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Focus on IFA's work

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GonKatast – a register of measured values on knee-straining activities

Problem

Osteoarthritis of the knee caused by many years of kneeling or comparable activities has been included as No. 2112 in the German list of occupational diseases. The German social accident insurance institutions are therefore faced with the task of investigating the issues of compensation and of preventing occupational activities that may harm the knees.

Since little information on this can be found in the literature, there is an acute need for valid data on the occurrence and frequency of the body postures of kneeling, squatting and crawling in different trades.

Activities

A project to record knee-straining postures was launched cooperatively by various social accident insurance institutions in the following trades: reinforcing ironworker, floor layer, roofer, screed layer, truck tarp maker, tiler, ramp agent, mould maker, plumber, painter, paver, parquet layer, pipe layer, welder and shipyard worker.

So that the tasks of the trades investigated can be appropriately differentiated, they have been divided into task modules or typical work shifts, e.g. the tiling of floors and the tiling of walls by tilers.

The body postures were recorded at workplaces and on building sites with the aid of the CUELA measuring system attached to the body.

Parquet layer with the CUELA measuring system

The parallel documentation of the entire content of the work shift made it possible to convert the measured data into complete work shift profiles.

This procedure yielded a total of 81 task modules with a total of 242 investigated work shifts. All the shift profiles were imported into the OMEGA database for musculoskeletal loading and are available for further research.

Results and Application

The results from the various trades were compiled at the respective supervising social accident insurance institutions in documentation for the processing of occupational diseases. They are also directly added in a data register (GonKatast) to the concurrently developed IFA anamnesis software and can be used for the investigation of exposure in case of occupational diseases of the knee.

The overall results have been published in an IFA Report.

The GonKatast collection of measured values is available to the social accident insurance institutions as an aid in determining minimum exposure conditions in recognition proceedings for occupational diseases of the knee joints (BK 2102, 2105, 2112). It also facilitates the identification of prevention focuses in the field of occupational knee joint stressing and the development of suitable prevention measures.

Area of Application

Prevention services of the social accident insurance institutions, staff processing occupational diseases

Additional Information

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IFA, Division 4: Ergonomics – Physical environmental factors

Literature Requests

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