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2018

COMBUSTIBLE DUST INCIDENT REPORT



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LETTER FROM THE AUTHOR

DR. CHRIS CLONEY

Managing Director, DustEx Research Ltd.



Center stage at the International Powder Show; I was pretty nervous...

It has been almost a year since I took the stage in Chicago on April 26, 2018. In my presentation, I talked about the goal of DustEx Research, the goal of myself and our team, to see a year with zero fatalities from dust explosions by 2038.

How are we going to achieve this? By building a connected global community to increase awareness, share knowledge, and advocate change in industries handling combustible dust. How are we going to measure our results? By building the world's first global tracking platform for dust fires and explosions.

But in that moment, we were just getting started on this journey. DustEx Research was incorporated literally nine days before the conference. The DustSafetyScience.com platform had only been online for a matter of weeks.

This report and the current status of the incident database, are due to tremendous effort and support since that time. Nine months in, DustSafetyScience.com has 500+ recorded incidents and, in January 2019, we had over 4000 visitors from more than 75 countries. We also launched a weekly podcast where we interview experts to figure out what challenges the community is facing. At the time of writing, 20 episodes have been released with more than 1700 downloads.

Unfortunately, we did not see a year with zero fatalities in 2018. We also struggle with obtaining accurate information, have difficulties with underreporting of severe incidents, and see challenges with getting global coverage. However, the early success and substantial feedback from our community (over 2000 emails to date!) show us that we are on the right track with our work.

I hope you find this incident report interesting, insightful, and useful in your work. As always, I appreciate your support and the effort you are putting into making industries handling combustible dust safer around the world.

With kindness,

Chris

P.S. Have feedback on the incident reporting? Email me at chris@dustsafetyscience.com.

P.P.S. You can read previous letters from me [here](#).

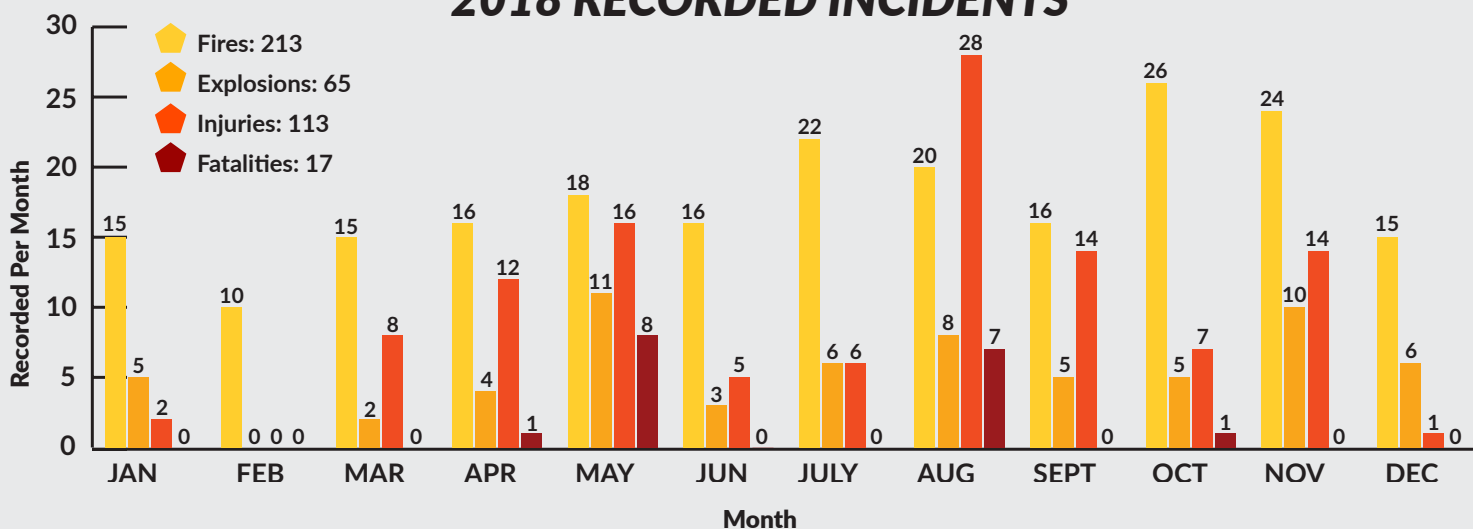
“There’s a famous quote by Peter Drucker, business management consultant: ‘You can’t manage what you don’t measure.’ That’s what my work is about, that is what the Combustible Dust Incident Database is about.”

- iPBS Powder Show Presentation 2018

INCIDENT DATA OVERVIEW

	UNITED STATES			CANADA			INTERNATIONAL	
	2016	2017	2018	2016	2017	2018	2017	2018
Fires	---	117	158	---	15	17	37	38
Explosions	31	28	36	2	4	4	36	25
Injuries	22	52	39	0	9	1	102	73
Fatalities	3	6	1	0	0	0	7	16

2018 RECORDED INCIDENTS



LOSS HISTORY - UNITED STATES

Loss history in the United States from various sources is summarized in the following table. Note that injuries and fatalities are from explosions only and that CSB¹ does not include grain handling facilities but CSB² does. The agricultural dust explosions are from Kansas State University³ and Purdue University⁴.

	EXP./YEAR	INJ./YEAR	FAT./YEAR
¹ CSB 1980-2005:	11.2	28.7	4.8
² CSB 2006-2017:	8.8	25.3	4.9
³ AGR 1980-2005:	14.6	17.2	2.9
⁴ AGR 2006-2017:	8.9	9.6	1.3
DSS 2016-2018:	31.7	31.3	3.3

This data suggests that there may be an average of 25-35 dust explosions per year in the United States resulting in 30-45 injuries and 2-8 fatalities.

2018 LOSS OVERVIEW

Looking at the 2018 global data, 94% of the fatalities occurred due to explosions. Of the injuries, 84% occurred from explosions while 16% were from fires. Some of the more severe incidents include:

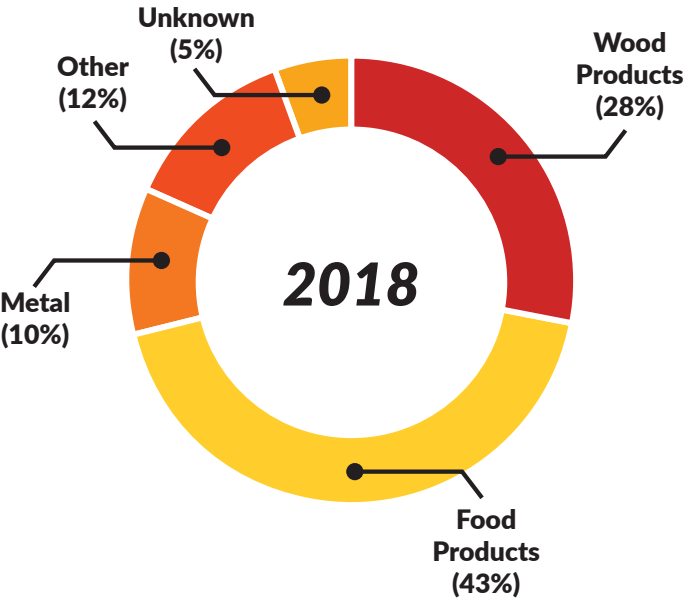
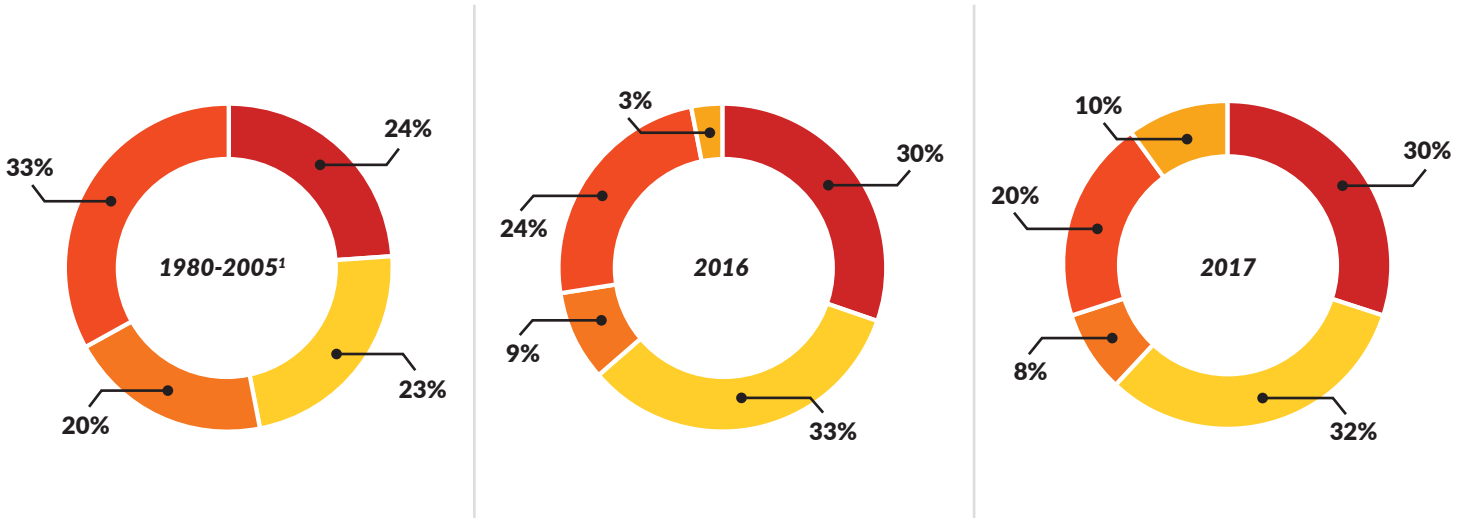
- [Seven Killed in Grain Silo Explosion](#) (Port Aqaba, Jordan)
- [Six Dead after Grain Elevator Explosion](#) (Lion's Den, Zimbabwe)
- [One Killed in Grain Elevator Explosion](#) (South Sioux City, NE)
- [Ten Injured in Metal Dust Explosion](#) (Changhua, Taiwan)

In North America, the trend for facility damages was reversed. Out of the 13 incidents with a reported loss of \$1 million and above, 11 were from fires and 2 were from explosions. Three incidents were recorded with facility losses above \$15 million:

- [Cotton Seed Elevator Fire in Altus, Oklahoma](#) (\$20 million)
- [Coal Silo Explosion in San Juan, New Mexico](#) (\$15-20 million)
- [Metallurgic Dust Fire in Muskegon, Michigan](#) (\$15 million)

MATERIALS INVOLVED

◆ Wood Products
 ◆ Food Products
 ◆ Metal
 ◆ Other
 ◆ Unknown



2018 DETAILED ANALYSIS

Wood	28.4%	Carbon	1.1%
Food	43.2%	Sulfur	0.7%
Metal	10.4%	Textile	1.1%
Coal	5.8%	Other	2.2%
Paper	1.4%	Unknown	5.4%
Plastic	0.4%		

