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Road vehicles — Testing the abrasion resistance of automotive glazing with the windscreen wiper test

Véhicules routiers — Contrôle de la résistance à l'abrasion du vitrage automobile par un test essuie-glace



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Foreword

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Introduction

The surfaces of vehicle glazing are usually subject to abrasive wear in service. This is caused by various mechanisms such as the impact of small particles (e.g. sand), the use of car wash brushes, windscreen wipers or ice scrapers, or the rolling up and down of panes of glazing with deposited dirt on them in the case of roll-up windows.

Various test methods are required in order to be able to evaluate to a sufficient extent the abrasion resistance of glazing surfaces with regard to these different mechanisms that occur in service. In addition to the abrasive wheel test [taber test (see ISO 3537, ISO 15082 and UNECE R43)], the sand drop test (see UNECE R43) and the more recent car wash test (see ISO 15082 and UNECE R43) that have been established in abrasion testing of vehicle glazing for many years, a method is to be standardized that simulates the abrasion that results from the use of windscreen wipers. This is significant for the evaluation of windscreens in particular, but also for other panes of glazing.