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Hello, February 2020

# **Process Safety Dispatch**

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#### It's Winter - It's Static Electricity Time!



In Winter in the Northern parts of the United States and in Canada, our electrostatic hazards consulting team find themselves more in demand. Here's why.

Winter can present process safety and processing challenges to companies as diverse as thin film producers, powder processors and producers, electronics companies and more. For those companies handling flammable liquids and

explosible powders, static electricity can (and regularly does) provide the ignition source for a fire or explosion. For others it is powder flow problem, dust sticking to surfaces, mixing problem, sieving difficulties, thin film 'cling', damage to electronics and more. It's worth looking at why this is – and what can be done to ensure the risks and processing problems associated with **static electricity** are properly controlled, all year round. **Read More...** 



#### **Expert Consulting**

- Dust Explosion Prevention & Mitigation
- Control of Static Electricity
- Hazardous (Electrical) Area Classification
- Process Hazard Analysis
- Process Safety Management
- Fire and Explosion Hazard Assessment
- Incident Investigation
- Organizational Process Safety Competency Assessment



## **Specialist Laboratory Testing**

- Combustible Dust Testing
- Electrostatic Testing
- Self-Heating / Thermal Instability Testing
- Flammability Testing of Gases & Vapors

## Cases in the News: The Delayed Dust Explosion

When something serious goes wrong on powder handling plant, how long do I have to get out before a dust explosion develops?

I think we all know that individual dust explosions last for a matter of seconds. Once ignition has started, a flame front grows from the ignition source with the generated heat developing pressure waves which travel ahead of the flame front — at the speed of sound.



Devastation will follow unless proper explosion protection and isolation measures are in place. Of course, combustible dust explosions can be multiple explosion affairs, where a primary explosion raises dust that leads to a secondary explosion and so on; and in extreme conditions (for example in a pipe system) it is even possible for the *deflagration* to develop into a *detonating* dust explosion, usually with more extreme consequences. In most cases it is clear that there is often *very little time available* to evacuate a facility.

So, you will be surprised to hear that in Belgium last year, a combustible dust explosion occurred that led to one fatality and 3 serious injuries; the explosion took place one day after the incident began. How can this be – and surely a day is enough time to evacuate a factory...Read more...

Visit us at the AIChE 2020 Spring Meeting & Global Congress on Process Safety, Houston, TX, March 29-April 2, 2020 - Booth #400 - Register

Dr. Ebadat will also be presenting:

• "Are you Now in Compliance with the Requirements of NFPA 652 Standard on Combustible Dust"? - March 30th at 10:30am.

Come meet us at the International Powder & Bulk Show, Rosemont, IL, April 28-30, 2020 – Booth #1250 - Register

Dr. Ebadat will also be presenting:

- Panel: "Are you Ready for the Combustible Dust DHA Deadline? April 28th at 10:15am
- "Practical Controls for Electrostatic Spark Hazards April 28th at 3:15pm
- Panel of Experts Answer Questions April 30th at 9:00am

If you would like a quote for any of our testing and/or consulting services, please click on the button below. We will get back to you promptly with your proposal.

# **REQUEST A QUOTE**

#### **Free On Demand Webinars**

Combustible Dust Hazards: Assessment, Prevention and Protection Including the Requirements of NFPA 652 [watch]

Electrostatic Hazards in Processing Industry: The Nature of the Problem and Practical Measures for its Control [watch]

Fire and Explosion Hazards: How to Identify and Control Them in Your Process [watch]

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