

INTERNATIONAL
STANDARD

ISO
27307

First edition
2015-06-15

**Thermal spraying — Evaluation of
adhesion/cohesion of thermal sprayed
ceramic coatings by transverse scratch
testing**

*Projection thermique — Évaluation des propriétés d'adhérence/
cohésion des revêtements céramiques appliqués par projection
thermique, par essai de rayure transversale*



Reference number
ISO 27307:2015(E)

© ISO 2015



COPYRIGHT PROTECTED DOCUMENT

© ISO 2015, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	1
5 Equipment and materials	2
6 Procedures of transverse scratch testing	2
6.1 General requirements for the testing specimen.....	2
6.2 Environmental conditions.....	2
6.3 Scratch testing on cross-section.....	2
6.4 Evaluation of failure mode.....	3
7 Scratch testing report	4
Annex A (informative) Typical coating failure modes after scratch testing	5
Annex B (normative) Transverse scratch testing record	6
Annex C (informative) Round robin test results of transverse scratch testing for plasma sprayed ceramic coatings	7
Bibliography	26