimensions:

Height (without fan)	2245 mm
Length	2235 mm
Width	1940 mm

Total screen area:

Type 142.1	5 m ²
Type 142.2	7 m ²

Motors

Screens	1.5 kW
Fan - CM82 (optional)	5.5 kW

Air volume:

Pre- and after suction	6400 m ³
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Weight

Freight volume	1610 kg
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Dynamic load (4.6-4.8 Hz)

P _H = +/-1976N, P _{V1} = +/- 3050N, P _{V2} = +/- 1421N (10N = 1 kg)
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