

Additive technologies for

POLYMERIC MATERIALS

made in Italy



I SLS (Selective Laser Sintering)

Laser sintering is one of the most versatile and frequently used 3D printing technologies.

In the SLS process, microscopic plastic particles (nylon powders) are exposed to a high-power laser that fuses them together to form a three-dimensional solid object. The powder is released onto a platform which is then hit by the laser which fuses it into a compact layer. The non-sintered powders on the platform form the support for subsequent layers until the complete object is produced.



RGS vacuum cleaners extract explosive and non-explosive dusts safely.

Equipped with a **recovery and sifting system for unused dusts**, they allow the dusts to be **reused in other printing processes**, due to their high cost.

I What functions does the vacuum cleaner have?



Cleaning of finished parts

To enable the recovery of dust.



Cleaning the printer

To avoid cross-contamination of different types of dust.



Cleanliness of the working environment

To keep the level of contamination low.



DUST EXTRACTORS, for explosive non-conductive dust used in 3D printers

RGS vacuum cleaners are designed to offer maximum **safety**, **ease** of use and **robustness** for the maintenance of 3D printers.

ATEX Z22 3D vacuum cleaner with wheeled cyclone pre-separator

The vacuum cleaner with dust recovery and screening system allows the dust to be reused in other printing processes.

As these powders are recovered, a **cyclone separator** is used between the suction hose and the vacuum cleaner to avoid contamination between the different mixtures.

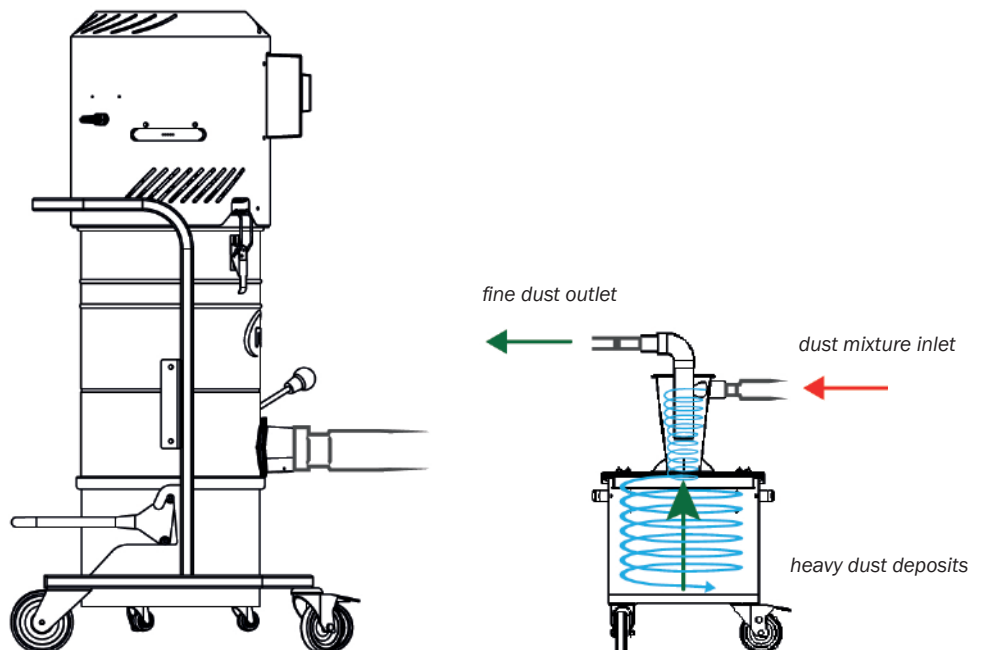



ATEX Z22 - 3D

How does the cyclone preseparator work?

The cyclone pre-separator separates the partially melted, and therefore heavier, powders from the powders that can still be used for other melts.

This allows considerable **savings in raw material** without having to use bulky and expensive screens.



I Other RGS solutions

VACUUM CLEANERS

RGS Vacuum Systems offers a wide range of industrial **vacuum cleaners with various powers and capacities:** single-phase, three-phase and compressed air industrial vacuum cleaners.



Specific models are also available for **vacuuming oils and shavings**, others for applications **in the food and pharmaceutical industry** as well as **special machines** designed to meet the customer needs.

PNEUMATIC CONVEYORS

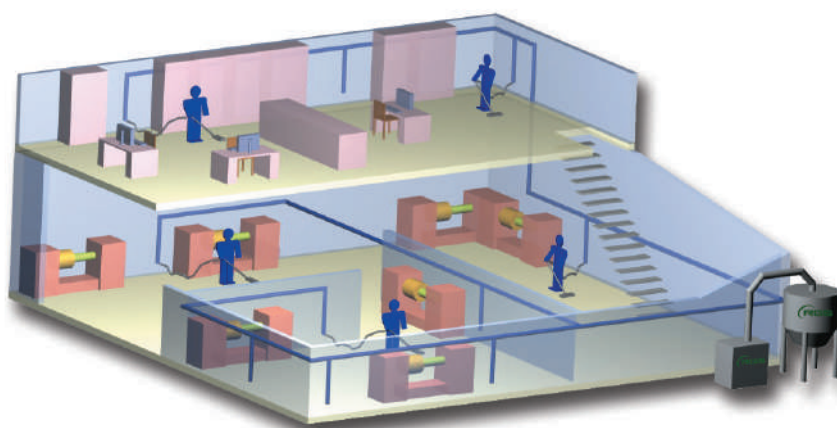
Pneumatic conveyors systems for powders and granules for all industrial sectors with **customization** options.



Thanks to a long experience in this field, it is possible to design and create the most suitable and the cheapest conveying system to solve the problems of the customers, according to the type of product and the needs of the sector.

CENTRALIZED SYSTEMS

RGS Vacuum Systems offers a wide range of components for the construction of **centralized vacuum systems** (such as *suction units, collection silos, pre-separators, components for the piping, control systems*) and **centralized ventilation systems** (such as *dust collectors, electro-fans, mobile arms, electrical control panels and piping components*).



All products can be made of painted steel, stainless steel and **ATEX version** according to the needs of the customer and the application sector.

I RGS services



Design and production of customized products

Quick call maintenance service



Preventive maintenance agreements

Additions and updates to regulations in force of installed systems





Aspiratori industriali
Vacuum cleaners

Impianti centralizzati
Centralized systems

Trasportatori pneumatici
Pneumatic conveyors

RGS in the World.



● **RGS headquarter**

● RGS branches

RGS BRASILE
 www.rgsbrasil.com.br

RGS IBERICA
 www.rgsiberica.com

RGS INDIA
 www.rgsvacuumsolutions.com

RGS CHINA
 www.rgschina.com.cn

RGS VACUUM SYSTEMS SRL

Via Mavore 1640/C - 41059 Zocca (MO) Italy - Tel. +39.059.986833

info@rgsimpianti.com - www.rgsvacuumsystems.com