DISCUSSION POINTS

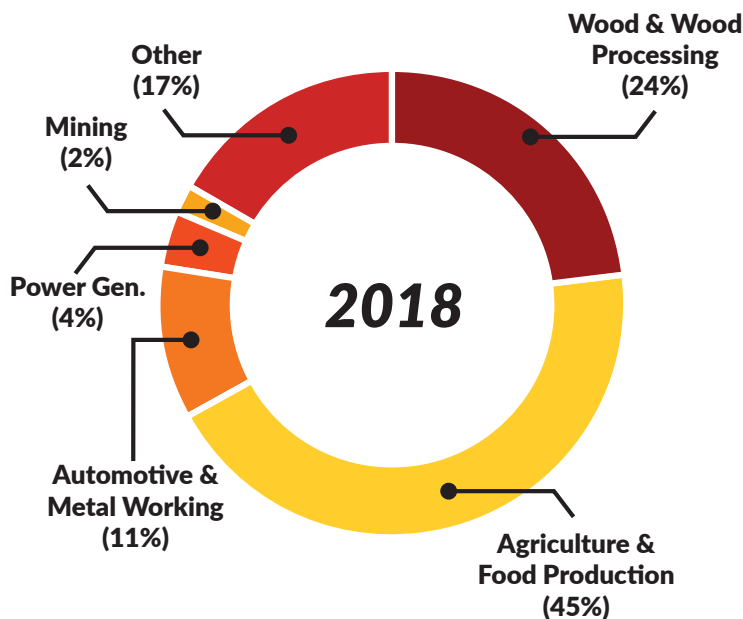
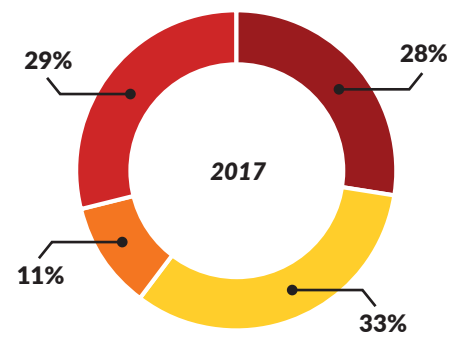
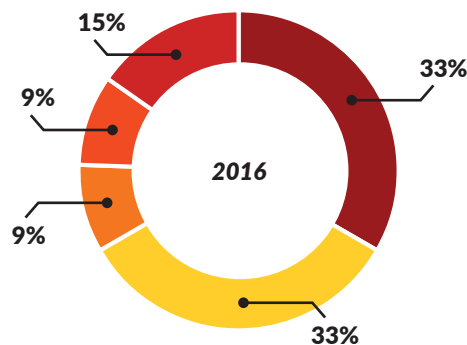
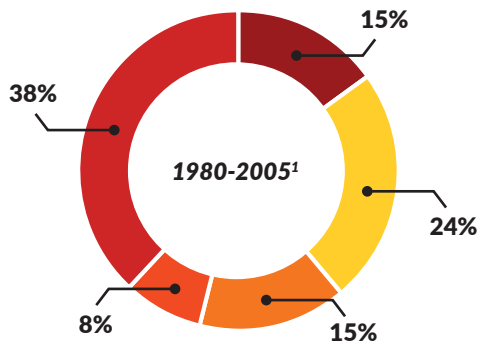
In reviewing the global incident data, wood and food products made up an average of 70% of the materials involved in combustible dust fires and explosions. Combustible products of wood processing include sawdust, chips, shavings, fibers, and pellets. Food products include grain, flour, barley, canola, sunflower, pecan, cocoa, spices, cereals, fishmeal, and milk powder.

At the mid-year, the total number of incidents involving wood was almost equal to those involving food products. However, by the end of the year, incidents involving food products had tripled while those involving wood products only doubled.

	JAN.- JUNE		JULY- DEC.	
	WOOD	FOOD	WOOD	FOOD
FIRES	33	24	66	90
EXPLOSIONS	5	12	13	30
INJURIES	10	32	15	42
FATALITIES	0	8	0	14

This suggests that incidents involving food products tend to occur more frequently later in the year, potentially coinciding with harvest season. Incidents involving wood products tend to occur uniformly throughout the year.

INDUSTRIES INVOLVED



DISCUSSION POINTS

Again, wood processing, agricultural, and food production make up a large proportion of the overall fire and explosion incidents. Other industries not broken out in the plots include: Cement, Coatings, Oil and Gas, Textiles, Recycling, Chemical Processing, and Other Manufacturing.

The Wood and Wood Products industries tended to have larger facility damages from combustible dust incidents. Out of the 13 incidents which reported losses of \$1 million or more, six occurred wood working, biomass storage, and pellet manufacturing. Five of these were fires and one was an explosion, resulting in \$24 million in total reported losses.

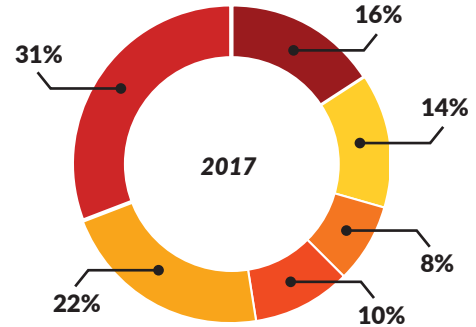
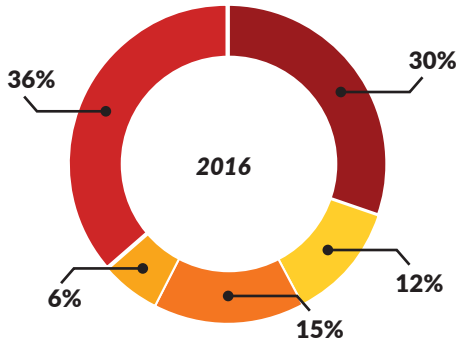
The remaining seven 'High Capital Cost' incidents included an explosion/fire in a metal die-casting facility, two coal dust explosions at power generation and mining operations, a fire at a cottonseed facility, a fire at a milk powder facility, and two fires at grain handling operations.

2018 DETAILED ANALYSIS

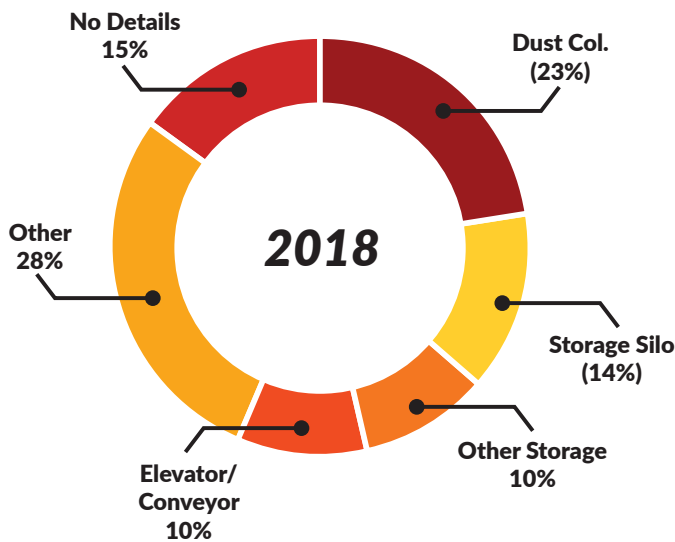
Wood & Wood Pro.	24.1%	Mining & Coal Pro.	1.8%
Agriculture	26.6%	Ethanol Production	2.5%
Food Processing	15.5%	Pulp & Paper	2.2%
Metal Pro. & Pro.	7.6%	Schools and Edu.	2.2%
Auto. Parts Man.	3.2%	Other	10.4%
Power Gen.	4.0%		

EQUIPMENT & CAUSES

◆ Dust Collector
 ◆ Storage Silo
 ◆ Other Storage
 ◆ Elevator/Conveyor
 ◆ Other
 ◆ No Details



No data for 1980-2005



DISCUSSION POINTS

Dust collection equipment has the largest percentage of combustible dust incidents with an average of 23% since 2016. However, this value is less than the historic data from the CSB, which suggested up to 40%. Dust collectors also make up a smaller proportion of the recorded dust explosions than seen in other equipment although the number of injuries are high.

The number of fatalities in dust collector incidents are lower than other types of equipment such as storage silos, elevators

and conveying equipment. The breakdown between fires, explosions, injuries, and fatalities in 2018 for different equipment is summarized as:

	FIRES	EXP.	INJ.	FAT.
Dust Collector	51	12	23	1
Storage Silo	29	9	6	7
Other Storage	24	3	1	0
Elev./Conv.	15	13	18	8
Dryer	42	7	4	1
Other	22	9	20	0
No Details	30	12	41	0

There is very little data available outlining the initiating cause of fire and explosion incidents. Out of the six incidents in North American wood handling industries with more than \$1 million in losses or that caused injury in 2018, two mentioned sparking from equipment and one mentioned an air compressor as contributing factors.

Perhaps more telling is that each of these incidents mentioned accumulation of combustible material such as piles of sawdust, wood chips, lumber, and insulation as contributed to rapid spread of the building fire and increased difficulty for firefighters in responding to the incident.

