ISO 9725:2017-06 (E)

Nickel and nickel alloy forgings

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Alloyidentification 1

5 Information to be supplied by the purchaser 1

6 Requirements 2
6.1 Requirements for forgings heat treated by the manufacturer 2
6.1.1 General 2
6.1.2 Composition 2
6.1.3 Tensile properties 2
6.1.4 Heat treatment 2
6.1.5 Grain size 3
6.1.6 Creep or stress rupture properties 3
6.1.7 Hardness 3
6.1.8 Dimensional tolerances 3
6.1.9 Surface condition 3
6.2 Requirements for forgings to be heat treated by purchaser 3
6.2.1 Composition 3
6.2.2 Temper 3
6.2.3 Precipitation-hardenable alloys 3
6.2.4 Dimensional tolerances 3
6.2.5 Surface condition 3

7 Sampling 3
7.1 Chemical analysis 3
7.2 Tensile, creep or stress rupture test 4
7.3 Heat treatment of test samples 4
7.3.1 Forgings supplied in hot-worked temper 4
7.3.2 Forgings supplied in heat-treated temper 4

8 Number of tests 4
8.1 Determination of the chemical composition 4
8.2 Forgings heat treated by the manufacturer 4
8.3 Forgings to be heat treated by the purchaser 4

9 Test procedures 5
9.1 Determination of the chemical composition 5
9.2 Tensile tests 5
9.3 Creep and stress rupture tensile 5
9.4 Grain size determination 5
9.5 Rounding of results 5
9.6 Retests 5

10 Marking 6

11 Purchaser or third part inspection 6

12 Declaration of conformity 6

Annex A (normative)Rulesfornickelandnickelalloysidentificationbasedon chemical symbols 15

Bibliography 17