Prepared by the International Labour Office in collaboration with the International Ergonomics Association



International Labour Office



International Ergonomics Association

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PRACTICAL AND EASY-TO-IMPLEMENT SOLUTIONS FOR IMPROVING SAFETY, HEALTH AND WORKING CONDITIONS **Ergonomic checkpoints** 

## **Ergonomic checkpoints**

# Practical and easy-to-implement solutions for improving safety, health and working conditions

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#### Foreword

There is growing awareness of the need to apply practical action in the workplace to reduce work-related accidents and diseases. An increasing focus is placed on the application of ergonomic principles in view of their great potential to improve working conditions and productivity. Experience is being gained in applying ergonomics to workplaces in different sectors and industrial situations in both developed and developing countries, with tangible results in the reduction of occupational accidents, work-related diseases and major industrial accidents, as well as improvements in unsatisfactory working conditions. Ergonomic checkpoints has been developed with the objective of offering practical, low-cost solutions to ergonomic problems, particularly for small and medium-sized enterprises.

This manual is based on numerous examples of practical ergonomic improvements achieved at low cost. There are many such examples worldwide, including ergonomically designed tools, carts, materials-handling techniques, workstation arrangements, work environments, worksite welfare facilities and group work methods. The knowledge gained from these locally achieved improvements is a very useful addition to the ergonomic applications developed by qualified specialists and trained practitioners. It is increasingly apparent that local improvements achieved at the shop floor level should be made known to other workplaces where similar improvements could be made. We hope that using *Ergonomic checkpoints* will stimulate this valuable sharing of experiences and help people promote a more systematic application of ergonomic principles.

This manual presents 132 ergonomic interventions aimed at creating positive effects without relying on costly or highly sophisticated solutions. The emphasis is on realistic solutions that can be applied in a flexible manner and contribute to improving working conditions and productivity. The various experiences reported from practitioners in applying the first edition of Ergonomic checkpoints are reflected in revised text and illustrations and in the additional checkpoints. The close collaboration between the International Ergonomics Association and the International Labour Office has proved fruitful in making this second edition up to date, and meeting the most urgent needs of managing ergonomics-related workplace risks.

We hope that *Ergonomic checkpoints* will continue to inspire managers, supervisors, workers, trainers and educators, as well as ergonomics and occupational safety and health specialists, and will help them share practical information and experiences by disseminating ergonomically sound workplace improvements

> Seiji Machida Director Programme on Safety and Health at the Workplace and the Environment (SafeWork) International Labour Office

#### **Preface to the second edition**

This book is a revised, expanded version of *Ergonomic checkpoints* and was compiled jointly by the International Ergonomics Association (IEA) and the International Labour Office (ILO) to present practical workplace improvements from an ergonomic point of view.

The first edition of Ergonomic checkpoints, published in 1996, was well received across the world and has been translated into more than a dozen languages, including Arabic, Bahasa Indonesian, Bahasa Malaysian, Chinese, Estonian, Farsi, French, Japanese, Korean, Polish, Portuguese, Russian, Spanish, Thai, Turkish and Vietnamese. It has been used in training programmes in a number of industrially developing countries in Asia, Africa and Latin America, and a range of small-scale workplaces in developing countries have reported improvements from applying the low-cost ideas in the manual. Practitioners of workplace ergonomics in industrialized countries have also found the checkpoints to be useful tools for improving working conditions, particularly work practices in small and medium-sized enterprises. Training activities have shown that the checkpoints can be used effectively to train local people to find realistic solutions to ergonomic problems in various workplace situations. The broad coverage of the checkpoints is particularly suited to identifying practical solutions to ergonomic problems in specific local situations, where priority issues can vary greatly.

In 2004, in view of the development in ergonomics in the last decade and feedback from

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