

DIN EN ISO 14920:2023-11 (E)

Thermal spraying - Spraying and fusing of self-fluxing alloys (ISO 14920:2023)

Contents		Page
	European foreword	3
	Foreword	4
1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	Influence on the substrate and design	5
	4.1 Substrate	5
	4.2 Design	6
5	Spray material of the self-fluxing alloy	6
	5.1 Selection	6
	5.2 Composition	6
6	Preparation of the component	6
	6.1 General	6
	6.1.1 Surface cleanliness	6
	6.1.2 Removal of prior surface treatments	6
	6.1.3 Pre-machining requirements	7
	6.1.4 Surface preparation requirements	7
	6.2 Methods of surface preparation	7
	6.2.1 Surface preparation requirements	7
	6.2.2 Surface preparation inspection	7
	6.2.3 General masking of surface preparation	7
	6.2.4 Plug masking for surface preparation	7
	6.3 Cleanliness	7
7	Spray and fusion process	8
	7.1 Spraying with simultaneous fusion	8
	7.1.1 Procedure	8
	7.1.2 Particle size and particle size range of the powder particles	8
	7.1.3 Coating thickness	8
	7.2 Spraying with subsequent fusion	8
	7.2.1 Procedure	8
	7.2.2 Particle size and particle size range of the powder particles	8
	7.2.3 Coating thickness	9
	7.3 Spraying technique — Procedure	9
	7.3.1 General	9
	7.3.2 Preheating	9
	7.3.3 Spraying	9
	7.3.4 Fusing the deposit	9
	7.3.5 Cooling	10
8	Final machining	10
9	Hardness testing	10
	9.1 General	10
	9.2 Standard hardness test	10
	Annex A (informative) Reference values for the expected hardness of the fused coating	12
	Bibliography	13