

Starting points for the development of multi-purpose workbenches for the needs of modern logistics

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Abstract— There is growing interest in how issues related to modularity can benefit service researchers and service providers at development and implementation of services in practice. We assume that logistics companies offering warehousing services for raw materials and components are trying to provide to customers more and more value-added services, which also include services of deferred production and preparation of goods for shipment per customer request (declaring, packaging, assembly, etc.). This means that arrangement of the workplace affects productivity and that work in warehouses is unpredictable and variable. This is the main reason why warehouses are in a great need for ergonomic and flexible workplaces. The solution is probably not in a number of different workplaces but in one or a few easily customizable. Flexibility can likely be achieved through modularity of workbenches and carefully determined body parts in the function of the platform. In order to reach a critical mass for the production, it is reasonable to aim for affordability and possibility of placing apart the pieces to minimize transport costs. Our objective in this paper is to discuss the methodology for starting point's determination for the development of multi-purpose workbenches for the needs of modern logistics. We will present also first results.

Key words— workbench, logistics, warehouse, ergonomics, modularity, flexibility.

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