

भारतीय मानक

क्रेन – नियंत्रण – अभिन्यास और लाक्षणिक

भाग 5 शिरोपरि घुमावदार क्रेन और पोर्टल ब्रिज क्रेन

Indian Standard

**CRANES — CONTROLS — LAYOUT AND
CHARACTERISTICS**

PART 5 OVERHEAD TRAVELLING CRANES AND PORTAL BRIDGE CRANES

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BUREAU OF INDIAN STANDARDS
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NATIONAL FOREWORD

This Indian Standard which is identical with ISO 7752-5 : 1985 'Lifting appliances — Controls— Layout and characteristics — Part 5 : Overhead travelling cranes and portal bridge cranes' issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on the recommendations of the Cranes, Lifting Chains and Its Related Equipment Sectional Committee and approval of the Heavy Mechanical Engineering Division Council.

This standard is being published in five parts. Other parts of this standard are as follows:

- Part 1 General principles
- Part 2 Mobile cranes
- Part 3 Tower cranes
- Part 4 Jib cranes

The text of ISO standard has been approved for publication as Indian Standard without deviations. Certain terminology and conventions are however not identical to those used in Indian Standards. Accordingly wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards which are to be substituted in their place are listed below along with their degree of equivalence for the editions indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 4306/1 : 1990 Cranes — Vocabulary — Part 1 : General	IS 13473 (Part 1) : 1992 Cranes — Vocabulary — Part 1 General	Identical
ISO 7752/1 : 1983 Lifting appliances — Controls — Layout and characteristics — Part 1 : General princi- ples	IS 13558 (Part 1) : 1992 Cranes — Controls — Layout and characteristics : Part 1 General principles	Identical

Indian Standard
**CRANES — CONTROLS — LAYOUT AND
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0 Introduction

To reduce driver confusion or incorrect control in an emergency, this part of ISO 7752 unifies controls for certain types of cranes.

ISO 7752/1 establishes the general principles for all kinds of cranes.

1 Scope and field of application

This part of ISO 7752 establishes the arrangement, requirements and direction of movement of the basic controls for travelling, traversing, slewing, cab driving and load hoisting and lowering operations for all overhead travelling cranes and portal bridge cranes, as defined in ISO 4306/1.

2 References

ISO 4306/1, *Lifting appliances — Vocabulary — Part 1: General*.

ISO 7752/1, *Lifting appliances — Controls — Layout and characteristics — Part 1: General principles*.

3 General requirements

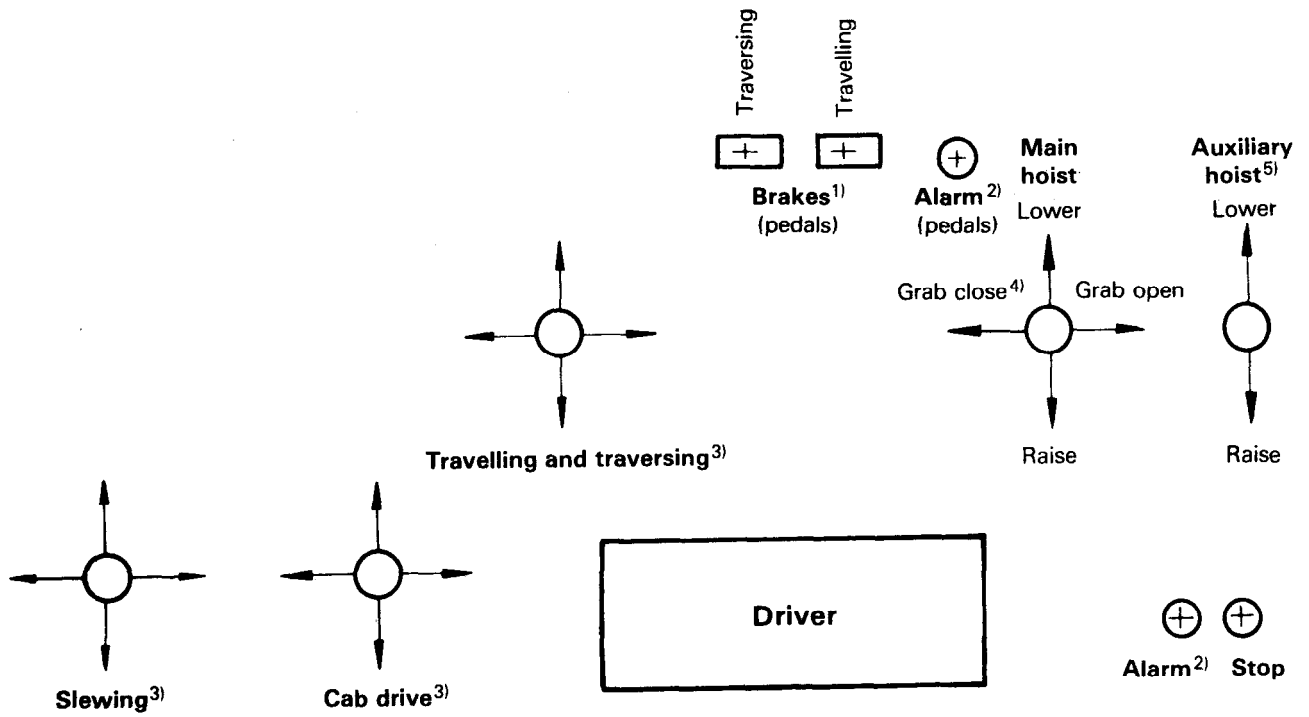
3.1 The basic controls for the crane shall comply with the requirements of ISO 7752/1 with the exception as noted in 3.2.

