

Focus on IAG's work

Edition 11/2010

617.0-IAG:617.81

Model workplaces for older employees

Problem

The consequences of demographic change have been known for some time, both in Germany and elsewhere: a continually falling birth rate is accompanied by greater longevity. These trends will have major repercussions for the world of work in the years and decades to come.

This development draws particular attention to the situation of older employees. This group is not precisely defined; the term is sometimes even applied to all workers over the age of 45. The general performance of older employees is assumed to decrease. Although this assumption has now been disproved many times, assessment from an OS&H perspective of changes resulting from the ageing process remains a topical issue.

Activities

Following an analysis of the physiological changes actually occurring during the ageing process, the specific hazards were identified to which older employees are exposed increasingly, and the areas defined which typically present the greatest problems to them.

These findings led to design instructions for workplaces intended for older employees which take their particular needs into account. The instructions were put into practice at a model workplace in assembly work.



Age distribution in 2030 in Germany (Source: Statistisches Bundesamt) (top), Model workplace for older employees (below)

Results and Application

Ageing is accompanied by typical changes which can be observed to a greater or lesser degree in all individuals. These include impairment of the senses, such as presbyopia and presbycusis, or general reduction in agility and physical strength (deficit model).

These changes are accompanied by others by which the deficits are compensated for or which give older employees other advantages, such as greater experience or social competence (competence model).

The resulting conclusions for the ergonomic design of workplaces are as follows:

- The basic principle is good design in consideration of human engineering and ergonomic criteria. Beyond this principle, only a small number of special measures are required in order to adapt workplaces to the needs of older employees.
- Younger employees also benefit from a good workplace design; it enhances occupational safety and promotes good health.

Examples for the options which are beneficial to older employees include:

- Additional lighting, in order to meet the need for greater illumination. Better illumination of the workplace also reduces the accident risk for all employees.
- Aids for lifting, forearm rests or holding devices, and a reduction in the loads to be handled, for support and relief of the postural and locomotor apparatus. These measures act preventively against musculo-skeletal disease.

The findings are illustrated in a practical manner by the model workplace. They can now be presented in seminars and in the context of in-plant consultancy. A further model workplace in the form of a PC workstation for office use has also been created.

Area of Application

Accident insurance institutions, company physicians, entrepreneurs, managers, safety professionals, works council

Expert Assistance

IAG, Section of Work Design – Demography