



COMBUSTIBLE DUST
PREVENTATIVE MAINTENANCE

INDUSTRIAL
VACUUM SOLUTIONS

 **Nilfisk**
trusted since 1906

WHAT IS COMBUSTIBLE DUST?

OSHA's National Emphasis Program (NEP) defines combustible dust as "a particulate solid that presents a fire or deflagration hazard when suspended in air or some other oxidizing medium over a range of concentrations, regardless of particle size or shape."

Most solid organic materials, as well as many metals and some nonmetallic inorganic materials, will burn or explode if finely divided and dispersed in sufficient concentrations.

OSHA Maintenance Guidelines

Since the implementation of the NEP in 2008, OSHA has conducted more than 2,600 inspections of manufacturing facilities and has issued more than 12,000 violations pursuant to combustible dust.

OSHA's guidelines and recommendations for decreasing risk of combustible dust fires and explosions:

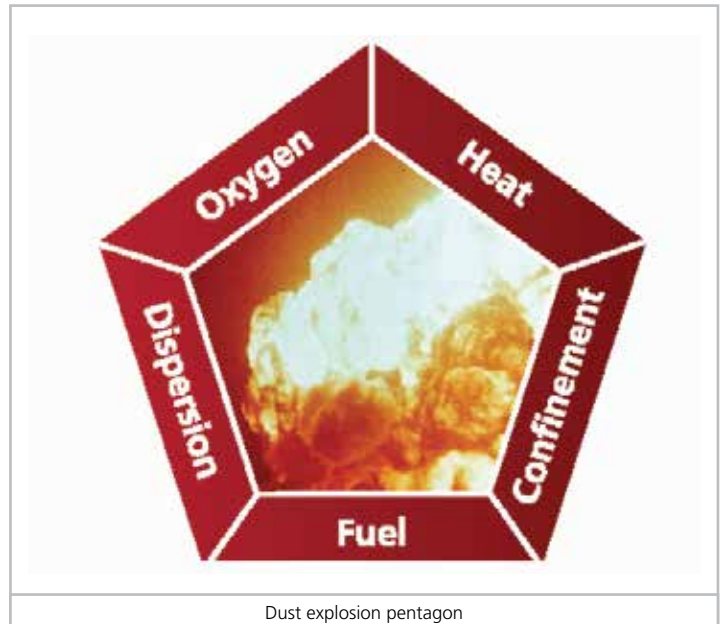
- » Utilize properly-equipped vacuums for source capture and as portable suction device to prevent fugitive dust from accumulating
- » Make housekeeping as easy and ergonomic as possible by using lightweight, adjustable tools, flexible hoses and overhead cleaning accessories
- » Keep dust level below 1/32" by cleaning with an industrial vacuum cleaner that meets the requirements for explosion hazard locations and/or materials
- » Inspect all equipment for possible ignition sources and for need deflagration venting upgrades

NFPA 654 Safe Housekeeping Hierarchy

1. Vacuum dust with a certified vacuum that is bonded and grounded so it doesn't become an ignition source.
2. Where the vacuum cannot reach, conduct water wash down or carefully sweep with a broom in a manner that does not stir up dust.
3. Finally, if the previous two measures are not effective, cleaning with compressed air is permissible only in small areas with operating equipment shut down.

Learn More:

NilfiskIndustrialVacuums.com
ExplosionProof-Vacuum.com



Dust explosion pentagon



Overhead cleaning

BE PREPARED WITH NILFISK INDUSTRIAL VACUUM CLEANERS

The threat of an explosion in your facility is very real. That is why OSHA recommends, and sometimes requires, manufacturers to use certified explosion-proof vacuums as part of a regular plant maintenance program to collect hazardous dust.

- » Electric models – CSA certified explosion-proof/dust ignition-proof for use in hazardous environments, including Class I, Group D, and Class II, Groups E*, F, and G locations.
- » Pneumatic models – ATEX-approved (Ex) for use in Zones 1, 2, 21 and 22 and designed to meet the requirements for use in Class I, Group D, and Class II, Groups E, F, and G locations.
- » Explosion-proof/dust ignition-proof design – all internal mechanisms in the electric models including the motor, switches, filters and inner chambers are designed for use in explosion-proof/dust ignition-proof applications.
- » Non-sparking/low sparking material construction – made from 304 stainless steel to prevent a dangerous percussion arc that might otherwise cause a spark.
- » Advanced filtration technology – optional HEPA and ULPA filters guarantee capture of up to 99.999% of all ultra-fine particles down to and including 0.12 microns in size. This ensures that no combustible particulate is exhausted back into the air.
- » Easy-to-clean design – vacuum components are easy to access for fast cleaning and quick decontamination. Also, most models feature a drop out collection container and an external filter shaker mechanism.
- » Multiple collection options – complete line of EXP vacuums with varying collection capacities.
- » Wet/dry units – models designed to collect wet and dry materials for unique cleaning applications.
- » User-friendly features – static-control accessories, including those for overhead cleaning, reduce maintenance steps and hassle for your team.
- » Non-sparking wet separator – ideal for collecting volatile Group E metal dusts such as aluminum or titanium.



Collecting flour



Antistatic accessories

Expert Support

We support you with a highly-trained direct sales team. Dedicated to solving your individual combustible dust safety challenges, our team analyzes your processes and recommends the best vacuums and features for your particular application.

Locate your sales rep at:
NilfiskIndustrialVacuums.com/FindARep.aspx.



Safe Choice Commitment

At Nilfisk Industrial Vacuums we understand that you face many risks each day, just by operating your business. That is why Nilfisk is dedicated to helping you make smart choices to keep your facility and your workers safe. Our team of experts is ready to tackle any cleaning challenge — because in a world full of risk, you have to make safe choices.

We are committed to being that safe choice. To learn more, visit nilfiskindustrialvacuums.com.



Nilfisk-Advance, Inc.
Industrial Vacuum Division
740 Hemlock Rd., Suite 100
Morgantown, PA 19543
United States
(800) 645-3475

www.nilfiskindustrialvacuums.com
questions@nilfisk.com