

30th International Conference on Lightning Protection, ICLP 2010,
(Cagliari, Italy – September 13th – 17th, 2010)

RISK ANALYSIS ASSOCIATED TO LIGHTNING IN OIL REFINERY CONSTRUCTION SITES

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ABSTRACT

This work presents a study on plant and workers protection against direct lightning in oil refineries construction sites. Since these sites have large and free open air areas, workers are exposed to direct lightning strokes. This study analyzes each structure calculating the risks based on recommendations of the standard IEC 62305-2/2006 [1]. Moreover, it defines both the structure protection volumes using the rolling sphere method, and the protection systems against lightning for each structure using natural components or not.