ICAAMC

H & S Forum

ICAAMC
(International Compressed Air & Allied Machinery Committee)
H & S Forum
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Rota Giacomo (SIAD Group, Italy)

<<3- Cards>> Game & Other Safety Tools

Summary of <<3- Cards>> Game & Other Safety Tools

The pillars are:
1. Safety's Motivation & Awareness
2. Technical Safety
3. Safety Management System
4. Applied Statistics (Descriptive & Inferential).

The aforesaid framework shall allow the description of more than 21-years experience of steering the process of continuous safety improvement thru the use of the history cases in an industrial group active in various countries & in several fields (e.g.: gases, welding robots, healthcare services at patient' home & at the hospital, engineering & construction of plants & equipment for the production of gases, industrial burners & combustion control, treatment of industrial wastes, biological & environment' chemistry lab, metrological service, miscellaneous services, etc.).

The following principles do apply:
1. *The accidents do follow precise rules* (Heinrich' Triangle & MultiNomial Distribution)
2. *The accidents do repeat with ordered laws* (Poisson'Diagram)
3. *The more we know, the less we know, but… only till a certain point* (Accident Reports Number Off)

4. *What is not being investigated will appear again* [Omission in Accident Reporting (Rota' Method for the <<3-Cards>>)]
5. *If we know immediately, we can act quickly* (Accidents Reports Emission Speed)
6. *How to select Action Priorities* (Pareto'Histogram of Accident Types)
7. *How to get figures talking* (Inferential Statistics)
8. *The "Non- Safety" has a cost which can be calculated: to see to believe ...* [Methods of the USA D.o.E. (Department of Energy) and of Rota]
9. *Increasing sensibility does well…*(6 -Sigma Program).

The scope of the presentation is devoted, then, to the following query:
Within which limits we can foresee the future? The answer is: To obtain a real evaluation of the Safety Performance we have to use Safety' Applied Statistics. We need to study the elements, which generate accidents, and the technique to partition the casual ones from the systemic ones. The questions are:

- How the analysis of the actual situation of accidents and of the past log can limit accidents, rising a barrier against errors (behavioural, management & technical).
- Why do we need to record every accident;
- Why do we need to analyze accident in a professional way and to define root causes, so to arrive to an action plan and to check its execution.
- Why we need to identify, analyze and work-out the safety performance Indicators. See, for example, Confindustria: http://www.unindustria.bg.it/restyling/servizi/ambiente/pubblicazioni/file/rotadefinitivo.pdf. and University of Bergamo http://www.unibg.it/struttura/struttura.asp?corso=8512&nomecorso=Sicurezza%20degli%20impianti%20industriali%20(5%20crediti).

To answer those questions we have used:

A. Documents
   a. Safety Books, i.e. collection of History Cases extracted from Company'Log as well as from External Sources'Log, e.g. Associations (Trade & Profession), NewsPapers, Magazines, InterNet WebSites
   b. "Lest-we-forget-book", i.e. the Book of Memory
   c. "To-flog-a-dead-horse" tools, i.e. the "3-Cards-Game"

B. Meetings

   The safety PROMs (i.e. the yearly cycles for about # 400 people, including directors, managers, supervisors, technical employees, sales, new application development, research, maintenance)