INTERNATIONAL STANDARD ISO 4557

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Hydraulic excavators — Operator's controls

Pelles hydrauliques — Commandes du conducteur

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 4557 was developed by Technical Committee ISO/TC 127, *Earth-moving machinery,* and was circulated to the member bodies in January 1976.

It has been approved by the member bodies of the following countries :

Austria	Korea, Rep. of	Turkey
Brazil	Mexico	United Kingdom
Canada	Poland	U.S.A.
Czechoslovakia	Romania	U.S.S.R.
France	South Africa, Rep. of	Yugoslavia
Italy	Spain	
Japan	Sweden	

The member body of the following country expressed disapproval of the document of technical grounds :

Germany

Printed in Switzerland

Hydraulic excavators — Operator's controls

1 SCOPE

This International Standard specifies the requirements for the operator's controls on hydraulic excavators as they relate to the operator and his position on the machine.

2 FIELD OF APPLICATION

This International Standard applies to hydraulic excavators as defined in ISO . . .

The range of sizes of operators considered in this International Standard is that established in ISO 3411.

3 REFERENCES

ISO 3411, *Earth-moving machinery — Human physical dimensions of operators and minimum operator space envelope.*

ISO 5353, *Earth-moving machinery — Seat index point (SIP).*[1)]

ISO . . . , *Hydraulic excavators — commercial terminology.*[1)]

ISO . . . , *Earth-moving machinery — Seating arrangements.*[1)]

ISO . . . , *Earth-moving machinery — Zones of comfort and reach.*[1)]

ISO . . . , *Earth-moving machinery — Control levers — Direction and force.*[1)]

4 LOCATION OF CONTROLS

4.1 General

The overall cab dimensions are defined in ISO 3411.

4.2 The operator's controls shall be located as specified in 4.3, taking into account possible adjustment of the seat.

4.3 The controls listed in the table shall be located in the zones of comfort specified in ISO . . . and if possible for all positions they may occupy but at least for their neutral position. All positions that they may occupy shall be at least within the zone of reach specified in ISO . . .

Operation controls	Machine travel controls
Operation sound alarm	Steering
Rotation or slew	Accelerator
Corresponding slewing brake	Clutch-pedal
Lift and lower	Service brake
Manoeuvre of dipper arm	Course-change indicator
Manoeuvre of bucket	Gear-change lever
	Lighting control
	Movement sound alarm

5 MOVEMENT OF CONTROLS

5.1 The movement of the following controls in relation to their neutral position shall, where possible, be made in the same general direction as the movement they control :

- rotation or slew;
- lift and lower;
- manoeuvre of dipper arm;
- if possible, manoeuvre of bucket.

5.2 The movement shall be continued for as long as an action is exerted by the operator on the controls referred to in 5.1 and shall be discontinued automatically as soon as this action ceases.

5.3 The force to be applied to the controls referred to in 5.1 and the distance they require to be moved shall be within the limits specified in ISO . . ., taking into account their position and direction of movement.

6 SEAT INDEX POINT (SIP)

To define and determine the location of the seat index point (SIP) see ISO 5353, which specifies a device and the method.

1) In preparation.