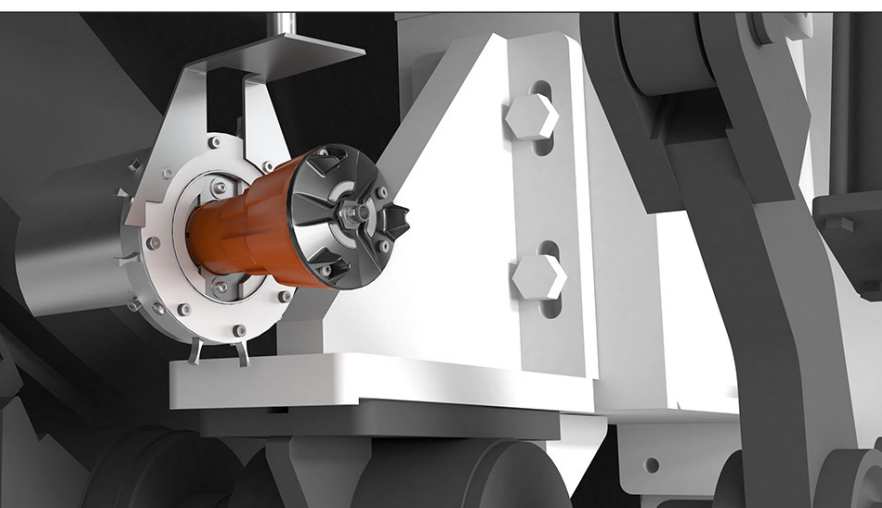


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2018 OSHA CITATIONS

ISSU. DATE	INDUSTRIAL ACTIVITY	STATE	VIOLATIONS	INT. PEN.	CUR. PEN.	INSPECTION	STATUS	CITATION LINK
17-Jan	Printing Services	OH	1	\$6,467	\$5,174	1259793.015	Closed	More Info
17-Jan	Dehydrated Food Processing	NY	9	\$155,205	\$155,205	1250461.015	Open	More Info
19-Jan	Woodworking and Millwork	OK	11	\$39,579	\$13,800	1256134.015	Open	More Info
19-Jan	Fertilizer Manufacturing	ME	9	\$686,292	\$47,799	1269702.015	Open	More Info
24-Jan	Equipment Manufacturing	WI	4	\$48,227	\$23,282	1255618.015	Open	More Info
30-Jan	Metal Tank Manufacturing	AL	10	\$101,800	\$51,000	1266870.015	Open	More Info
30-Jan	Plastic and Resin	WV	2	\$12,934	\$9,700	1279599.015	Closed	More Info
2-Feb	Paint and Coating	WI	1	\$5,497	\$3,848	1259598.015	Closed	More Info
5-Feb	Dental Equipment	AL	7	\$39,735	\$22,311	1275989.015	Closed	More Info
8-Feb	Plastics and Resin	NY	1	\$9,147	\$9,147	1274530.015	Open	More Info
23-Feb	Paper Products	WI	4	\$38,248	\$30,341	1272259.015	Open	More Info
18-Mar	Metal Services	PA	5	\$12,750	\$7,778	1262338.015	Open	More Info
12-Mar	Carbon/Graphite Products	OH	1	\$5,497	\$3,848	1297749.015	Closed	More Info
20-Mar	Smelting and Refining	PA	2	\$21,313	\$15,975	1280334.015	Closed	More Info
23-Mar	Food Processing	IL	3	\$16,815	\$6,000	1267703.015	Open	More Info
3-Apr	Plastic Packaging	IL	4	\$27,716	\$24,944	1275487.015	Open	More Info
12-Apr	Food Processing	NY	3	\$21,619	\$16,216	1273034.015	Open	More Info
17-Apr	Wood Products	TX	4	\$95,322	\$95,322	1272047.015	Open	More Info
19-Apr	Adhesive Manufacturing	WI	3	\$14,118	\$7,000	1278584.015	Open	More Info
19-Apr	Wood Products	MA	5	\$25,872	\$9,240	1272727.015	Open	More Info
27-Apr	Textile Coating	MA	5	\$50,444	\$25,225	1274754.015	Open	More Info
16-May	Wood Products	WI	3	\$13,304	\$5,174	1296278.015	Open	More Info
18-May	Commercial Baking	NJ	2	\$18,294	\$14,000	1297478.015	Closed	More Info
22-May	Plating & Polishing	IL	7	\$24,392	\$17,174	1295568.015	Open	More Info
23-May	Wood Products	TX	6	\$54,879	\$27,440	1289686.015	Open	More Info
30-May	Food Processing	WI	2	\$20,787	\$14,552	1280845.015	Closed	More Info
15-Jun	Metal Foundry	NY	1	\$6,467	\$4,527	1283599.015	Open	More Info
28-Jun	Pharmaceutical Prep. Man.	FL	2	\$18,478	\$11,087	1303375.015	Open	More Info
10-Jul	Other Plastics Product Man.	MO	1	\$11,641	\$3,622	1292504.015	Closed	More Info
11-Jul	Recyclable Mat. Merch.	TX	18	\$204,549	\$100,000	1291035.015	Open	More Info
27-Jul	Cotton Ginning	OK	2	\$7,760	\$4,650	1301249.015	Closed	More Info
13-Aug	Materials Recovery Facilities	NY	6	\$9,978	\$6,000	1303557.015	Open	More Info
17-Aug	Nonferrous Metal	NY	5	\$51,737	\$35,107	1308940.015	Closed	More Info
21-Aug	Misc. Wood Product Man.	PA	7	\$6,097	\$3,050	1297275.015	Closed	More Info
21-Aug	Sawmills	PA	12	\$10,531	\$5,300	1297264.015	Open	More Info
5-Sep	Other Plastics Product Man.	IL	1	\$7,068	\$4,948	1310941.015	Closed	More Info
17-Sep	Spice and Extract Man.	MA	2	\$18,294	\$6,000	1307797.015	Closed	More Info
26-Sep	Plastics Mat. and Resin Man.	PA	1	\$5,654	\$3,500	1336727.015	Open	More Info
27-Sep	Railroad Rolling Stock Man.	TX	5	\$122,873	\$122,873	1306379.015	Open	More Info
27-Sep	Cabinet and Countertop Man.	TX	6	\$15,522	\$15,522	1325312.015	Open	More Info
27-Sep	Home Centers	NJ	18	\$106,432	\$65,988	1305884.015	Open	More Info
16-Oct	Polish & Sanitation Good Man.	PA	1	\$12,934	\$12,934	1333923.015	Open	More Info
17-Oct	Unlam. Plastics Shape Man.	WI	3	\$24,945	\$17,462	1317654.015	Open	More Info
30-Oct	Spring (Light Gauge) Man.	IL	3	\$50,813	\$15,150	1313626.015	Open	More Info
13-Nov	Misc. Chemical Product Man.	OH	5	\$23,281	\$16,000	1334443.015	Open	More Info
7-Dec	Misc. Wood Product Man.	ID	2	\$20,325	\$7,391	1349897.015	Open	More Info
11-Dec	Surgical & Medical Inst. Man.	OH	3	\$27,162	\$10,000	1336668.015	Open	More Info
27-Dec	Automobile Manufacturing	Mo	1	\$8,315	\$8,315	1329863.015	Open	More Info

Inspections Resulting In Citations: 48

Total Initial Penalties: \$2,337,109

Initial Penalty/Citation: \$10,672

Total Citations: 219

Total Current Penalties: \$1,140,921

Initial Penalty/Inspection: \$48,690

**Information was collected from OSHA Data & Statistics by searching for "dust" under inspection details with citations that include the General Duty Clause. Project completed in partnership with Dalhousie University and student Shamus MacDonald Brawn. View full project report [here](#) once it has been completed.*

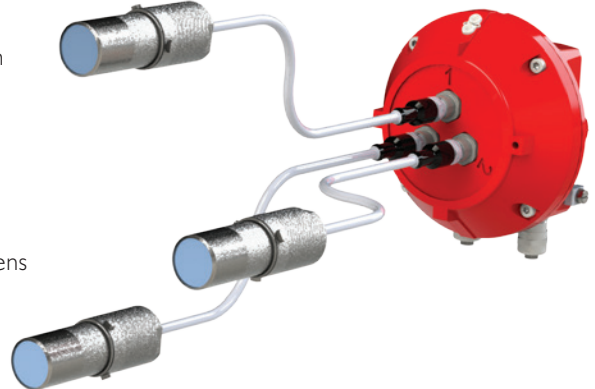
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GRAIN SILO EXPLOSION

PORT AQABA, JORDAN | MAY 14, 2018

Seven Fatalities, Two Injuries

BACKGROUND

The Port Aqaba grain storage terminal had 75 silos, each with a height of forty-five meters and storage capacity up to 200,000 tons of wheat. At the time of the incident, the silos were being emptied and dismantled as part of a redevelopment project. Although the demolition company had received a risk assessment noting the dust explosion hazards involved, investigators determined that they did not comply by removing the dust prior to starting work.

INCIDENT DESCRIPTION

The initial dust explosion occurred on the third floor of the tower building, when grain dust in the bucket elevator or conveyor system was ignited. The explosion propagated through the bucket elevator and into the tunnel system underneath the silos. Subsequent explosions occurred throughout the tunnel and in the storage silos.

OUTCOME

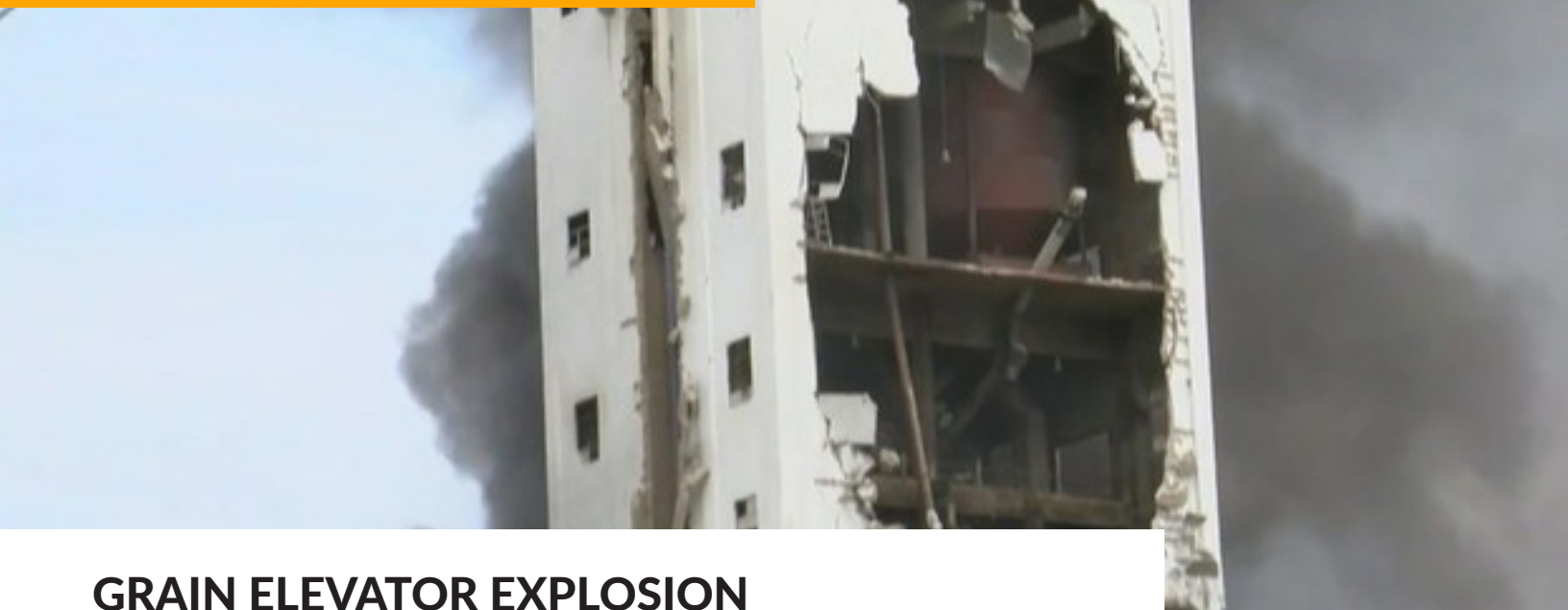
The explosions caused extensive damage to the silo structure blowing out several of the brick walls, stairwells, and silos. Nine workers were injured in total, five of whom passed away during the week following the incident. News reports stated that a sixth worker passed away on May 21 and a seventh on May 29. At least one company has been charged in violation of standard safety procedures in relation to the incident.

Image Sources: Personal Communication

Incident Database: [Explosion During Grain Silo Demolition Kills Seven in Aqaba, Jordan](#)

Podcast Interview: [Lessons Learned from the Port Aqaba Explosion with Ali Alnajdawi](#)





GRAIN ELEVATOR EXPLOSION

SOUTH SIOUX CITY, NEBRASKA | MAY 29, 2018

One Fatality, One Injury

BACKGROUND

The grain elevator is located in South Sioux City, Nebraska, and contains a 200-foot structure with a 30-foot drying cone on top. At the time of the explosion, three workers were getting ready to transfer grain in the elevator. Limited details are available on the processing operations outside of this publicly available information.

INCIDENT DESCRIPTION

Witnesses stated that the explosion started at the top of the elevator and worked its way down, blowing out several of the cement walls of the structure. Nearby residents also reported hearing 3-5 minor explosions approximately a half-hour after the initial explosion. The incident ruptured a nearby gas line, which was allowed to burn until the utility company could stop the gas flow. Collapse of the remaining structure was a major concern and nearby residents were evacuated after the incident.

OUTCOME

Two of the three employees on site were injured during the explosion. One was treated for minor injuries at the scene while the other was transferred to the hospital with serious burn injuries. News agencies reported that this individual, unfortunately, passed away on July 13.

In addition to the injuries, 50 individuals were evacuated from their homes. Demolition of the damaged top of the elevator took two weeks, after which point residents were allowed to return home. The remaining demolition was reportedly going to take up to mid-July 2018. On October 15, the South Sioux City sued the grain elevator owner for more than \$120,000 to cover the emergency expenses related to the incident.

Image Sources: Local News Reporting (SiouxlandProud.com)

Incident Database: [One Killed and One Injured in Grain Elevator Explosion in South Sioux City, Nebraska](#)





MAGNESIUM SCRAP EXPLOSION AND FIRE

EATON RAPIDS, MICHIGAN | MAY 2, 2018

Two Injuries

BACKGROUND

The Magnesium Products facility in Eaton Rapids focuses on die-casting automotive parts for the transportation industry. The facility employs 450 individuals and is the largest employer in the community. New agencies reported that fires “break out often” at the facility, but none of the same magnitude as the current incident.

INCIDENT DESCRIPTION

Local news agencies as well as the Eaton Rapids City Manager stated that the fire originated in the “tunnel” area of the facility where magnesium scraps are transported on a conveyor line. This was followed by a series of explosions that occurred at the facility. The fire chief’s report was released to the public and indicated that the cause of the initial fire and explosion was unknown. However, the second and third explosions were the result of burning magnesium reacting with the water from fire suppression systems.

