
Thermal spraying — Spraying and fusing of self-fluxing alloys

Projection thermique — Projection et fusion d'alliages autofondants



COPYRIGHT PROTECTED DOCUMENT

© ISO 2015

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
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Influence on the substrate and design	1
3.1 Substrate metal.....	1
3.2 Design.....	1
4 Spray material of the self-fluxing alloy	2
4.1 Selection.....	2
4.2 Composition.....	2
5 Preparation of the component	2
5.1 General.....	2
5.2 Methods of surface preparation.....	3
5.3 Cleanliness.....	3
6 Spray and fusion process	3
6.1 Spraying with simultaneous fusion.....	3
6.1.1 Procedure.....	3
6.1.2 Particle size and particle size range of the powder particles.....	3
6.1.3 Coating thickness.....	3
6.2 Spraying with subsequent fusion.....	4
6.2.1 Procedure.....	4
6.2.2 Particle size and particle size range of the powder particles.....	4
6.2.3 Coating thickness.....	4
6.3 Spraying technique — Procedure.....	4
6.3.1 General.....	4
6.3.2 Preheating.....	4
6.3.3 Spraying.....	4
6.3.4 Fusing the deposit.....	5
6.3.5 Cooling.....	5
7 Final machining	5
8 Hardness testing	5
8.1 General.....	5
8.2 Standard hardness test.....	6
Annex A (informative) Reference values for the expected hardness of the fused coating	7
Bibliography	8