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Paints and varnishes — Coatings on plastics and composites —

Part 6: Stone-chip resistance testing

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Foreword

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A list of all parts in the ISO 22785 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The ISO 22785 series explains the characteristics of plastics and the differences between plastics substrates and metallic substrates.

Stone-chip resistance is usually assessed through surface tests; nonetheless, the substrate also has an influence on the stone-chip resistance of the coating and is considered when testing stone-chip resistance.

Impacts due to loose chippings on a road surface or other materials can cause damage to paint finishes. Such damage can result in single layers or all layers flaking off from the substrate.

Stone-chip damage can be replicated with single-impact and multi-impact test procedures. ISO 20567-1 and ISO 20567-4 describe multi-impact test procedures, while ISO 20567-2 and ISO 20567-3 describe single-impact test procedures.

Many of the existing test procedures for coatings have been developed for metallic substrates, and in the past they have often also been applied to plastics substrates.