International Standard 8703

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Road vehicles — Caravans and light trailers — Control device for inertia braking — Calculation of forces

Véhicules routiers — Caravanes et remorques légères — Dispositifs de commande de freinage par inertie — Calcul des forces

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Foreword

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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 8703 was prepared by Technical Committee ISO/TC 22, *Road vehicles.*

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

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Road vehicles — Caravans and light trailers — Control device for inertia braking — Calculation of forces

1 Scope

This International Standard specifies, for the manufacturers of control devices for inertia braking, the forces to be taken into account so that sections may be calculated and maximum admissible stresses selected. These forces are not given as a basis for a dynamic test.

2 Field of application

This International Standard applies to control devices for inertia braking intended for use on caravans and light trailers[1].

NOTE — For calculation of the mechanical strength of steel drawbars, see ISO 7641/1.

3 References

ISO 7237, *Road vehicles — Masses and dimensions of caravans — Terms and definitions.*

ISO 7641/1, *Road vehicles — Caravans and light trailers — Calculation of the mechanical strength of the drawbar — Part 1 : Steel drawbars.*

4 Symbols and definitions

D is the value in newtons determined by the following equation corresponding to the longitudinal force between the towing vehicle and the trailer.

$$D = g \times \frac{22\,000 \times m_t}{22\,000 + m_t}$$

where

g is the acceleration due to gravity, i.e. the conventional value of 9,806 65 m/s²;

m_t is the maximum manufacturer's total mass of the trailer as defined in ISO 7237, expressed in kilograms.

1) Trailer categories 01 and 02 in accordance with the EEC/UNO classification :

— Category 1 : single axle trailers, excluding semi-trailers, maximum weight not more than 0,75 t.

— Category 2 : Trailers, maximum weight not more than 3,5 t excluding category 01 trailers.