

Why a new DeDuster®?

Market demands were the thriving factor for the development of the new XP 5 DeDuster®. This DeDuster® completes the new XP series with a capacity of 500 kg/h. The DeDuster® was designed to fit in spaces with restricted height and to remove dust and angel hair in one unit, as well as for cleaning of regrind. The unit is only 500 to 550 mm high, depending of the type of flange connection.

How it works

The well-proven electromagnetic coil feature remains unchanged. The electromagnetic field breaks the static bond between the electrostatic charged plastic pellet and the small dust particles.

Dust particles as small as 1 micron will be removed efficiently. However, some design changes were made in order to improve the removal of the dust and angel hair efficiency.

The product flows into the DeDuster®, discharged by a rotary valve or another feeding device. The adjustable inlet deflector distributes the product to the wash decks evenly and provides a smooth flow. The wash air, generated by a high efficiency fan, pushes the air through holes and slots in the wash deck for efficient removal of dust and streamers. From the upper wash deck, the material flows through the Venturi zone. This area is designed to remove the long angel hair and heavier dust particles. The airflow velocity passing the Venturi zone can be regulated through the adjustable Venturi deflector and the air volume can be adjusted with the by-pass air damper. The dust outlet deflector was redesigned for smooth airflow of dusty air, and angel hair into the redesigned and raised dust outlet channel.

The combination of the design modifications and air flow improvements resulted higher cleaning efficiency and lower carry over.



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The Nature of Bulk Material Handling

WHAT'S NEW?

- → Low height design
- → Removes dust and angel hair
- → Low energy and air consumption

INSTALLATION EXAMPLES

The XP5 can be installed as compact unit on a mobile frame, including a cyclone, fan, inline filter and electrical equipment. The 3D drawings show an example of a closed loop compact De-Dusting unit, also called CCD. There are many other solutions available for various applications. Pelletron works close together with each customer in order to find the suitable solution. The system is ideal for all types of granular products that need to be cleaned before packaging, shipping or processing.

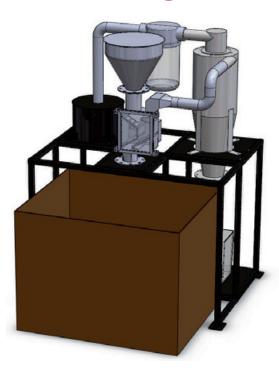
SPECIAL FEATURES

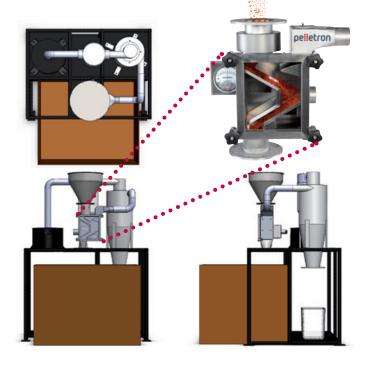
In order to reduce electrical energy consumption, Pelletron combined the XP5 DeDuster® with a high speed, fractional horsepower fan. The fan is installed in a special designed insulated housing to keep the working environment at a low noise level. The velocity of the fan and the air volume is adjustable with a potentiometer dial. This provides very easy fine tuning for the operator.

DEDUSTER® BENEFITS

With its patented DeDuster®, Pelletron has helped thousands of companies around the world to improve their production processes by separating contaminants from virgin and recycled materials before processing. DeDusters® have helped many customers earn a return on their investment in as little as a few weeks, thanks to reduced scrap rates, increased production and improved quality of the end product.

New XP5 DeDuster® from Pelletron





BENEFITS

- → Reduces scrap and bad parts
- → Reduces customer complaints and rejects
- → Reduces maintenance of extruder
- → Improves product quality
- → Improves production with fast ROI
- → Improves regrind quality
- → Increases life span of feed screw
- → Increases logistics flexibility for loading and unloading

AVAILABLE SIZES

(nominal capacity at 560 kg/m3)

XP- 5 500kg/h XP-15 1500kg/h XP-45 4500kg/h XP-90 9000kg/h XP-180 18000kg/h XP-360 36oookg/h XP-540 54000kg/h χP-720 72000kg/h XP-900 90000kg/h

ABOUT PELLETRON CORPORATION

Founded in 1986, Pelletron Corporation provides dedusting solutions to processors and manufacturers in an array of applications including plastics, recycling, automotive, medical equipment, mining, and food.