

White Paper

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Ergonomics – Is It Worth the Investment for Organizations?



At first glance it appears that a conflict exists in organizational practice between the requirements of a holistic ergonomic approach and the consideration of basic economic conditions, and that therefore both perspectives are only to be reconciled via a trade-off. In reality, however, one may expect a true “free lunch” and moreover realize that economic conditions often benefit from ergonomic insights [1]. For example, efficiency during the performance of tasks may be increased by ergonomic design. Vice versa, high efficiency can only be generated long term under ergonomic conditions. It cannot be denied that initial investments are necessary to achieve these goals: for example, the purchase of new ergonomic instruments and devices incurs certain costs. Most likely, work flow will slow during the initial phase. New behavioral habits and work habits must be learned the same way as handling the new instruments. But these costs and efforts are worth it!

Literature

- [1] Hendrick, H., 1997: Good ergonomics is good economics. Meeting of the Human Factors & Ergonomics Society, Santa Monica
- [2] Ellegast, R., Herda, C., Hoehne-Hüchstädt, U., Lesser, W., Kraus, G., Schwan, W., 2004: [Ergonomics at sewing work stations. St. Augustin: Main society of the commercial labor Institution for Statutory Accident Insurance and Prevention; report 7/2004] [German] Ergonomie an m N arbeitspl tzen. Sankt Augustin: Hauptverband der gewerblichen Berufsgenossenschaften (HVBG) BIA-Report 7/2004

One example from the clothing industry illustrates the positive correlation between investments in ergonomic measures and economic data. In a study initiated by the Institution for Statutory Accident Insurance and Prevention for Textile and Clothing Employees and the Leather Industry Institution for Statutory Accident Insurance and Prevention [2], ergonomic modifications were carried out on approximately 40 work stations at a manufacturing plant for work clothing. The ergonomic measures required investments in the range of 60,000 Euros. Following the implementation of these measures (e.g. the opportunity to switch between sitting and standing work areas, more free space), a reduction of work days missed due to inability to work of 16 % was noted. Productivity could be increased by approximately 15 %. This way, the investments could be redeemed within one year. Meanwhile, the workstation developed within this research project is now commercially available. The reduction of work days missed due to inability to work is one way to justify ergonomic measures in an economic context. In addition, numerous other positive effects on productivity exist, which can be triggered by ergonomic design measures; for example, a clearly structured laboratory work space will reduce the time spent searching for items (more details in the Eppendorf PhysioCare Concept). Furthermore, shorter paths and distances to reach save the time and energy of the employees.

Accordingly, the measures described above further the well-being of the employees long term and allow them to pursue their work with more joy and motivation. This, in turn, enables them to increase their efficiency long term and without consequential damage.

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