OHSAS 18001 a tool to improve the safety

As we come across accidents and the loss of life on a daily basis, safety becomes paramount in whatever we do. We will be surprised to realize that many of these accidents could have been avoided if we all take a more prudent approach to safety. The key is to bring in the awareness of the hazards and risks involved in each activities and the mitigation to these hazards.

 While the efforts to improve safety dates back to the very beginnings of industrialization, the preliminary rigorous and defined approaches to safety engineering mostly aroused after World War II. The sharp rise in accident costs that resulted from compensation laws and tighter employers' liability initiated the modern concern.

Following many catastrophic incidents in the 1980s & 1990s it was evident that the existing safety systems were not sufficient, and that additional influence was needed to improve workplace safety as safety remained separate from operations and it was primarily compliance-driven.

The most successful safety programs are those that recognize safety as a value, which is inherent to every part of a company's operation with an underlying commitment to creating an incident- and injury-free work environment for all employees.

As Occupational Health and Safety (OH&S) issues, particularly in the engineering industry were still problematic areas that needed to be addressed by all parties, in 1999; a Safety Management System named OHSAS 18001 was introduced. Reviewed and revised in 2007, OHSAS 18001 is fully compatible with ISO 9001 and ISO 14001 in order to facilitate the integration of quality, environmental and occupational health and safety management systems by organizations. All the requirements of OHSAS 18001 are intended to be incorporated into any OH&S Management System. It is intended to address occupational health and safety rather than product and services safety.

OHSAS utilizes systems theory and systems approaches to prevent foreseeable accidents and to minimize the result of unforeseen ones. The primary concern of OHSAS Management System is the management of hazards: their identification, evaluation, elimination, and control through analysis, design and management procedures. In general it takes a larger view of the analysis of hazards than just failures.

Concept of safety- A workplace is provisionally categorised as safe if its risks are deemed known and judged to be acceptable to internal and external standards

Hazard identification and developing the Hazards – Risk Matrix is an integral part of the Occupational Health & Safety Assessment Standard OHSAS 18001. Organizations will need to apply the process of hazard identification and risk assessment to determine the controls that are necessary to reduce the risks of incidents.
Lets see what's an hazard –

Hazard - A source or situation with a potential for harm in terms of injury, ill health, damage to property, damage to the workplace environment, or a combination of these.

- Whats a RISK-
  Risk- Combination of the likelihood and consequence(s) of a specified hazardous event occurring.

During that analysis, all the activities including routine and non routine activists of the operation is considered and potential hazards endangering the functionality of these activities are identified. The next step is to develop a Risk matrix considering the severity and frequency of the Hzards. Next, is to decide which risks are acceptable, tolerable or unacceptable in consultation with the work force. Having determined the significant risks, the next step is to decide what action should be taken to mitigation measures to bring the risk down to the tolerable levels deemed by the organization. These measures are formed into a management program which will define the responsibility of the person to implement the program, frequency of monitoring and the deadlines. Having completed a risk assessment and having taken account of existing controls, the organization should be able to determine whether existing controls are adequate or need improving, or if new controls are required. If new or improved controls are required, their selection should be determined by the principle of the hierarchy of controls, i.e. the elimination of hazards where practicable, followed in turn by risk reduction (either by reducing the likelihood of occurrence or potential severity of injury or harm), with the adoption of personal protective equipment (PPE) as a last resort.

Five Steps to RA

Step 1 : Look for the hazards

Step 2 : Decide who might be harmed and how

Step 3 : Evaluate the risks and decide whether the existing procedures are adequate or more should be done

Step 4 : Record your findings

Step 5 : Review your assessment periodically and revise it if necessary

Risk Assessment- sample.

Severity / Probability	Slight Harmful	Harmful	Extremely Harmful
Very unlikely	Trivial Risk	Tolerable Risk	Moderate Risk
unlikely	Tolerable Risk	Moderate Risk	Substantial Risk
likely	Moderate Risk	Substantial Risk	Intolerable Risk

The OHSAS 18001 standard acknowledges today's increasing concerns for legal compliance, employee safety and occupational health. It provides the basis for managing these issues in a structured, concise and cost-effective manner. Perhaps the most important elements of an effective OHSAS 18001 Management System are *leadership support and visibility*, followed by *employee engagement* to ensure a wide variety of input from the various employees on safety analysis.

VELOSI as well as the main corporate in the Oil & Gas and Engineering industries adopts the principles of OHSAS 18001:2007 placing safety as our core value, making sure each colleague returns home daily as healthy, functional and productive as when they came to work, is paramount for the success of our business.

As the heart of the OHSAS 18001 is the Hazard Identification, if we could teach everyone including our children to look for the hazards in the daily routine tasks they do and if we could make them aware of it, then it becomes the second nature to them and then we can definitely avoid many accidents that happen on a day to day basis including fatalities.