3.2 The lever forces shall be consistent with the duty of the appliance; the following values are recommended:

- a) Hand levers:
 - forward/back: 60 N
 - right/left: 40 N
- b) Foot pedals: 150 N

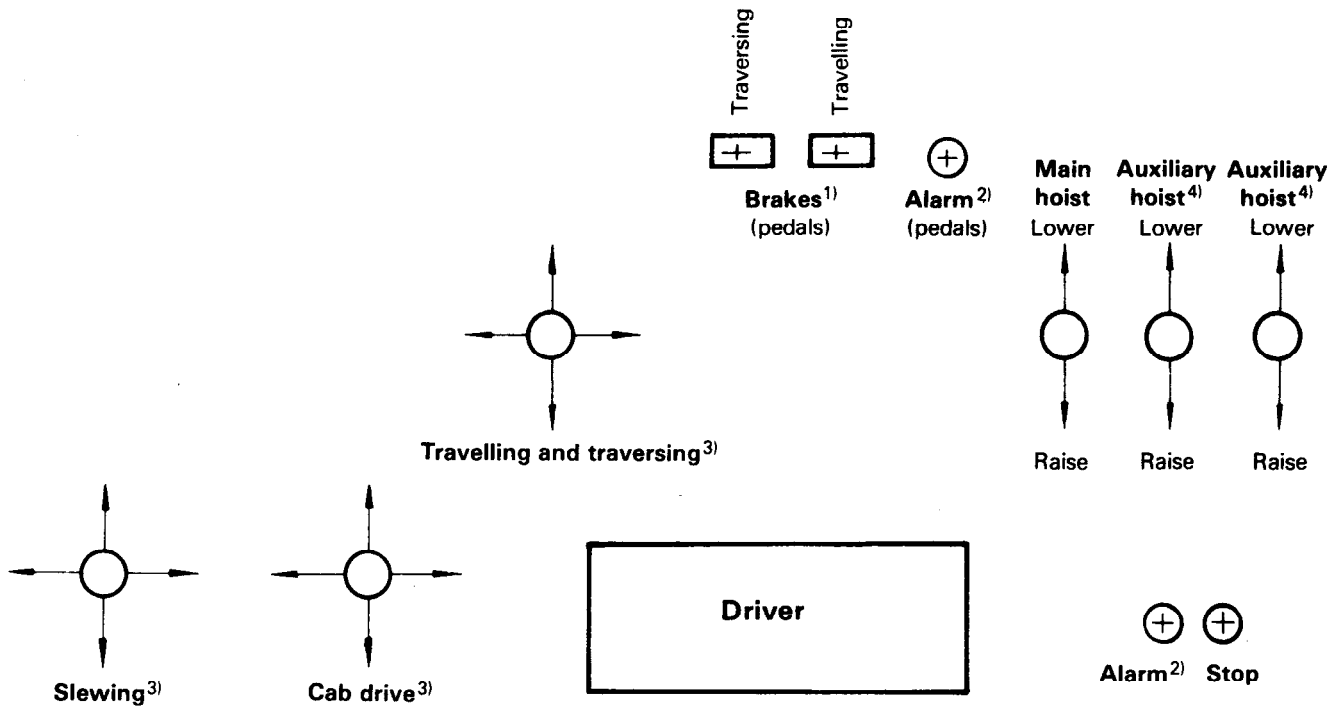
4 Basic control arrangement

Controls for overhead travelling cranes and portal bridge cranes, when applicable, shall be arranged around and in front of the driver as shown either in figure 1 or in figure 2.



- 1) May be a common releasing pedal.
- 2) Alternative locations.
- 3) Handle (joy stick) directions are to be the same as directions of movements.
- 4) Or other loading device function.
- 5) Optional.

Figure 1



- 1) May be a common releasing pedal.
- 2) Alternative location.
- 3) Handle (joy stick) directions are to be the same as directions of movements.
- 4) Optional.

Figure 2

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