OUTCOME

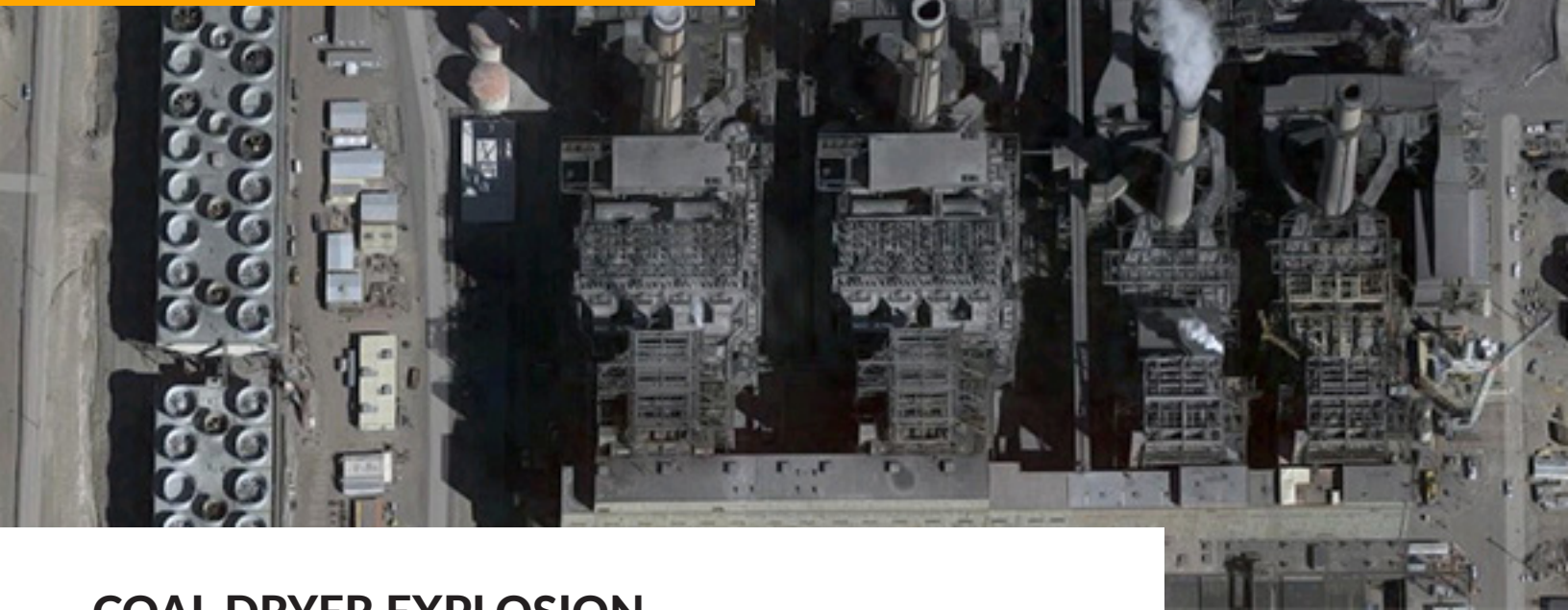
Two employees were injured during the incident. One was injured by debris during the explosions. The second was thrown into the air by an explosion’s impact and hit the door jamb on the way out of the building. OSHA currently has an inspection open for this incident, which is flagged under the Combustible Dust National Emphasis Program.

In addition to the injured employees, the magnesium facility fire and explosions had a large impact on the automotive industry in North America. Industry trade publications reported that Ford, Chrysler, and General Motors were impacted as the Eaton Rapids facility is the main producer of specific parts for their vehicles.

Image Sources: Michigan State Police Drone Footage ([Lansing State Journal](#))

Incident Database: [Magnesium Dust Fire and Explosions in Eaton Rapids Michigan Injures Two and Cuts Automotive Parts Supply Line](#)





COAL DRYER EXPLOSION

SAN JUAN, NEW MEXICO | MARCH 17, 2018

\$15-20 Million in Damages

BACKGROUND

The San Juan Power Generation Station is located 15 miles west of Farmington, New Mexico. As the state's largest electricity provider, the plant serves more than 50,000 residential and business customers and has been in operation since 1973.

INCIDENT DESCRIPTION

On March 17, the Unit 1 silo, which was holding 614 tons of coal, collapsed causing an explosion and fire. A subsequent investigation determined that a faulty weld holding two sections of the silo together and corrosion led to the silo collapse. Dust in the falling coal was reported to have then exploded, damaging nearby equipment in Unit 1.

OUTCOME

No one was injured in the silo collapse, coal dust explosion, or structural fire. Repairs to Unit 1 were estimated between \$15-20 million and a company spokesperson stated that the utility expected to have the unit back in service by June 2018. No status update is available on the repairs, but the utility is planning on moving away from coal and retiring the power station by 2022.

Image Source: Google Maps

Incident Database: [Faulty Weld Cause of Power Plant Explosion in Waterflow, New Mexico](#)



SPARK CAUSES METALLURGIC DUST FIRE

MUSKEGON, MICHIGAN | MARCH 13, 2018

\$14-15 Million in Damages

BACKGROUND

The Muskegon facility is part of the Port City group of companies focusing on aluminum die casting and rapid prototyping. The 75,000 square foot foundry where the fire occurred manufactures parts for the automotive industry.

INCIDENT DESCRIPTION

News reports state that the fire started from an equipment or propane tank malfunction which produced a spark and ignited oils and metallurgic dust near the rear of the facility. As firefighters arrived, they determined that there were multiple fires moving towards each other from different points in the facility. As the walls and ceilings collapsed, firefighters had to take a defensive position and flames could still be seen two days after the incident even as the facility was being dismantled.

OUTCOME

None of the 40 employees on-site during the fire were injured. The foundry was completely destroyed with a rebuild cost estimated between \$14-15 million dollars. The company stated that no one will lose their jobs and that they plan to rebuild immediately.

Incident Database: [Dust Fire Destroys Muskegon, Michigan Foundry, Costs \\$15M to Rebuild](#)





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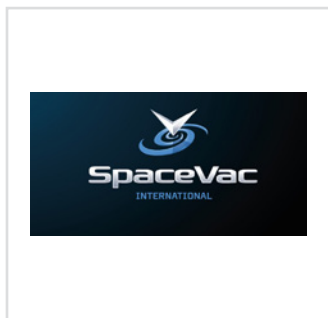
Engineering For:

- Dust Collection Systems
- Explosion Protection Systems
- System Retrofits

Dust Hazard Analysis
NFPA Compliance



DSS MEMBER COMPANIES



SpaceVac International

Unit 3 JBJ Business Park, Northampton Road Blisworth, Northants, United Kingdom, NN7 3DW

Phone: +0 1604 968 668
Email: info@spacevac.us



SpaceVac is the world's leading high-level cleaning system – enabling operators to remove high-level dust from inaccessible areas from the safety of the ground floor. SpaceVac's innovative cleaning technology can be brought into hazardous and explosive atmospheres using our ATEX certified conductive cleaning system.



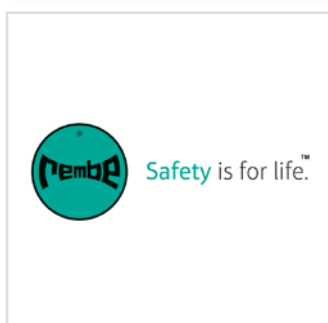
SINTROL Dust Monitors

Ruosilantie 15 00390 Helsinki, Finland

Phone: +358 50 463 5452
Email: info@sintrolproducts.com



Sintrol manufactures high quality, low maintenance dust monitors for the detection and monitoring of dust concentration. Historically the most common applications for Sintrol dust monitors have been inline industrial dust measurement solutions for process control, filtration leak detection and emissions monitoring.



REMBE® GmbH Safety + Control

Gallbergweg 21 59929 Brilon, Germany

Phone: +49 2961 7405-0
Email: info@rembe.de



REMBE® is a specialist in explosion safety and pressure relief. As an independent German company they supply safety systems for industrial plants. REMBE takes a comprehensive approach, primarily developing its own products and providing consultancy and engineering services to customers around the world.



Nilfisk, Inc.

740 Hemlock Road, Suite 100 Morgantown, PA 19543

Phone: +1 800 645 3475
Email: questions@nilfisk.com



Nilfisk is one of the world's leading suppliers of professional cleaning equipment. The company offers a complete line of NRTL-certified and NFPA-compliant industrial vacuum cleaners for collecting combustible dust in Class I, Class II and non-classified environments.



Masterduct, Inc.






5235 Ted Street Houston, Tx 77040

Phone: (713) 462-5779
Email: info@masterduct.com








MASTERDUCT specializes in providing high-quality, flexible, abrasive-resistant and heat tolerant hoses as a solution to just about any need. These include anti-static/electrically conductive hoses for combustible dusts in automotive, agriculture, plastics, woodworking, and dust collection applications.

























DSS MEMBER COMPANIES

	<p>JENSEN HUGHES</p> <p>3610 Commerce Drive, Suite 817 Baltimore, MD 21227-1640</p> <p>Phone: +1 844-900-DUST (3878) Email: dust@jensenhughes.com</p>	<p>JENSEN HUGHES is your partner in combustible dust hazard protection. Our expert team of engineers and consultants provides unbiased dust testing, comprehensive dust hazard analysis, employee training and related services to ensure your facility is suitably protected in a cost-effective manner.</p>
	<p>IEP Technologies</p> <p>417-1 South Street Marlborough, MA 01752</p> <p>Phone: +1 855 793 8407 Email: info.IEP.us@hoerbiger.com</p>	<p>IEP Technologies™ is a worldwide leading provider of explosion protection systems and services which suppress, isolate and vent potential combustible dust or vapor explosions within process industries. As a key member of the HOERBIGER Safety Solutions group, IEP Technologies has facilities around the world.</p>
	<p>Hallam-ICS</p> <p>3801 Lake Boone Trail, Suite 100 Raleigh, North Carolina 27607</p> <p>Phone: +1 919-410-3769 Email: cgiusto@hallam-ics.com</p>	<p>Hallam-ICS is a leader in industrial safety services, and provides combustible dust safety consultation, compliance reviews, and detailed design of system upgrades. Their team excels at designing and implementing complete, effective solutions to mitigate combustible dust hazards.</p>
	<p>Firefly AB</p> <p>Heliosagatan 3 Stockholm, Sweden, 120 30</p> <p>Phone: +46 8 449 25 00 Email: info@firefly.se</p>	<p>Firefly is a Swedish supplier of fire protection systems to the process industry worldwide. For over 45 years, Firefly has specialized in creating tailor-made systems of the highest technical standard, covering everything from spark detection and water spray extinguishing to flame detection and water mist suppression.</p>
	<p>Fike®</p> <p>704 SW 10th Street Blue Springs, MO 64015</p> <p>Phone: +1 816-229-3405 Email: industrialprotection@fike.com</p>	<p>Fike® is a globally recognized manufacturer and supplier of explosion protection systems, fire protection systems and pressure relief devices. With offices around the world, the variety of explosion protection equipment we offer and the personalized customer service we provide, ensures that our solutions protect our customers and their facilities.</p>

DSS MEMBER COMPANIES

	<p>Fauske & Associates LLC</p> <p>16w070 83rd Street, Burr Ridge, IL 60527</p> <p>Phone: +1 630 323 8750 Email: info@fauske.com</p>	<p>Fauske & Associates provide expert safety testing, engineering, and training programs. Dust Hazards Analysis includes combustible dust explosion and fire hazards testing, onsite assessments, OSHA/NFPA compliance, audit preparation, electrostatic hazards, ignition source evaluation and vent sizing calculations.</p>
	<p>Fagus-GreCon</p> <p>648 Griffith Rd. Suit A Charlotte, North Carolina 28217</p> <p>Phone: +1 704 912-0000 Email: sales@grecon.us</p>	<p>The GreCon spark extinguishing system is used for preventive fire protection. A spark extinguishing system can detect and eliminate ignition sources before a fire or dust explosion occurs. These systems can be used in filter components, conveyor belts and many other parts of production facilities.</p>
	<p>ExNB Certification Institute</p> <p>Kozak Sqr 13-16 H-1154 Budapest, Hungary</p> <p>Phone: +36 30 966 0223 Email: info@exnb.eu</p>	<p>ExNB Certification Institute provides assessment and certification of electrical & non-electrical equipment according to ATEX and Fire Protection regulations for gas and dust hazardous areas worldwide. ExNB operates its EC-approved ExAM personnel competency assessment system based on ISO/IEC 17024.</p>
	<p>Element6 Solutions</p> <p>2 Guelph Street Georgetown, Ontario L7G 3Y9</p> <p>Phone: (905) 452-2049 Email: rjickling@elmt6.com</p>	<p>From dust hazard analysis to hood and system designs, Element6 Solutions specializes in all aspects of dust collection. Whether you are implementing a new dust collection system or retrofitting an existing system, Element6's experts can solve your dust issues.</p>
	<p>Delfin Industrial Corporation</p> <p>2010 E Center Cir. Bldg. C #300 Plymouth, MN, 55441</p> <p>Phone: +1 877 205 9015 Email: sales@delfinindustrial.com</p>	<p>Delfin is a leading modern industrial vacuum company founded on strong values and lasting passion with the highest standards for service and efficiency. With a catalogue of 140 standard vacuum models, they have the ability to fulfill any individual customer requirement by targeting and customizing every proposal.</p>

