

1956\$ROOT:[TECH_CENTER.INCIDENTS]82_3_RC.DES;1

82_3_RC * Ti and Dry Cl2 Fire in Wet Compressor

A wet compressor was destroyed by a dry chlorine-titanium reaction. The compressor went into high vibration following a water wash when the water to the suction side, was shut off due to an operating error. Dry chlorine entered the titanium compressor. The impeller and part of the case were consumed by the chlorine-titanium reaction. Flow reversal caused charring of 40' of the 20" FRP suction piping and the suction valve. Total property damage was \$140M.

1956\$ROOT:[TECH_CENTER.INCIDENTS]82_4_SAF_RC.DES;1

82_4_SAF_RC * H2 Fire in H2SO4

An audible reaction, accompanied by momentary flame, occurred in the vicinity of a small hole in a wastewater pipeline when the pipe was heated to weld a patch to repair the hole. The line had been temporarily used to transport waste sulfuric acid during a plant shutdown. The line was not flushed prior to welding and contained a hydrogen-air mixture.

A 1000 gallon spill of epichlorohydrin was cleaned up using a vacuum truck. Shortly afterwards it was noticed that a reaction was occurring in the truck. It was found that a previous leak had allowed caustic into the ditch where the EPI was spilled. Investigation pointed out that the possibility of reactive chemicals incidents from less than obvious sources must be considered before vacuum trucks are loaded. Note also that the vacuum truck in this incident had no relief device.

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83_32_RC_EF * MagMeter Explodes

It was recently reported that a Fischer-Porter mag-meter exploded while in service. The meter, which was supplied with an aluminum case, was in acid service. Apparently acid leaked into the aluminum case and generated hydrogen. Similar meters in the affected plant have been supplied with a nitrogen purge. New installations will use F-P mini-mags, which have remote electronics.

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1956\$ROOT:[TECH_CENTER.INCIDENTS]83_33_RC.DES;1

83_33_RC * Reactive Chemical Incident in Lab

- A caustic operator, after finishing his routine analysis, was cleaning up around his lab bench. He was emptying his caustic samples into the sink drain with a flow of hot water. He picked up an unmarked sample of sulfuric acid and dumped it into the same sink containing caustic.

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83_34_SAF_RC * Low O2 Content In Vessel

A bizarre tragedy occurred in a Ludington, Mich. A $MgCl_2$ evaporator was down for maintenance. Low O2 content in the body caused by depletion of O2 in the air due to rapid rust formation on high surface area, clean steel tubes, led to a fatality. Give this wide publicity and let's be sure we have no similar traps awaiting us.

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