

Ergonomics safety and health



Ergonomics safety and health In modern industrial sector the use of human factors has become an essential part of the working portfolio. The need and affectivity of ergonomics cannot be denied, many quality experts from the field of industry manufacturing have termed it a pre-requisite for conducting operations. Though the uses of its guidelines are applicable in general, however, it is of immense value in the field of manufacturing and product creation.

Although every firm should have human factors application in place, industries that are products oriented and make use of hardcore processes for the product design are the front line contenders to make use of human factors in their working practices. There are number of reasons why a product based industry cannot do without its implementation, and one of them is the direct exposure of the working staff to the heavy machinery used. The requirements of product manufacturing industry is not just limited to the heavy machinery, rather it involves lengthy working hours and using of the hard material which damages the softer parts of human body in many ways (Salvendy & Karwowski, 2012).

The risks involved in the manufacturing industry are prone to pose greater threats towards the workers safety. Some of the injuries that the workers can come across include back injuries, stress related injuries, formation of cysts in some cases, carpal tunnel syndrome and various other similar defects that can have serious negative repercussions over the human activities in the outside world.

E-thrombosis is an injury that is usually experienced by the working class in the organizations, and this is attributed to the extensive sitting in one posture.

Human Factor Investigation Plan

Having identified the problems and injuries that the workers can come across, it is needed to formulate an action plan in form of human factor investigation which enables safe working. Human factor investigation enables creating a backup plan and risk assessment techniques.

The investigation is conducted through a tool called Human Factor Investigation Tool (HFIT). While this tool was practically used in oil and gas industry, it can be used for manufacturing industry as well (Gordon, Flin, & Mearns, 2005).

The first task in this project is to identify areas which could pose any threat to human safety, secondly highlight the areas where human fatigue is involved; repetitively working in same posture and over same equipment is unsafe as well. The strategy so devised must be based on the principle of reducing the direct contact of workers with heavy machinery. This can be done through automation. Automation finds its applications in industries like fire fighting scenarios where they can go into the buildings and not just put off the fire but also save human life. This all can be considered as gifts of ergonomics (Schlick, 2009). It can be implemented in other manufacturing industries as well. Short working intervals are a must for keeping the body and mind fresh towards the work. Hence lengthy working durations are against the rules of safe human factors.

The plan for human factors implementation should take into account even the small factors like illumination, the sitting postures, wearing of safety belts, helmets in hard hat areas, inflow of fresh air and exhaust systems, fire extinguishers, and first aid availability.

The use of ergonomics tools not just provides safety rather peace of mind

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and accomplishment of project management functions which serve as the key towards the success of any project. It makes the systems lean, enables eliminating the wastes and makes the processes fast (Mital & Kumar, 2000).

References

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