DSS MEMBER COMPANIES

	<p>CV Technology</p> <p>15852 Mercantile Ct, Jupiter, FL 33478</p> <p>Phone: +1 561 694 9588 Email: info@cvtechnology.com</p> <p> </p>	<p>CV Technology specializes in explosion protection solutions for the prevention and mitigation of explosion hazards related to combustible dust. Located in Jupiter, Florida, CV Technology manufactures various explosion mitigation products including explosion vents, isolation valves, flameless vents, and chemical suppression equipment.</p>
	<p>CST Industries</p> <p>903 E 104th Street, Suite 900 Kansas City, MO 6413</p> <p>Phone: 844-44-TANKS Email: sales@cstindustries.com</p> <p>   </p>	<p>As the world's largest bolted tank manufacturer, CST can provide comprehensive dust explosion solutions for compliance with the new regulation for Combustible Dust, NFPA 652. For more information on CST's combustible dust testing, call 844-44-TANKS.</p>
	<p>Boss Products LLC</p> <p>6729 Guada Coma Dr. Schertz, TX 78154</p> <p>Phone: +1 360 263 2360 Email: info@bossproductsamerica.com</p> <p>   </p>	<p>Boss Products is your single source for EcoMAXX® and EcoMAXX®/VigilEX® Fire and Explosion Protection Solutions. ATEX Certified & FM Approved products that comply to NFPA Standards. Headquartered in Schertz, TX, Boss Products serves North and Latin America through a vast network of highly trained local distributors.</p>
	<p>AT Industrial Products</p> <p>3633 Pomona Blvd. Pomona, California 91768</p> <p>Phone: +1 909 593 8340 Email: info@atindustrialproducts.com</p> <p>    </p>	<p>AT Industrial Products has been keeping workers and processing equipment safe from combustible metal dust fires for 20 years. Specializing in wet dust collection equipment for the capture and containment of combustible metal dusts generated by sanding, grinding, sawing, cutting and deburring.</p>
	<p>Anpak Industry Support & ATEX</p> <p>Burggraaf 14, 8448MK Heerenveen, The Netherlands</p> <p>Phone: +31 611 247212 Email: info@anpak.eu</p> <p>   </p>	<p>Get Focused, Get Going, Get Results! If you do not know where to start in the "World of Process Safety" or are stuck with ATEX, PED, RI&E or HAZOP issues, ANPAK can help. Based out of Heerenveen, The Netherlands, ANPAK specializes in explosion safety and is IECEx CoPC 05 Certified.</p>



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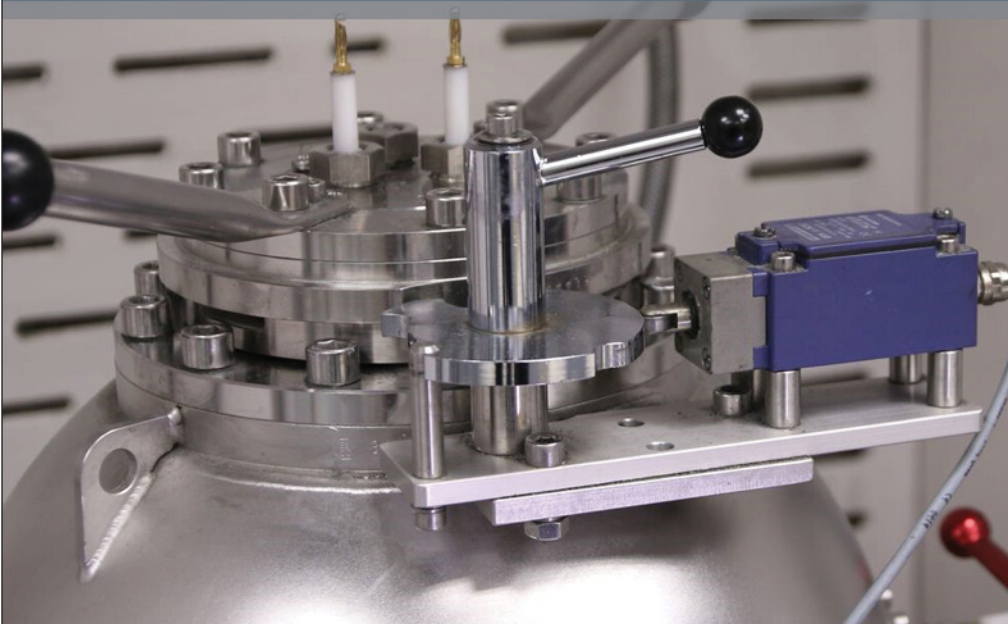
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UPCOMING EVENTS & TRAINING

REMBE® GmbH Safety + Control

ExNB Certification Institute

BWF Envirotec, USA

IChemE



Explosion Safety Days - Food and Beverage

Location: Brilon, Germany

Date: Nov. 19 & 20, 2019

ExAM Personal Competency Assessment

Global Training Providers
Needed

Dust Collector Training Academy

Location: Hebron, KY

Date: Sept. 17-19, 2019

Hazards 29 Process Safety Conference

Location: Birmingham, UK

Date: May 22-24, 2019

View the Community Events & Training calendar [here](#).

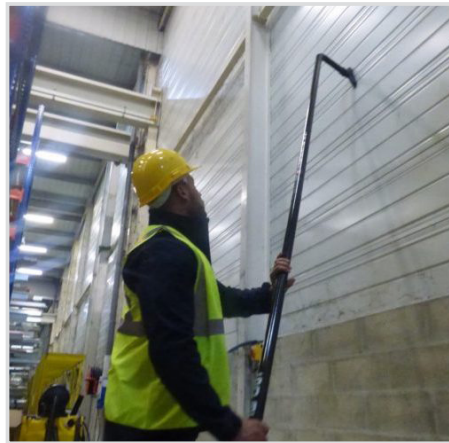
SPONSOR CASE STUDIES

IEP Technologies



Dust Explosion Protection for Dried Whey Protein Products

SpacVac International



High-Level Combustible Dust Cleaning in Food Processing Operations

XP Products



Explosion Proof Drum Kit for Dust Collector Explosion Isolation

WOOD & WOOD PRODUCTS

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Jan 15	Tatum Brothers Lumber	Lawtey, FL	Fire	Pine Dust	0	0	Compressor	\$1 Million	
Jan 27	Enviva Partners	Chesapeake, VA	Fire	Wood Pellets	0	0	Domes/Conveyors	\$1 Million	
Feb 1	Great Lakes Renewable Energy	Hayward, WI	Fire	Sawdust	0	0	Baghouse	No Details	
Feb 3	No Details	Danbury, NC	Fire	Wood Dust	0	0	Unknown	No Details	
Mar 4	Klausner Trading USA	Live Oak, FL	Fire	Wood Shavings	0	0	Shaker Unity	No Details	
Apr 16	Delta Timber & Landscape	Montrose, CO	Fire	Wood Dust	0	0	No Details	No Details	
Apr 23	Hardwoods of Michigan	Clinton, MI	Fire	Wood Dust	0	0	Silo	No Details	
Apr 24	Widner Product Finishing Co.	Rogers, TX	Explosion	Wood Dust	0	0	Dust Collector	\$1 Million	
Apr 27	Conklin Office Furniture	Holyoke, MA	Fire	Wood Dust	0	0	Dust Collector	No Details	
Apr 30	Shoun Lumber	Butler, TN	Fire	Wood Shavings	0	0	Hot Work	\$ Millions	
May 14	Ameriwood Industries	Tiffin, OH	Fire	Sawdust	0	0	Dust Collector	No Details	
May 23	Weyerhaeuser Co.	Columbia Falls, MT	Fire	Sawdust	0	0	Hot Work	No Details	
May 27	Whitsell Manufacturing Inc.	Cottage Grove, OR	Fire	Sawdust	0	0	Unknown	\$10 Million	
May 28	Burmeister Woodwork	Hales Corners, WI	Fire	Wood Dust	0	0	Dust Collector	No Details	
Jun 5	No Details	Charlottesville, NY	Fire	Wood Dust	1	0	Sawmill Motor	No Details	
Jun 17	Catalyst Paper Co.	Wisconsin Rapids, WI	Fire	Wood Chips	0	0	No Details	No Details	
Jun 19	DCI Corporation	South Royalton, CT	Fire	Sawdust	0	0	Bandsaw	No Details	
Jul 4	Klise Manufacturing Company	Grand Rapids, MI	Fire	Wood Dust	0	0	Dust Collector	No Details	
Jul 9	Waterman Log Crafters	Wisconsin Dells, WI	Fire	Sawdust	0	0	Dust Collector	No Details	
Jul 12	Sunbelt Shavings	Shuqualak, MS	Fire	Wood Dust	0	0	Hopper	No Details	
Jul 18	BJB Milling & Lumber, Inc	Eugene, OR	Fire	Wood Dust	0	0	Silo	No Details	
Jul 19	Marth Wood Shavings Supply	Marathon City, WI	Fire	Wood Dust	0	0	Conveyor	No Details	
Jul 25	Pasquier Panel Products	Sumner, WA	Fire	Wood Dust	0	0	Sheds	No Details	
Jul 27	Rocky Top Log Furniture	Lancaster, KY	Explosion	Wood Dust	0	0	Dust Collector	No Details	
Aug 13	Blair's Artistic Touches & Design	Lake City, IA	Explosion	Sawdust	0	0	Dust Collector	No Details	
Aug 29	Steve's & Sons	San Antonio, TX	Fire	Wood Dust	0	0	Dust Collector	No Details	
Aug 31	Maine Woods Pellet Company	Athens, ME	Fire	Wood Dust	0	0	Dust Collector	No Details	
Aug 31	Agri Wood Products	Waco, TX	Fire	Wood Dust	1	0	Exhaust Fan	No Details	
Sep 3	Seneca Sawmill	Eugene, OR	Fire	Sawdust	0	0	No Details	No Details	
Sep 11	Spearfish Pellet Company	Spearfish, SD	Fire	Sawdust	0	0	No Details	No Details	
Oct 13	CreaFill Fibers Corporation	Chestertown, MD	Explosion	Wood Dust	1	0	Machinery	\$20,000	
Oct 16	Sierra Casework Inc.	Modesto, CA	Fire	Wood Dust	0	0	Dust Collector	No Details	
Oct 31	Crestwood, Inc.	Salina, KS	Fire	Sawdust	0	0	Dust Collector	No Details	
Nov 5	Shaum's Chair	Columbiana, OH	Fire	Wood Dust	0	0	Maintenance Building	No Details	
Nov 8	5 Acre Mill	Hicksville, OH	Explosion	Sawdust	0	0	Dust Collector	No Details	
Nov 27	Martinez Pallets	Cookeville, TN	Fire	Sawdust	0	0	No Details	\$25,000	

WOOD & WOOD PRODUCTS CONT.

