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## SYNOPSIS OF INDIAN STANDARDS

Number and Title of the Indian Standard:

IS XXXX : XXXX/ ISO 11228-2:2007 Ergonomics — Manual handling — Part 2: Pushing and pulling ICS 13.180 (adoption of ISO 11228-2:2007)

Scope:

This part of ISO 11228 gives the recommended limits for whole-body pushing and pulling. It provides guidance on the assessment of risk factors considered important to manual pushing and pulling, allowing the health risks for the working population to be evaluated. The recommendations apply to the healthy adult working population and provide reasonable protection to the majority of this population. These guidelines are based on experimental studies of push/pull tasks and associated levels of musculoskeletal loading, discomfort/pain, and endurance/fatigue.

Pushing and pulling, as defined in this part of ISO 11228, is restricted to the following:

- whole-body force exertions (i.e. while standing/walking);
- actions performed by one person (handling by two or more people is not part of the assessment, butsome advice is given in Annex C);
- forces applied by two hands;
- forces used to move or restrain an object;
- forces applied in a smooth and controlled way;
- forces applied without the use of external support(s);
- forces applied on objects located in front of the operator;
- forces applied in an upright position (not sitting).

This part of ISO 11228 is intended to provide information for designers, employers, employees and others involved in the design or redesign of work, tasks, products and work organization.

Salient features of content

This standards gives the ergonomics aspects for human regarding pulling and pushing. Following this standard, the adverse effects of pushing and pulling heavier loads than possible, and wrong way of lifting the loads can be avoided.