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Geotextiles and geotextile-related products — Determination of index abrasion resistance characteristics under wet conditions for hydraulic applications

Géotextiles et produits apparentés — Détermination des caractéristiques de résistance à l'abrasion d'indice dans des conditions humides pour les applications hydrauliques

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Foreword

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This document was prepared by Technical Committee ISO/TC 221, *Geosynthetics*.

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Introduction

The abrasion resistance under wet conditions is an important property for the application of geotextiles intended to be used as geobags (geotextile bags filled with soil) or filter beneath armourstone. The abrasion impact on geotextiles can be achieved under wet conditions by installing geotextile samples in a rotating drum. In the fixed rotating drum test facility, the drum is rotated with a defined speed and is filled with water and a mixture of angular-grained high-quality basalt chippings with determined sizes. The abrasion impact is caused by crushed stones tumbling over the geotextile. The assessment of the geotextile abrasion resistance characteristics can be achieved by comparing thickness and mechanical properties (tensile strength, elongation) and/or additional hydraulic properties (characteristic opening size, filtration behaviour) before and after abrasion impact.