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Dec 13	QubicaAMF Worldwide	Lowville, NY	Fire	Sawdust	0	0	Dust Collector	No Details	
Dec 7	Sutphin Lumber Company	Mechanicsville, MD	Fire	Sawdust	0	0	Machinery	\$500,000	

INCIDENT SUMMARY - INCIDENTS: 39 | FIRES: 34 | EXPLOSIONS: 5 | INJURIES: 3 | FATALITIES: 0

AUTOMOTIVE PARTS MANUFACTURING

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
May 2	Meridian Magnesium	Eaton Rapids, MI	Explosion	Magnesium	2	0	Conveyor	No Details	
May 4	Keystone Automotive	Brainerd, MI	Fire	Metal Dust	0	0	Dust Collector	No Details	
May 14	Miami Valley Polishing	Piqua, OH	Fire	Metal Dust	0	0	No Details	150,000	
Jun 12	Multimatic, Inc	Butler, IN	Fire	No Details	0	0	Dust Collector	No Details	
Nov 1	Baldwin Filters	Kearney, NE	Fire	No Details	0	0	Dust Collector	\$25,000	
Nov 1	Hanwha Azdel	Lynchburg, VA	Explosion	Plastic Dust	0	0	Oven	No Details	
Nov 13	Adient	Holland, MI	Fire	Steel Dust	0	0	Dust Collector	No Details	
Dec 3	Challenge Manufacturing	Holland, MI	Fire	Metal Dust	0	0	Dust Collector	No Details	

INCIDENT SUMMARY - INCIDENTS: 8 | FIRES: 6 | EXPLOSIONS: 2 | INJURIES: 2 | FATALITIES: 0

METAL PRODUCTION & PRODUCTS


DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Mar 13	Muskegon Castings Corp.	Muskegon, MI	Fire	Metallurgic Dust	0	0	No Details	\$15 Million	
Mar 22	Victor Technologies	West Lebanon, NH	Fire	Metal Dust	0	0	Dust Collector	No Details	
Apr 4	Mann Metal Finishing	Hartford, MI	Fire	Magnesium Dust	0	0	Dust Collector	No Details	
Apr 11	Sioux City Foundry Company	Sioux City, IA	Fire	Metal Dust	0	0	Dust Collector	No Details	
Apr 25	Crystal Distributions Inc.	Elk River, MN	Fire	Metal Dust	0	0	Dust Collector	No Details	
May 5	CWC Textron	Muskegon, MI	Fire	Iron Dust	0	0	No Details	No Details	
May 10	GKN Aerospace	El Cajon, CA	Fire	Titanium/Aluminum	0	0	No Details	No Details	
Jun 28	Harmony Castings llc.	Harmony, PA	Fire	Aluminum	0	0	Dust Collector	No Details	
Jul 13	Nemesis Metals	Fond du Lac, WI	Fire	Metal Dust	0	0	Dust Collector	No Details	
Aug 10	Great Lakes Works	River Rouge, MI	Explosion	Steel Dust	15	0	Dust Collector	No Details	
Sep 19	Metal-Matic, Inc.	Minneapolis, MN	Explosion	Aluminum Dust	2	0	Dust Collector	No Details	
Sep 20	Whiting Metals, llc.	Whiting, IN	Fire	Metal Dust	0	0	Baghouse	No Details	
Oct 12	Nucor Steel	Seattle, WA	Fire	Titanium Dust	0	0	3D Printer	No Details	
Nov 19	Fisher Engineering	Rockland, ME	Fire	Metal Dust	0	0	Dust Collector	No Details	
Dec 18	Fisher Engineering	Rockland, ME	Explosion	Metal Dust	0	0	Dust Collector	No Details	
Dec 19	P.C. Campana	Lorain, OH	Explosion	No Details	0	0	Mixing Container	No Details	

INCIDENT SUMMARY - INCIDENTS: 17 | FIRES: 12 | EXPLOSIONS: 5 | INJURIES: 19 | FATALITIES: 0

AGRICULTURE










DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Jan 15	No Details	Buchanan, WI	Fire	No Details	0	0	Silo	No Details	
Feb 1	Kinneberg Farm	Preston, MN	Fire	Grain	0	0	Grain Silo	No Details	
Feb 8	Feddick Farms	Medford, WI	Fire	Grain Dust	0	0	Grain Bin	No Details	
Feb 16	Island Dehy, Inc.	Cozad, NE	Fire	Sawdust	0	0	Sawdust Shed	No Details	
Mar 8	Topflight Grain Cooperative Inc.	Beason, IL	Explosion	Corn	0	0	Grain Elevator, Bearing	No Details	
Mar 30	Hanley Falls Farmers Coop.	Hanley Falls, MN	Fire	Grain	0	0	Grain Elevator	No Details	
Apr 10	Cargill	Cedar Rapids, IA	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Apr 16	No Details	Spiritwood, SD	Fire	Corn	0	0	Grain Bin	No Details	
Apr 26	Premium Ag Solutions	Hitterdal, MN	Fire	Corn	0	0	Grain Bin	No Details	
May 17	Frenchman Valley Farmers Coop.	Dix, NE	Fire	Grain	0	0	Grain Elevator	\$100,000	
May 18	No Details	Baldwin, WI	Fire	Grain	0	0	Storage Silo	25 Cattle	
May 25	Van Der Geest Dairy	Merrill, WI	Fire	Sawdust	0	0	Sawdust Tank	No Details	
May 29	Andersen Farms	South Sioux City, NE	Explosion	Corn	1	1	Grain Elevator	Elevator Destroyed	
Jun 1	Project for Pride for Living	Minneapolis, MN	Fire	Grain	0	0	Grain Elevator	No Details	
Jun 25	Petry Farms	Rochelle, IL	Fire	Grain	0	0	Grain Bin	\$10,000	
Jun 28	IFG Export Grain Terminal	Lake Charles, LA	Explosion	Grain Dust	0	0	Storage Silo	No Details	
Jul 6	Wern Valley Game Farm	Genesee, WI	Fire	Grain Dust	0	0	Grain Silo	No Details	
Jul 14	No Details	Gordonville, PA	Fire	Grain Dust	0	0	Silo	No Details	
Jul 30	Grainland Cooperative	Eureka, IL	Explosion	Grain Dust	0	0	Grain Dryer	No Details	
Aug 10	Landus Cooperative	Templeton, IA	Explosion	Grain Dust	0	0	Grain Leg	No Details	
Aug 12	Cal-Maine Foods	Zephyrhills, FL	Fire	Grain Dust	2	0	Silo	No Details	
Aug 19	Landus Cooperative	Rake, IA	Explosion	Grain Dust	2	0	Grain Elevator	No Details	
Aug 24	Pride AG Resources	Montezuma, KS	Fire	Grain Dust	0	0	Grain Elevator	No Details	
Aug 26	Mount Ararat Farms, Inc	Port Deposit, MD	Fire	Grain Dust	0	0	Silo	\$10,000	
Aug 26	McConahy Farms	Washington Township, PA	Fire	Haylage	0	0	Silo	No Details	
Sep 11	Pittman Family Farms	Hanford, CA	Fire	Grain Dust	0	0	Cooler	\$200,000	
Sep 12	Farmers Grain & Coal	Greenview, IL	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Sep 25	Madison County Farm Supply	Fredericktown, MO	Fire	Grain Dust	0	0	Grain Elevator	No Details	
Oct 1	Northern Partners North Grain	Mendota, IL	Explosion	Grain Dust	1	0	No Details	No Details	
Oct 4	Hawley Coop Elevator	Hawley, MN	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Oct 5	NH-Hay, Inc.	Albany, OR	Fire	Straw Dust	0	0	No Details	\$35,000	
Oct 5	No Details	Califon, NJ	Fire	Grain Dust	0	0	Corn Dryer	\$100,000	
Oct 17	No Details	Breckenridge, MN	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Oct 20	No Details	Wapella, IL	Fire	Grain Dust	1	0	Combine Harvester	No Details	

AGRICULTURE CONT.

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Oct 20	No Details	Cosmos, MN	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Oct 29	No Details	Roanoke, IN	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Oct 30	Hartford Farmers Elevator	Hartford, SD	Fire	Grain Dust	0	0	Grain Elevator	No Details	
Oct 30	No Details	Grand Meadow, MN	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Oct 30	No Details	Crystal, MI	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Nov 3	No Details	Decatur, IL	Explosion	Grain Dust	0	0	Grain Elevator	No Details	
Nov 4	No Details	Bristol, WI	Fire	Grain Dust	0	0	Grain Dryer	\$250,000	
Nov 4	No Details	New Salem, ND	Fire	Grain Dust	1	0	Grain Dryer	\$20,000	
Nov 7	White River Feed Company	Kent, WA	Fire	Grain Dust	0	0	No Details	No Details	
Nov 8	No Details	Reynolds, ND	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Nov 11	Eaton Farm Bureau Co-op	Mason, MI	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Nov 14	No Details	Sturtevant, WI	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Nov 14	No Details	Oakfield, NY	Fire	Grain Dust	0	0	Silo	No Details	
Nov 15	Mayport Farmers Co-op	Mayville, ND	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Nov 16	Elbow Lake Co-op Grain	Elbow Lake, MN	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Nov 17	No Details	Holy Cross, IA	Fire	Grain Dust	0	0	Grain Bin	\$50,000	
Nov 19	Quarterline Farms	Holland, MI	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Dec 11	Travelbee Farms	Girard Township, MI	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Dec 15	No Details	Bangor Township, MI	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Dec 15	Deerfield AG Services	Deerfield, OH	Fire	Grain Dust	1	0	Grain Dryer	No Details	
Dec 21	Star of the West Milling Company	Emmett, MI	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Dec 26	No Details	Loogootee, IN	Fire	Grain Dust	0	0	Concrete Bin	No Details	

INCIDENT SUMMARY - INCIDENTS: 56 | FIRES: 48 | EXPLOSIONS: 8 | INJURIES: 9 | FATALITIES: 1

FOOD PROCESSING






DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Jan 4	MGI Grain Processing Ilc.	East Grand Forks, MN	Explosion	Grain Dust	0	0	Grain Elevator	\$150,000	
Jan 6	Bunge North America	Delphos, OH	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Jan 31	South Georgia Pecan Company	Valdosta, GA	Explosion	Pecan	0	0	Storage Silo	No Details	
Mar 7	Frontier Co-op	North Liberty, IA	Fire	Spices	1	0	Grinder/Dust Collector	No Details	
Mar 25	Brady Enterprises	Weymouth, MA	Fire	Cocoa Dust	1	0	Compressor	\$300,000	
Apr 10	Cargill	Cedar Rapids, IA	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Apr 17	Unknown	Altus, OK	Fire	Cottonseed	0	0	Unknown	\$20+ Million	
Apr 25	Jupe Feeds, Inc.	Temple, TX	Explosion	Grain Dust	0	0	Grain Elevator	No Details	
May 29	Fowlerville Feed and Pet	Fowlerville, MI	Explosion	Grain	0	0	Grain Bin	No Details	

FOOD PROCESSING CONT.

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Jun 25	TreeHouse Foods Inc.	Lancaster, PA	Fire	Cereal Dust	0	0	Cereal Dryer	No Details	
Jul 18	Post Consumer Brands	Northfield, MN	Fire	Grain Dust	0	0	Grain Equipment	No Details	
Jul 28	Dentinger Feed and Seed	Vale, OR	Fire	Grain Dust	0	0	Bins	No Details	
Jul 29	Hartsville Oil Mill, Inc.	Darlington, SC	Fire	Cottonseed	0	0	No Details	No Details	
Jul 31	Dietary Pros Inc.	Wausau, WI	Explosion	Magnesium Dust	1	0	No Details	No Details	
Aug 1	Vita-Line Products	Hazleton, PA	Fire	Grain Dust	0	0	Grain Grinder	No Details	
Aug 2	Troy Grain	Troy, IL	Fire	Grain Dust	0	0	Silo	No Details	
Aug 3	Palmer Grain Company Inc.	Palmer, KS	Explosion	Grain Dust	1	0	Loading Bay	No Details	
Aug 3	Froedtert Malt	West Milwaukee, WI	Fire	Grain Dust	0	0	Silo	No Details	
Aug 9	Poulin Grain	Newport, VT	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Sep 8	No Details	Primghar, IA	Fire	Grain Dust	0	0	No Details	\$1 Million	
Sep 12	Dairy Farmers of America	Garden City, KS	Fire	Milk Dust	0	0	Dryer	\$1 Million	
Oct 15	Ardent Mills	Chattanooga, TN	Fire	Grain Dust	0	0	No Details	No Details	
Oct 19	M & R Grains	Rapho Township, PA	Fire	Grain Dust	0	0	Grain Dryer	\$500,000	
Oct 19	South Central FS Watson	Effingham, IL	Fire	Grain Dust	0	0	Grain Bin	No Details	
Oct 19	No Details	Lower Macungie, PA	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Oct 26	Perdue Farms	Washington, IN	Fire	Grain Dust	0	0	Dust Collector	No Details	
Nov 1	ICM Biofuels	St. Joseph, MO	Explosion	Grain Dust	0	0	Grain Dryer	No Details	
Nov 20	Bunge North America	Bellevue, OH	Explosion	Grain Dust	1	0	Grain Dryer	No Details	
Dec 21	DuPont Nutrition and Health	Memphis, TN	Explosion	Protein Dust	0	0	Drying Unit	No Details	
Dec 29	Conagra Brands	Centralia, IL	Fire	Cocoa Dust	0	0	Electric Fan	No Details	







