

Personal Protective Equipment (PPE's) for Industrial 'Flash' Fires

ChEN 409: Petroleum Refining

Jeremy Cimini

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Industrial Fire



While very cool to look at, this is NOT a 'flash' fire.

'Flash' Fires

- aka: Flashover.
- Area or region where all flammable material simultaneously ignites (as opposed to 'long' burn time of the vapor from a solid or liquid) .
- Maximum of 5 seconds of exposure (OSHA).
 - Total burn or personal exposure time.



Unlikely engineering attire:



More likely:



Note: Petrochemical & refinery work is a profession where a stylish pose, leisurely attitude, crossed legs, and a Magnum P.I. mustache are mandatory.

Plan & prepare accordingly.

Performance

- <http://www.bulwark.com/page.asp?SID=3&Page=60201>
 - 3 second exposure time.
 - 2 cal/cm²/second.

Unlike maintenance and operational personal, full protective suits/coveralls are more unlikely to be worn by the engineer or other office worker that only ventures into the hazardous refining environment occasionally, or semi-regularly for short periods of time.

In response, the industry has developed more 'office-friendly' PPE's:



Sources

- <http://www.osha.gov/index.html>
 - Boring, convoluted architecture, painful to use.
- <http://www.bulwark.com/product2/>
 - Same as OSHA, but involves more shopping...