

# Calculation of scuffing load capacity of cylindrical, bevel and hypoid gears —

## Part 1: Flash temperature method

ICS 21.200

# National foreword

This British Standard reproduces verbatim ISO/TR 13989-1:2000 and implements it as the UK national standard.

The UK participation in its preparation was entrusted to Technical Committee MCE/5, Gears, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

The procedure described herein is widely used both during gear design, to check the possibility of scuffing, and for analysis of service failures where scuffing has featured. The method is one of the most widely used and accepted for these purposes. However, it is necessary to be aware that there are significant instances of gear systems which have scuffed, and which have been exhaustively investigated, where the method in this document has not yielded either explanations or predictions of the events experienced. It is generally accepted that scuffing remains a complex and not fully understood phenomenon, and that the method described in this document can only represent a contribution to scuffing analysis.

## Cross-references

The British Standards which implement international publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

**Compliance with a British Standard does not of itself confer immunity from legal obligations.**

This British Standard, having been prepared under the direction of the Engineering Sector Committee, was published under the authority of the Standards Committee and comes into effect on 15 May 2001

## Summary of pages

This document comprises a front cover, an inside front cover, the ISO/TR title page, pages ii to v, a blank page, pages 1 to 39, and a back cover.

The BSI copyright date displayed in this document indicates when the document was last issued.

## Amendments issued since publication

| Amd. No. | Date | Comments |
|----------|------|----------|
|          |      |          |
|          |      |          |
|          |      |          |
|          |      |          |
|          |      |          |