INCIDENT SUMMARY - INCIDENTS: 30 | FIRES: 21 | EXPLOSIONS: 9 | INJURIES: 5 | FATALITIES: 0

PULP & PAPER

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
May 3	International Paper	North Strabane, PA	Fire	Paper Dust	0	0	Dust Collector	No Details	
May 19	Proctor and Gamble	Green Bay, WI	Fire	Paper Dust	0	0	Paper Machine	No Details	
Jul 20	Fibercorr Mills	Massillon, OH	Fire	Paper Dust	0	0	Ventilation System	No Details	
Aug 20	Domtar	Rothschild, WI	Fire	Paper Dust	0	0	No Details	No Details	
Nov 4	Orchids Paper	Barnwell, SC	Fire	Paper Dust	0	0	Paper Machine	No Details	




INCIDENT SUMMARY - INCIDENTS: 5 | FIRES: 5 | EXPLOSIONS: 0 | INJURIES: 0 | FATALITIES: 0

POWER GENERATION

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Jan 2	Evergreen Community Power	Reading, PA	Fire	Wood Dust	0	0	Silo	No Details	
Jan 31	Georgia Power	Floyd County, GA	Fire	Carbon Dust	0	0	Storage Silo	No Details	
Mar 17	Public Service Company of NM	San Juan, NM	Fire	Coal Dust	0	0	Coal Silo	\$15-20 million	
Apr 18	GENON Coal Facility	Newburg, MD	Fire	Coal Dust	0	0	Coal Hopper Train Car	No Details	
Jul 13	St. Clair Power Plant	East China, MI	Fire	Coal Dust	0	0	Conveyor Belt	No Details	
Jul 31	Xcel Energy	La Crosse, WI	Fire	No Details	0	0	Containment Bin	No Details	






INCIDENT SUMMARY - INCIDENTS: 6 | FIRES: 6 | EXPLOSIONS: 0 | INJURIES: 0 | FATALITIES: 0

MINING & COAL PROCESSING

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Mar 17	The Harrison County Coal Co.	Mannington, WV	Fire	Oxidized Coal	0	0	Coal Storage Silo	No Details	
Mar 31	Gilberton Coal Company	Gilberton, PA	Fire	Coal Dust	0	0	Conveyor Belt Motor	No Details	
Jun 18	Former Bowie Refined Coal	Brazil, IN	Fire	Coal Dust	0	0	No Details	No Details	







INCIDENT SUMMARY - INCIDENTS: 3 | FIRES: 3 | EXPLOSIONS: 0 | INJURIES: 0 | FATALITIES: 0

SCHOOLS AND EDUCATIONAL FACILITIES

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Jan 17	General McLane High School	Edinboro, PA	Fire	Wood Dust	0	0	Dust Collector	No Details	
Mar 10	East Greenwich High School	East Greenwich, RI	Fire	Wood Shavings	0	0	Trash Can	No Details	
May 8	Mason High School	Mason, OH	Fire	Wood Dust	0	0	Dust Collector	No Details	
May 16	Dale Jackson Career Center	Lewisville, TX	Fire	Sawdust	0	0	Dust Collector/ Table saw	\$500,000	
Dec 3	University of Alaska Fairbanks	Fairbanks, AK	Fire	Coal Dust	0	0	No Details	No Details	

INCIDENT SUMMARY - INCIDENTS: 5 | FIRES: 5 | EXPLOSIONS: 0 | INJURIES: 0 | FATALITIES: 0

ETHANOL PRODUCTION

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Feb 11	Plymouth Energy llc.	Merrill, IA	Fire	Grain Dust	0	0	Grain Dryer	No Details	
May 14	South Bend Ethanol llc.	South Bend, IN	Fire	Grain Dust	0	0	Dryer Unit	No Details	
Oct 9	Badger State Ethanol	Monroe, WI	Explosion	Grain Dust	0	0	Silo	No Details	
Nov 6	Cardinal Ethanol	Union City, IN	Explosion	Grain Dust	0	0	Silo	No Details	
Nov 30	Big River Resources	Taylor Ridge, IL	Fire	Grain Dust	0	0	Grain Bin	No Details	
Dec 15	Pratt Energy	Pratt, KS	Explosion	Grain Dust	0	0	Grain Dryer	No Details	

INCIDENT SUMMARY - INCIDENTS: 7 | FIRES: 4 | EXPLOSIONS: 3 | INJURIES: 0 | FATALITIES: 0

OTHER

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Feb 17	Cemex USA	New Braunfels, TX	Fire	No Details	0	0	Hopper	No Details	
Feb 27	Keystone Filler	Muncy, PA	Fire	Carbon Dust	0	0	Dust Collector	\$100,000	
Mar 2	Mayville	Beaver Dam, WI	Fire	No Details	0	0	Dust Collector	No Details	
Apr 4	No Details	Artesia, NM	Fire	Sulfur Dust	1	0	No Details	No Details	
Apr 9	R.W. Lyall & Co	Corona, CA	Fire	No Details	0	0	Dust Collector	No Details	
May 2	No Details	Winona, MN	Fire	Textile Dust	0	0	Dust Collector	No Details	
May 3	Close the Loop	Hebron, KY	Explosion	Toner Dust	0	0	Dust Collector	No Details	
Jun 11	Crown Battery	Fremont, OH	Fire	No Details	0	0	Filter House	\$5,000	
Jun 22	Cogle's Recycling	Hamburg, PA	Fire	Cardboard Dust	0	0	Conveyor	\$60,000	
Jul 17	General Dynamics	Norfolk, VA	Fire	Wood Dust	0	0	Dust Collector	No Details	
Sep 18	Triple R Recycling	Joplin, MO	Explosion	Aluminum Dust	0	0	Barrels	No Details	
Sep 22	National Carbon Technologies	Gwinn, MI	Explosion	Carbon Dust	0	0	Pipe System	No Details	
Nov 8	CSX Transportation	Christiana, TN	Fire	Grain Dust	0	0	Grain Bin	No Details	
Nov 14	Helena Chemical Company	Fort Pierce, FL	Fire	Sulfur Dust	0	0	Conveyor Belt	No Details	
Nov 25	Argos Cement Company	Martinsburg, WV	Explosion	No Details	0	0	Dust Collector	No Details	
Dec 3	Irwin Telescopic Seating Co.	Altamont, IL	Fire	Metal Dust	0	0	Dust Collector	\$20,000	
Dec 11	Keywell Corporation	Falconer, NY	Fire	Metal Dust	0	0	Dust Collector	No Details	
Dec 13	No Details	Long Beach, CA	Fire	No Details	0	0	Dust Collector	No Details	

INCIDENT SUMMARY - INCIDENTS: 18 | FIRES: 14 | EXPLOSIONS: 4 | INJURIES: 1 | FATALITIES: 0



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WOOD & WOOD PRODUCTS

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Feb 6	Alberni Pacific Division	Port Alberni, BC	Fire	Sawdust	0	0	Sawdust Bin	No Details	🔗
Jun 1	Fornebu Lumber	Bathurst, NB	Fire	Wood Dust	0	0	Dust Collector	No Details	🔗
Jun 8	Fibrestick Manufacturing Ltd.	Sault Sainte Marie, ON	Fire	Wood Dust	0	0	Dust Collector	No Details	🔗
Jul 13	Al-Mar Custom Sawmill Ltd.	Tappen, BC	Fire	Sawdust	0	0	Silo	No Details	🔗
Aug 11	No Details	Twin Creeks, BC	Fire	Hog Fuel	0	0	No Details	No Details	🔗
Aug 20	Krug	Kitchener, ON	Fire	Wood Dust	0	0	Dust Collector	No Details	🔗
Sep 14	No Details	Wallenstein, ON	Fire	Wood Dust	0	0	Dust Collector	No Details	🔗
Dec 9	Great Northern Pellets	Upper Musquodoboit, NS	Explosion	Wood Dust	0	0	Hammer Mill	No Details	🔗

INCIDENT SUMMARY - INCIDENTS: 8 | FIRES: 7 | EXPLOSIONS: 1 | INJURIES: 0 | FATALITIES: 0

METAL PRODUCTION & PRODUCTS

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Jun 26	Clearbrook Iron Works	Abbotsford, BC	Fire	No Details	0	0	Dust Collector	No Details	🔗
Dec 16	National Steel Car	Hamilton, ON	Fire	Metal Dust	0	0	Dust Collector	\$750,000	🔗




INCIDENT SUMMARY - INCIDENTS: 2 | FIRES: 2 | EXPLOSIONS: 0 | INJURIES: 0 | FATALITIES: 0

AGRICULTURE & FOOD PROCESSING

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Mar 13	No Details	Stirling-Rawdon, ON	Fire	Corn Dust	0	0	Corn Silo	No Details	🔗
Aug 20	Paterson Grain	Crystal City, MB	Explosion	Grain Dust	1	0	Grain Elevator	No Details	🔗
Jun 21	C B Constantini Ltd.	Brooks, AL	Fire	Grain	0	0	No Details	\$8-10 Million	🔗
Sep 30	H & M Farms Ltd.	Altona, MB	Fire	Grain Dust	0	0	Grain Dryer	No Details	🔗
Oct 11	North West Terminal	Unity, SK	Fire	Grain Dust	0	0	Grain Dryer	No Details	🔗
Oct 21	Westmor Grain Terminal	Morinville, AB	Fire	Grain Dust	0	0	Grain Dryer	No Details	🔗
Nov 5	Maizeing Acres Inc.	Trenton, ON	Fire	Grain Dust	0	0	Grain Elevator	No Details	🔗
Nov 28	ADM Milling Company	Calgary, AB	Explosion	Grain Dust	0	0	No Details	No Details	🔗

INCIDENT SUMMARY - INCIDENTS: 8 | FIRES: 6 | EXPLOSIONS: 2 | INJURIES: 1 | FATALITIES: 0

OTHER

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Jan 18	Teck Resources	Elkview, BC	Explosion	Coal Dust	0	0	Coal Dryer	\$10 Million	
Aug 18	Harmac Pacific	Nanaimo, BC	Fire	Wood Dust	0	0	No Details	No Details	
Aug 20	Coast Environmental	Chemainus, BC	Fire	Hog Fuel	0	0	No Details	No Details	

INCIDENT SUMMARY - INCIDENTS: 3 | FIRES: 2 | EXPLOSIONS: 1 | INJURIES: 0 | FATALITIES: 0

Dust Management, Control and Mitigation



- Dust Hazard Analysis
- Dust Collection System Audit/Design/Retrofit
- NFPA Compliance
- Finite Element Analysis
- 3D Scanning
- Modeling
- Plant Design

