Abstract: International statistics show that the problem of the accidents at work is far away to be solved (ILO estimates that every year about 270 million work accidents and 160 million occupational diseases resulting in the death of more than 2 million workers occurs in the world). That's why the EU global goal concerning the community' strategy for occupational health and safety for 2007-2012 is to reduce in 25% the incidence rate of occupational accidents and diseases. In this prospect it is presented a case study which justify the need to develop studies in Safety, Hygiene and Health at Work area as a way to encourage the managers to implement preventive actions and strategies, besides meeting the legal requirements, in order to reduce the occurrence of work accidents, improve the work conditions and therefore obtain benefits in added values and reinforced competition. The general objective of this study is to describe the work situations, identify the dangers and associate the potential risks and consequences; evaluate and value the risk. The study uses the Failure Table methodology and, in the business area of an organization which will be from now on designated as MANTEM that works in the electromechanical maintenance area. The results were, amongst others, some actions to be implemented to eliminate/minimize risks.