INTERNATIONAL STANDARD ISO 3470

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Road vehicles — Windscreen demisting equipment for passenger cars — Test method

Véhicules routiers — Dispositif de désembuage du pare-brise de voiture particulière — Méthode d'essai

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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 3470 was drawn up by Technical Committee ISO/TC 22, *Road vehicles,* and circulated to the Member Bodies in May 1974.

It has been approved by the Member Bodies of the following countries:

Austria	Italy	Switzerland
Belgium	Japan	Thailand
Bulgaria	Netherlands	Turkey
Czechoslovakia	Poland	United Kingdom
Germany	Romania	U.S.A.
Hungary	South Africa, Rep. of	Yugoslavia
Iran	Sweden	

The Member Bodies of the following countries expressed disapproval of the document on technical grounds :

Austrâlia
France

Printed in Switzerland

Road vehicles — Windscreen demisting equipment for passenger cars — Test method

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies a test method for passenger car windscreen demisting systems.

2 REFERENCES

ISO 1176, *Road vehicles — Weights — Vocabulary.*

ISO . . ., *Road vehicles — Definition of the "R" point.*[1)]

3 DEFINITIONS

For the purposes of this International Standard, the following definitions shall apply :

3.1 mist : A film of condensation on the inside surface of a vehicle windscreen.

3.2 demist : The restoration of visibility through the windscreen following a mist condition, by the operation of demisting systems.

3.3 "R" point : The "seating reference point" ("R" point) is the manufacturer's design reference point which

a) establishes the lowest and rearmost normal driving or riding position of each seat provided by the vehicle manufacturer;

b) has co-ordinates established relative to the designed vehicle structure;

c) simulates the position of pivot centre of the human torso and thigh ("H" point).

3.4 road load : The power output required to move the vehicle on a flat road at a specified speed through still air at 20 °C with standard barometric pressure (1 013 mbar), the vehicle being at its complete vehicle kerb weight as specified in ISO 1176 plus 180 kg (mass of the driver included). Road load includes transmission friction, rolling friction and air resistance.

4 TEST EQUIPMENT AND PREPARATION

4.1 All necessary vehicle preparation such as cleaning and marking of the windscreen and instrumentation necessary to ensure a satisfactory test and for recording demist test conditions shall be carried out prior to the temperature stabilization referred to in 4.3.

4.2 A thorough degreasing operation shall be carried out on the inside of the windscreen using methylated spirit, white spirit or an equivalent degreasing agent. When dry, a solution of ammonia of not less than 3 % and not more than 10 % shall be applied, allowed to dry and finally wiped with a dry cotton cloth.

4.3 The vehicle shall be placed in a cold chamber for sufficient time to ensure that engine coolant, lubricants and vehicle internal air temperature are stabilized at a temperature of -3 ± 2 °C.

5 STEAM GENERATOR SPECIFICATION

The steam generator to be used in the test shall be similar to that shown schematically in the figure.

5.1 The capacity shall be at least 2,25 l.

5.2 The heat losses at boiling point shall be less than 75 W in ambient condition at -3 ± 2 °C.

5.3 The fan shall have a capacity of 0,07 to 0,10 m^3/min at 50 Pa static pressure.

5.4 Six steam outlet holes of 6,5 mm diameter shall be provided around the top of the generator.

5.5 The generator shall be calibrated at -3 ± 2 °C up to an input of at least n times 70 ± 5 g/h, where n is the number of seating positions designated by the manufacturer.

1) In preparation.