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Irish Standard S.R. CEN ISO/TR 11811:2012

Nanotechnologies - Guidance on methods for nano- and microtribology measurements (ISO/TR 11811:2012)

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## TECHNICAL REPORT

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# Nanotechnologies - Guidance on methods for nano- and microtribology measurements (ISO/TR 11811:2012)

Nanotechnologies - Directives relatives aux méthodes de mesure en nano- et microtribologie (ISO/TR 11811:2012)

Nanotechnologien - Leitfaden für nano- und mikrotribologische Messverfahren (ISO/TR 11811:2012)

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#### Foreword

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Nanotechnologies — Directives relatives aux méthodes de mesure en nano- et microtribologie



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#### ISO/TR 11811:2012(E)

#### Foreword

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#### Introduction

Evaluation of wear and friction in systems where interactions occur in the nanoscale is becoming increasingly important. There are two main areas of application. The first is in MEMS and NEMS devices, where tribological issues can determine the overall performance of the device. It is also true that, in many cases, the tribological performance of macroscale contacts depends on the combination of what occurs at the micro- and nanoscale asperity contacts which actually take place when two surfaces come into contact.

The development of nanotribology testing provides a way of generating information and understanding these small-scale contacts. This understanding can then be used to model the performance of microscale devices and provide the basis for future models of sliding wear.

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