there are 5 main steps that needs covering for a safe system :

- assessing work tasks

- identifying hazards and assessing risks

- defining safe methods

- implementing the safe system

- monitoring the system

In each component, what specifically needs to be considered :

1/ Assessing Work Tasks:

- what is used: plant and equipment, substances, potential machinery failures, the task’s electrical needs

- error sources: possible human failures, short cuts

- where the task is carried out: the working environment and its protection needs

- how the task is carried out: procedures, potential work method failures, task frequency, training needs

2/ Identifying Hazards and Assessing Risks;

- Need to identify components and its potential risks

- There are a few techniques to assess risks such as formal hazard analysis techniques such as a hazard and operability (HAZOP) study, fault tree analysis (FTA) or failure modes. If it is a simple system, there is a simpler technique that can be used like job safety analysis (JSA).

3/ Defining safe methods:

- defining the importance of tasks then assigns it with a specific level then we can base on that level to restrict activity without permission:

+ very high – permit to work

+ high – written safe system or permit

+ moderate – written safe system

+ low – written safe system

+ very low – verbal instruction (with written backup such as safety rules)

- The document of these level should be written in a non-formal way and easy-to-read with clear structures including all key points

+ setting up the task along with any necessary authorization

+ planning job steps

+ stating the approved safe working methods including, if appropriate, how to get to and from the task area

+ conditions which must be confirmed before work starts

+ dismantling/disposing of equipment or waste at the end of the task

4/ Implementing the system :

- Make sure everything is in control and the system works effectively and efficiently. Before taking the system into account, there should have a review about it and its concerns.

- Besides, employees must acquire:

+ adequately trained in specific systems of work

+ competent to carry out the work safely

+ aware of the systems and hazards which the safe methods aim to remove/reduce

- Moreover, there should have a training course for employees which should contain :

+ why the safe system is needed

+ what is involved in the work

+ the identified hazards

+ the precautions that have been decided

5/ Monitoring the system:

- To have a good monitoring system, there should have regularly check-ups for that system to make sure the system still works well

- Some simple questions should be asked when having a check-up:

+ Do workers continue finding the system workable?

+ Are laid down procedures being carried out?

+ Are procedures still effective?

+ Have there been any changes that require the system to be revised?