

## **Grain Dust Explosion Prevention Program**

This program can be delivered in as few as 1 hour 45 minutes or as long as 2 hours 45 minutes, depending on the responsiveness and background of the audience. The program is split into four modules. We generally take a break after the first two modules or the first hour, whichever comes first.

**Module 1. *Introduction:*** Historical patterns of grain dust explosions; hazards associated with combustible grain dust; why dust hazards are often ignored; legal definitions of combustible dust; grain dust explosion pentagon; primary and secondary explosions

**Module 2. *Grain dust properties and ignition sources:*** Ignition sources; primary dust explosion locations within the grain elevator facility; how much dust does it take to explode?

**Module 3. *Dust mitigation: Good housekeeping, preventive measures, and grain handling:*** dust generation sources; grain receiving and unloading areas; housekeeping practices; dust collection system points; monitoring dust collection systems; recognition of dust hazards; challenges of communicating dust hazards to workers

**Module 4. *Controlling ignition sources, equipment maintenance, and material handling:*** preventive maintenance, equipment maintenance; electrical hazards; material handling techniques; spouting; bucket elevators; venting; safeguards in materials handling equipment; wrap up and questions

The dust explosion chamber is used to illustrate how the elements of an explosion mix to form a hazardous mix. Depending on the characteristics of the facility, the dust explosion chamber may be used at a variety of points in the presentation.

**Presenters (usually 2 of the following will present):**

To schedule training sessions, please contact:

Or

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