International Standard 8152

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION•МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ•ORGANISATION INTERNATIONALE DE NORMALISATION

Earth-moving machinery — Operation and maintenance — Training of mechanics

Engins de terrassement — Emploi et entretien — Méthode de formation des mécaniciens

First edition — 1984-09-01

UDC 621.878/.879.004.2 **Ref. No. ISO 8152-1984 (E)**

Descriptors : earth-moving equipment, operators (personnel), training

Price based on 8 pages

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been established 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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 8152 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*.

Earth-moving machinery — Operation and maintenance — Training of mechanics

0 Introduction

This International Standard is intended as a guide to the training of mechanics. It has been assumed that candidates for training possess a sufficiently sound general education with suitable bias towards workshop practice and the use of tools, and that they are sufficiently mature to benefit from the training.

In selecting potential trainees account needs to be taken not only of ability, but also of physical and mental toughness, since the maintenance of machinery is arduous and skilful work, which, particularly when carried out in poor site conditions, can require a high degree of medical fitness.

1 Scope and field of application

This International Standard describes the training of mechanics appropriate for earth-moving machinery. It does not specify any procedure for assessing proficiency or competence, since these factors are usually covered by local and national practices and regulations.

This International Standard is not intended to override any applicable national regulations or standards.

It applies to all earth-moving machinery as defined in ISO 6165.

2 References

ISO 4510, *Earth-moving machinery — Maintenance and adjustment tools.*

ISO 6012, *Earth-moving machinery — Service instrumentation.*

ISO 6165, *Earth-moving machinery — Basic types — Vocabulary.*

ISO 6750, *Earth-moving machinery — Operation and maintenance — Format and content of manuals.*

3 Structure of training programmes

3.1 General

The minimum normal training period should be relevant to national practice and local conditions, but preferably should not be less than three years, with an optional fourth year when appropriate for more advanced or specialized training. It is often an advantage, in deciding the training for an individual trainee or group of trainees, if the length of the course can be decided before training commences, particularly relative to the nature and content if a fourth year of training is contemplated.

3.2 Safety

Throughout training, it must continually be emphasized that one of the **most important** aspects of machine operation and servicing is **safety**. Safety precautions must be integrated into every aspect of the training course and should include

— the understanding and application of local and national safety regulations;

— responsibilities in connection with safety measures, accident prevention, fire hazards and personal hygiene, together with the necessity of using machinery guards and shields, and personal protective equipment and safety clothing for eyes, head, ears and feet;

— precautions to be observed when operating earth-moving equipment and attachments, and the safe and proper handling of all hydraulic tools, air tools, special tools and equipment;

— safe methods of lifting by hand and the use of mechanical and hydraulic handling equipment;

— safe handling and storage of liquids and solvents (particularly those which are flammable), including oils, fuels, and acids;

— location of master switches and methods of immobilizing machinery, including all types of earth-moving base machines and equipment;

— dangers associated with high pressure systems;

— safe method of dismantling wheels and the use of a protective cage during inflation of tyres and hydro-inflation, etc.

3.3 Periods of training

In accordance with 3.1, the periods of training described below should be regarded only as typical, and the actual durations should be chosen to conform to national practice and local conditions.