

Aerospace series — Insert, thin wall — Salvage procedure for components

ICS 49.030.99

National foreword

This British Standard is the UK implementation of EN 3916:2008.

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A list of organizations represented on this committee can be obtained on request to its secretary.

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Série aérospatiale - Douilles filetées, à paroi mince -
Procédure pour récupération

Luft- und Raumfahrt - Gewindeeinsätze, dünnwandig -
Verfahren für Nacharbeit von Bauteilen

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Foreword

This document (EN 3916:2008) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2009, and conflicting national standards shall be withdrawn at the latest by February 2009.

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1 Scope

1.1 This specification covers the accepted methods for the reclamation of installation holes for standard thin wall inserts, within assemblies.

1.2 To enable rectification when defects or damage occur to the standard insert tapped installation hole, or to rectify any out of position of the hole within the specified parameters of use.

1.3 To control the machining of the existing insert hole and the installation requirements of the replacement oversize thin wall insert.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 3676:1998, *Aerospace series — Inserts, thin wall, self-locking — Design standard*

EN 3913, *Aerospace series — Insert, thin wall, self-locking, short, in heat resisting nickel base alloy NI-PH2601 (NI-P100HT, Inconel 718), silver plated on internal thread, for salvage of components*

EN 3914, *Aerospace series — Insert, thin wall, self-locking, long, in heat resisting nickel base alloy NI-PH2601 (NI-P100HT, Inconel 718), silver plated on internal thread, for salvage of components*

EN 3915, *Aerospace series — Insert, thin wall, self-locking, MJ threads, in heat resisting nickel base alloy NI-PH2601 (NI-P100HT, Inconel 718), for salvage of components — Classification: 1 275 MPa (at ambient temperature) / 550 °C — Technical specification*

ISO 965-1, *ISO general-purpose metric screw threads — Tolerances — Part 1: Principles and basic data*

ISO 5855-2, *Aerospace — MJ threads — Part 2: Limit dimensions for bolts and nuts*

3 Conditions of use

3.1 After reclamation, assemblies shall conform to the dimensional requirements of their respective Engineering Drawings.

3.2 Table 1 shows the values for the maximum out of position as applied to the theoretical centreline of the original hole. In practice this is a cylinder of diameter x_{xx} applied down the theoretical centreline of the original hole. If the actual position of the hole centreline falls outside the perimeter of this cylinder, the hole cannot be reclaimed.

3.3 Salvage using oversize inserts is only possible if the 'Boss thickness for component salvage' has been used in the original design (see EN 3676:1998, Table 6).

3.4 The reclamation facility shall at this stage investigate the component Engineering Drawings to check that the operations detailed and controlled by sections 4 and 5 will not cause a further non conformance of the component.

Table 2 demonstrates that 2 types of oversize insert can be used i.e. long or short. Before commencing reclamation, the original Engineering Drawings shall be checked to establish which type of standard insert has been used i.e. long or short. The replacement oversize insert and accompanying dimensions from this specification shall correspond with it, i.e. short for short, long for long.