



JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS B 0671-2 : 2002
(ISO 13565-2 : 1996)
(JSA)

**Geometrical Product Specifications
(GPS) — Surface texture: Profile
method; Surfaces having stratified
functional properties — Part 2:
Height characterization using the
linear material ratio curve**

ICS 17.040.20; 17.040.30

Reference number : JIS B 0671-2 : 2002 (E)

Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal of establishing a Japanese Industrial Standard from the Japanese Standards Association (JSA), with a draft of Industrial Standard based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

This Standard has been made based on **ISO 13565-2:1996** *Geometrical Product Specifications (GPS) — Surface texture: Profile method; Surfaces having stratified functional properties — Part 2: Height characterization using the linear material ratio curve* for the purposes of making easy to compare this Standard with International Standard; to prepare Japanese Industrial Standard conforming with International Standard; and to propose a draft of International Standard which is based on Japanese Industrial Standard.

JIS B 0671 group consists of the following three parts with the general title *Geometrical Product Specifications (GPS) — Surface texture: Profile method; Surfaces having stratified functional properties*.

Part 1: Filtering and general measurement conditions

Part 2: Height characterization using the linear material ratio curve

Part 3: Height characterization using the material probability curve

Date of Establishment: 2002-03-20

Date of Public Notice in Official Gazette: 2002-03-20

Investigated by: Japanese Industrial Standards Committee
Standards Board

Technical Committee on Machine Elements

JIS B 0671-2:2002, First English edition published in 2003-04

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

© JSA 2003

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

**Geometrical Product Specifications
(GPS) — Surface texture: Profile method;
Surfaces having stratified functional properties —
Part 2: Height characterization
using the linear material ratio curve**

Introduction This part of JIS B 0671 has been prepared based on the first edition of ISO 13565-2 *Geometrical Product Specifications (GPS) — Surface texture : Profile method ; Surfaces having stratified functional properties — Part 2 : Height characterization using the linear material ratio curve* published in 1996 without modifying the technical contents.

This part of JIS B 0671 is a Geometrical Product Specification (GPS) standard and is to be regarded as a General GPS standard (see TR B 0007). It influences chain link 2 of the chain of standards for roughness profile.

For more detailed information of the relation of this part of JIS B 0671 to other standards and the GPS matrix model, see annex A.

This part of JIS B 0671 defines a set of parameters, based on the linear material ratio curve, to be used for the evaluation of the valley suppressed roughness profile defined in JIS B 0671-1. It is based on a three-layer surface model, evaluating the peaks, the core and the valleys separately.

“Informations” underlined with dots in this Standard are the matters not included in the original International Standard.

Remarks : TR B 0007 is identical with ISO/TR 14638 : 1995 *Geometrical Product Specifications (GPS) — Masterplan*.

Information : A triple stratified surface model is a profile model that the profile consists of three independent random processes of a protruding peak to the height direction, a core and a reduced valley.

1 Scope This part of JIS B 0671 describes the evaluation process for determining parameters from the linear representation of the material ratio curve (also referred to as the Abbott curve) which describe the increase of the material portion of the surface with increasing depth of the roughness profile. They are intended to aid in assessing the operational behaviour of highly mechanically stressed surfaces.

Remarks : The International Standard corresponding to this Standard is as follows.

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and JIS are IDT (identical), MOD (modified), and NEQ (not equivalent) according to ISO/IEC Guide 21.

ISO 13565-2 : 1996 *Geometrical Product Specifications (GPS) — Surface*