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WOOD & WOOD PRODUCTS

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Jan 26	Juken New Zealand	Matawhero, New Zealand	Fire	Sawdust	0	0	Dryer	No Details	
Jan 28	Dongwha	Southland, New Zealand	Fire	Wood Dust	0	0	Cyclone Dryer	No Details	
Jan 29	Corinthian Doors	Canning Vale, Australia	Fire	Wood Dust	0	0	Silo	\$40,000	
Jan 31	Southwood Export Limited	Chesapeake, New Zealand	Fire	Wood Dust	0	0	Storage Pile	No Details	
Apr 26	No Details	Rosenberg, Germany	Explosion	Cellulose Dust	7	0	Shredder	No Details	
May 8	No Details	St. Georgen, Austria	Explosion	Wood Dust	1	0	Plate Grinder	No Details	
May 18	Righini	Tonneins, France	Explosion	Wood Chips	1	0	Dust Collector	No Details	
May 24	Mendip	Upper Milton, UK	Fire	Wood Shavings	0	0	Packing Area	No Details	
May 27	Borg Manufacturing	Mount Gambier, Australia	Explosion	Pine Chips	0	0	Storage Silo	No Details	
Jun 6	No Details	Kruiabeke, Belgium	Explosion	Wood Dust	0	0	Storage Silo	No Details	
Jul 5	Falegnameria V.I.P.	Ripatransone, Italy	Fire	Wood Dust	0	0	Silo	No Details	
Jul 13	GP Wood	Lissarda, Ireland	Explosion	Wood Dust	2	0	No Details	No Details	
Aug 30	Lagerhaus Bruck	Bruck an der Großglocknerstraße, Austria	Fire	Wood Pellets	0	0	Heating System	No Details	
Sep 22	Juken New Zealand	Kaitaia, New Zealand	Fire	Wood Dust	0	0	Dryer	No Details	
Oct 12	Lounics Timber World	Evander, South Africa	Fire	Wood Dust	0	0	No Details	No Details	
Oct 26	No Details	Clacton-on-Sea, UK	Fire	Sawdust	0	0	Silo	No Details	
Nov 5	Neelsen GmbH	Bünde Ennigloh, Germany	Fire	Wood Dust	0	0	Wood Chip Bin	No Details	
Nov 17	Ante-Holz GmbH	Bromskirchen, Germany	Explosion	Sawdust	0	0	Chopping Machine	€150,000	
Nov 19	Balcas Timber	Invergordon, UK	Fire	Wood Pellets	0	0	Silo	No Details	
Nov 29	No Details	Gräfelting, Germany	Fire	Wood Dust	0	0	Silo	No Details	













INCIDENT SUMMARY - INCIDENTS: 20 | FIRES: 13 | EXPLOSIONS: 7 | INJURIES: 11 | FATALITIES: 0

METAL PRODUCTION & PRODUCTS

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
May 2	No Details	Changhua County, Taiwan	Explosion	Aluminum/Magnesium	10	0	No Details	No Details	
Sep 14	Friedrich Kicherer GmbH & Co. KG	Ellwangen, Germany	Fire	Metal Dust	0	0	Filter System	No Details	
Dec 18	Grenzebach	Asbach-Bäumenheim, Germany	Fire	Metal Dust	0	0	Dust Collector	No Details	












INCIDENT SUMMARY - INCIDENTS: 3 | FIRES: 2 | EXPLOSIONS: 1 | INJURIES: 10 | FATALITIES: 0

AGRICULTURE

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Mar 16	Coop. Agrícola Ganadera	La Angelita, Argentina	Explosion	Grain Dust	6	0	Bucket Elevator/Silo	No Details	
Mar 23	Cargill SACI	Puerto General San Martín, Argentina	Fire	Grain Dust	0	0	Conveyor Belt	No Details	
May 14	No Details	Port Aqaba, Jordan	Explosion	Grain	0	7	Grain Elevator	No Details	
Jun 6	Comptoir Agricole	Strasbourg, France	Explosion	Grain Dust	4	0	Grain Silo	No Details	
Jul 24	No Details	Dundee, Scotland	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Aug 14	Ingham's Enterprises	Hamilton, NZ	Fire	Grain Dust	0	0	Silo	No Details	
Aug 28	No Details	Ainderby Quernhow, UK	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Aug 28	Grain Marketing Board	Lion's Den, Zimbabwe	Explosion	Grain Dust	2	6	Grain Silo	No Details	
Sep 3	Allied Grain	Crimond, UK	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Sep 15	No Details	Knutsford, UK	Fire	Grain Dust	0	0	Grain Dryer	No Details	
Oct 15	No Details	Saxton, UK	Fire	Grain Dust	0	0	No Details	No Details	
Oct 20	No Details	Bourne, UK	Fire	Grain Dust	0	0	Grain Dryer	No Details	






INCIDENT SUMMARY - INCIDENTS: 12 | FIRES: 8 | EXPLOSIONS: 4 | INJURIES: 12 | FATALITIES: 13

FOOD PROCESSING

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Jan 4	National Cereals and Produce	Eldoret, Kenya	Explosion	Grain Dust	0	0	Maize Dryer	No Details	
Jan 28	Bairds Malt Ltd.	Grantham, UK	Fire	Grain	0	0	Hopper	No Details	
Mar 22	Cargill SACI	San Martín, Argentina	Fire	Grain Dust	0	0	Conveyor Belt	No Details	
Apr 6	Deoleo	Andujar, Spain	Explosion	Sunflower	3	0	No Details	No Details	
May 19	Manildra Flour Mill	Manildra, Australia	Explosion	Flour	1	0	No Details	No Details	
May 20	No Details	Julich, Germany	Explosion	Coal Dust	0	0	Coal Bunker	No Details	
Jun 2	Bairds Malt Ltd.	Grantham, UK	Fire	Barley Malt	0	0	No Details	No Details	
Jul 20	AFFCO Moerewa	Moerewa, NZ	Fire	Wood Dust	1	0	Hopper	No Details	
Jul 24	Cargill EWOS	Halsa, Norway	Explosion	Fishmeal Dust	0	0	Silo	No Details	
Sep 12	GrainCorp	Numurkah, Australia	Fire	Canola Meal Dust	0	0	Silo	No Details	
Oct 8	Muntons	Stowmarket, UK	Fire	Grain Dust	0	0	Screw Conveyor	No Details	













INCIDENT SUMMARY - INCIDENTS: 11 | FIRES: 6 | EXPLOSIONS: 5 | INJURIES: 5 | FATALITIES: 0

POWER GENERATION

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Feb 4	Energy Australia	Yallourn, Australia	Fire	Coal Dust	0	0	Coal Bunker	800 Sqm. Destroyed	
Aug 8	GS CHP	Pocheon, South Korea	Explosion	Coal Dust	4	1	Conveyor Belt	No Details	
Aug 22	Stadtwerke Düsseldorf	Düsseldorf, Germany	Fire	Wood Dust	0	0	Wood Chip Bunker	No Details	
Sep 18	Can Coal Power Plant	Canakkale, Turkey	Explosion	Coal Dust	6	0	No Details	No Details	
Oct 4	Korea South-East Power Company	Yeosu, South Korea	Explosion	Coal Dust	4	1	Dust Collector	No Details	

INCIDENT SUMMARY - INCIDENTS: 5 | FIRES: 2 | EXPLOSIONS: 3 | INJURIES: 14 | FATALITIES: 2

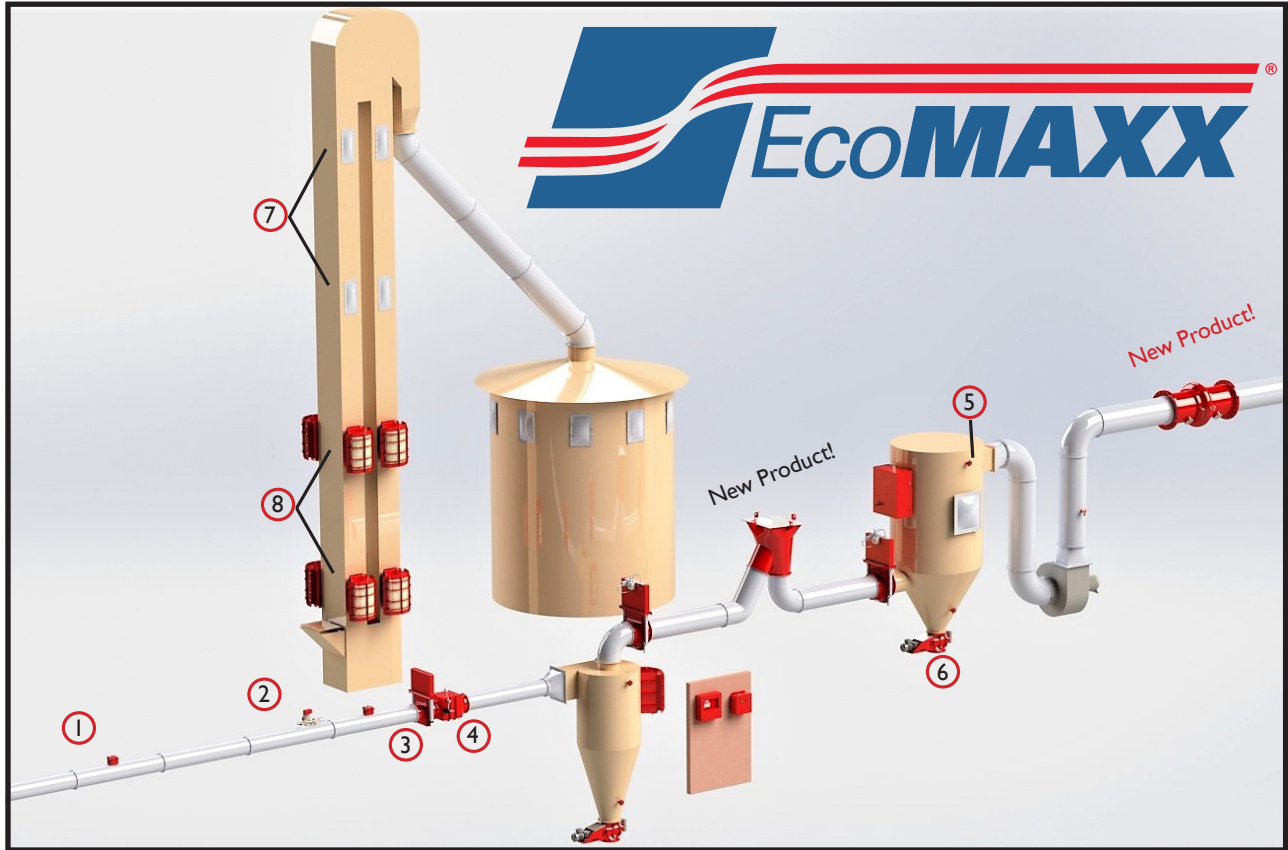
OTHER

DATE	COMPANY	LOCATION	TYPE	FUEL	INJ.	FAT.	EQUIPMENT	DAMAGES	LINK
Mar 12	No Details	Marsden, UK	Fire	Textile	0	0	No Details	No Details	
Apr 29	Bhansali Engineering Polymers Limited	Madhya Pradesh, India	Fire	No Details	1	1	Fluid Bed Dryer	No Details	
Jul 26	MIBRAG	Deuben, Germany	Explosion	Coal Dust	2	0	No Details	No Details	
Jul 26	Sleepyhead	Ōtāhuhu, NZ	Fire	Foam	0	0	Silo	No Details	
Jul 26	Mid UK Recycling	Caythorpe, UK	Fire	Wood Dust	0	0	Paper Shredder	No Details	
Sep 18	Civil Independence	Parkes, Australia	Explosion	No Details	0	0	No Details	No Details	
Sep 18	Reststofftechnik GmbH	Henndorf, Austria	Fire	Wood Dust	0	0	Wood Chipper	€500,000	
Sep 23	No Details	Bommanallur, India	Fire	Cotton	6	0	Blow Room	No Details	
Oct 9	Ravensdown Fertilizer	Christchurch, NZ	Fire	Fertilizer	0	0	Conveyor Belt	No Details	
Oct 9	ESD-SIC	Farmsum, The Netherlands	Explosion	Silicon Carbide	0	0	No Details	No Details	
Nov 22	Hong Kong Baptist University	Kowloon Tong, China	Explosion	Flour Dust	12	0	No Details	No Details	
Dec 3	No Details	Greerton, NZ	Explosion	No Details	0	0	Dust Collector	No Details	

INCIDENT SUMMARY - INCIDENTS: 12 | FIRES: 7 | EXPLOSIONS: 5 | INJURIES: 21 | FATALITIES: 1

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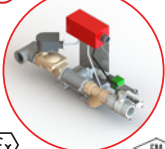


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List of Sources:

¹US Chemical Safety Board (2006), "Combustible Dust Hazard Study" Report No. 2006-H-1

²US Chemical Safety Board (2018), "Dust Incidents 2006-2017"

³Dr. Robert Schoeff, "Agricultural Dust Explosions" Kansas State University Reports

⁴Dr. Kingsly Ambrose, "Agricultural Dust Explosions" Purdue University Reports

Any questions or comments can be sent to chris@dustsafetyscience.com

Example Reference:

Cloney, Chris (2019), "2018 Combustible Dust Incident Report – Version #1" DustEx Research Ltd. Retrieved from <http://dustsafetyscience.com/2018-Report>



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