Ergonomics — Manual handling —

Part 2: Pushing and pulling

Ergonomie — Manutention manuelle —

Partie 2: Actions de pousser et de tirer
Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 11228-2 was prepared by Technical Committee ISO/TC 159, Ergonomics, Subcommittee SC 3, Anthropometry and biomechanics.

ISO 11228 consists of the following parts, under the general title Ergonomics — Manual handling:

— Part 1: Lifting and carrying
— Part 2: Pushing and pulling
— Part 3: Handling of low loads at high frequency
Introduction

Pain, fatigue and disorders of the musculoskeletal system can result from awkward and/or forceful manual handling tasks such as the pushing or pulling of objects. Musculoskeletal pain and fatigue can themselves influence postural control and increase the likelihood of hazardous working practices, leading to an increased risk of injury, as well as a reduction in productivity and the quality of work output. Good ergonomic design can provide an approach for avoiding these adverse effects.

This part of ISO 11228 provides two methods for identifying the potential hazards and risks associated with whole-body pushing and pulling. Its content is based on current knowledge and understanding of the musculoskeletal risk factors associated with these types of handling tasks. In addition to providing an ergonomics approach for the assessment of push/pull tasks, it proposes recommendations for reducing the risk of injury or ill health.

The assessment and control of risks associated with other aspects of manual handling are to be found in ISO 11228-1, ISO 11228-3 and ISO 11226.