Delayed Coker Unit
Fire Problems

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AND SOLUTIONS!

Fact

- In the last seven years 15 refinery workers have died in coker unit fires.
- In 1998 alone, eight refinery workers were killed in five separate coker fires.
- Beyond the tragedy of lives lost, these disasters represent more than $1 billion in property loss last year alone, not counting lost production.
- Drum
- Derrick
- Cutting Deck
- Switching Deck
- 750 GPM Oscillating Monitor

- Ground Level
- Sprinkler and Stand Pipe
- Booster Feed Manifold
• 8" pipe elbow failed at grade level allowing heated (750) reduced crude to escape at 250 PSI for nearly 6 minutes before igniting.

• When it flashed it flashed from grade level all the way up to the Cutting Deck (151 feet).
• The worst fire was at the top of the unit where a 6" quench oil line carrying either naphtha or diesel stock ruptured.
• What appears to be steam is actually yellow smoke from the galvanized metal used in the drilling and derrick.

• It took only 10 minutes for a derrick to fail!
• Units have been destroyed in recent years due to the lack of ability to reach them with an adequate fire stream.

What is the Solution?
Big Water!
Big Guns!

- Not just big guns, but big guns that have the ability to
  - go vertical,
  - go below horizontal,
  - be able to move 360 degrees around
  - and a true full fog to protect itself and its operators.
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