

COMPREHENSIVE ERGONOMICS SUPPORT

Customer: GARRETT MOTION SLOVAKIA S. R. O.

Industry: Mechanical engineering

Focus: Garrett's main technology portfolio consists of three main segments: advanced turbo technology, electric turbo technology and connecting vehicles for solutions in vehicle safety and cybernetics.

Location: Garrett Motion Slovakia s.r.o., Prešov, Slovakia

Garrett Motion is a technology company which supplies solutions to the automotive industry, making vehicles safer, more connected, more efficient and better for the environment. The main technological activities of Garrett Motion Slovakia's Prešov branch include machining, assembling, balancing and measuring turbochargers and their components.

"Based on our experience with Asseco CEIT, we decided to turn to them again with our demand for evaluating ergonomics in our workplaces. Within a relatively short space of time, their solution gave us a wide-ranging and comprehensive view of the jobs on which we must focus our attention in priority."

Marek Nastasič, HSE engineer, Garrett Motion Slovakia s. r. o.

COMPREHENSIVE PICTURE
OF THE LEVEL OF PRODUCTION
STAFF'S PHYSICAL EXERTION
IN 32 SELECTED JOBS



Steps carried out and project output

- Assessing employees' subjective reaction to strain by identifying problems in the musculoskeletal system and by identifying the subjective perception of workload
- Assessing the physical exertion of employees on assembly lines using the valid legislation of the Slovak republic, European technical standards and selected ergonomics analyses
- Identifying the most at risk work tasks from the perspective of physical exertion on assembly lines

- Proposing corrective technical measures
- Proposing recommended rotations for employees in individual positions until the implementation of corrective technical measures
- Defining the basic principles of ergonomics for designing assembly lines based on the measurements and analyses carried out

Project benefits

- Gaining a comprehensive picture of the level of physical exertion in individual workplaces
- Identifying exceeded limits from the perspective of Slovak legislation and Slovak Technical Standards if the situation arises
- Background information for an effective implementation of corrective measures
- Set of tailor-made planning principles for the future pro-active design of workplaces

Project output

A proposal for technical and organisational corrective measures developed following a comprehension assessment of ergonomics in the workplace, using selected evaluation tools.

Project in numbers:

comprehensive evaluation of

32

production jobs

processing

179

subjective reactions of staff to exertion

over

200

evaluations and analyses carried out

proposed corrective measures for identified excess levels of strain

project duration

4 months



Evaluation

of reach zones, working heights and work postures using augmented reality