

ISO 8504-4:2022-08 (E)

Preparation of steel substrates before application of paints and related products - Surface preparation methods - Part 4: Acid pickling

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	General	2
4.1	Pickling liquid	2
4.1.1	Requirements to the chemical materials	2
4.1.2	Requirements to the formulation and process conditions of a pickling liquid	2
4.1.3	Example of formulation and process conditions of a pickling liquid	2
4.2	General requirements	2
4.2.1	Requirements to the bath equipment materials	2
4.2.2	Requirements to the bath analysis	2
4.3	Health and safety	2
5	Method of acid pickling	3
5.1	Procedure for acid pickling	3
5.2	Preparation	3
5.3	Degreasing	3
5.3.1	Components and conditions	3
5.3.2	Immersion method	4
5.3.3	Part placement	4
5.3.4	Immersion time	4
5.3.5	Process temperature	4
5.4	Fresh water rinsing and/or washing	4
5.4.1	Fresh water rinsing process	4
5.4.2	Rinsing water temperature	4
5.4.3	Fresh water washing process	4
5.5	Pickling	4
5.5.1	Immersion requirement	4
5.5.2	Part placement	4
5.5.3	Immersion time	4
5.5.4	Process temperature	4
5.6	Post treatment	5
5.6.1	Conversion layer	5
5.6.2	Surface neutralization	5
5.6.3	Improvement of the phosphate layer	5
5.6.4	Quality check and assurance	5
5.6.5	Drying	5
6	Assessment of cleaned surface	5
Annex A (informative)	Formulation and condition of common process liquids	6
Bibliography		8