

First lecture – Part II (1 hour)

RISK ACCEPTABILITY (TOLERABILITY) IN SYSTEM SAFETY: CONCEPTS AND METHODOLOGY

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RISK ASSESSMENT is an effective mean of identifying system or process safety risks. The most accepted tool for assessing and accepting risk is the RISK ASSESSMENT (Code) MATRIX (RAM), which characterizes hazards within risk areas and critical technical processes, analyzing them for their potential mishap severity and probabilities of occurrence and prioritizing them for RISK ACCEPTANCE. Today, many safety standards and regulations recommend or require the application of their own RISK ASSESSMENT and ACCEPTANCE tools. In all these RAM's, the organizations consider potential mishaps severity and assign different levels of probability to their matrix, based on varying comprehension and sensitivity of the mishap risks. This presentation provides an overview of the fundamentals of RISK ASSESSMENT process and the evolution of contemporary approaches based on the CRITERIA for RISK ACCEPTABILITY (or Tolerability).