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Guest-editorial

Handtools constitute an important element of work in many tasks. Handtools are typically used in most jobs performed by a human operator. The demand for continuous improvement and increased ergonomics knowledge creates a challenge for handtools which are suitable for the required purpose. The use of poorly designed handtools in work may lead to a serious increase in occupational disorders. There is an urgent need to improve handtool design, while concurrently making the process of developing and evaluating new prototypes more efficient. At present the process of testing new prototypes both in the laboratory and in the field is time consuming and expensive. The methodologies are also undeveloped.

In this situation a joint European R & D project was established including handtool producers, end-users and research institutes from Germany and Finland. The project received financing from the European Union research programme BriteEuram under the name "Eurohandtool" (BE96-3735). The project included the following partners: Darmstadt University of Technology, Germany; Fiskars Consumer Oy Ab, Finland; Weingut Achim Zerbe, Germany; Domäne Schloss Johannisberg, Germany; Delta Industrie Informatik GmbH, Germany; Media Company Sansibar Ltd, Finland; and Tampere University of Technology, Finland, as coordinator of the project.

The main results of the project are: 1) a new handtool-oriented work analysis method (HTWAM), 2) a new method application for integrating ergonomics in the design process, 3) a new application for evaluating the ergonomics of prototypes and products in the laboratory and 4) new-generation handtools to be used at work in vineyards. These findings are presented in this Special Issue.

We wish to thank cordially all the end-users, especially Mr. Gietz and Mr. Zerbe, for their valuable and professional contribution, all the partners in the project for their enthusiastic and skillful work and the European Union R&D Programme BriteEuram for making this project possible.

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