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## Risk Assessment Methodology

HIRA Risk Assessment is employed for risk management and safety improvement in several industries. It provides a quantitative assessment of potential risks known and provides a basis for evaluating process safety with reference to a planned risk acceptance criterion.

### 1. Phase 1: Identification of Hazard

In this phase all possible incidents are determined and catalogued. Field visit and study of all procedures related to Operations and Input documents like Drawings and Process write-up are used in identification of Hazards.

### 2. Phase 2: HIRA Risk Assessment

#### Inputs Needed

HIRA is highly dependent on the availability and accuracy of the input data, When provided with complete Input data, a higher confidence on the validity and robustness of the results are obtained. The example of data collection will be specific to operations, building design, personnel / population occupancy levels.

Sr. No.	Activity	Hazard	Available control Measure
1	Welding	Electric Shock	Earthing to machine, Leather hand gloves and safety shoes.
		Eye irritation	Gelding shield and goggles
2	Hand grinder	Cutting & grinding dust	Eye goggles
		Electric Shock	Leather hand gloves and safety shoes.
3	Drill M/C	Electric Shock	Earthing to machine, Leather hand gloves and safety shoes.
		Vibration	Anti vibration handle.
4	Plasma Cutting	Electric Shock	Earthing to machine, Leather hand gloves and safety shoes.
		Eye irritation	Gelding shield and goggles
5	Material loading/unloading	slippage	Proper cotton strong belt.



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