

**Individual Product Specification****Bolt – Shouldered, untightened fitting****Ateliers de la Haute-Garonne - Flourens**

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## 1 Scope

This Individual Product Specification identifies a product from a manufacturer that has been successfully qualified to the relevant Product Specification.

The Individual Product Specification specifies individual requirements, which describe the specific performance of the product as demonstrated by the qualification, and which have to be considered for procurement and use, together with the Material Specification.

## 2 Normative References

This Airbus specification incorporates by dated or undated reference provisions from other publications. All normative references cited at the appropriate places in the text are listed hereafter. For dated references, subsequent amendments to or revisions of any these publications apply to this Airbus specification only when incorporated in it by amendment of revision. For undated references, the latest issue of the publication referred to shall be applied.

NSA5042	Product Specification : Bolt – Shouldered, untightened fitting
NASM6812	Fasteners, externally threaded, alloy steel, corrosion resistant steel, aluminium 60,000 PSI to 125,000 PSI
AMS-QQ-P-416	Technical Specification for Cadmium Plating - Plating, Cadmium (Electrodeposited)
A1091	Airbus Requirements for the Management of Hazardous Substances
EC n°1907/2006	REACH – Registration, Evaluation, Authorization and Restriction of Chemical Substances <sup>1</sup>
EC n°1272/2008	Regulation on classification, labelling and packaging of substances and mixtures, amending and repealing <sup>1</sup>

## 3 Material and Manufacturer

### 3.1 Manufacturer Material Designation

The trade name of the product is defined as follows: NSA5042

### 3.2 Manufacturer

The product is manufactured by: Ateliers de la Haute-Garonne, Flourens (France).

### 3.3 Manufacturing Plant

Ateliers de la Haute-Garonne - ETS AURIOL & CIE SA  
26 route de Lasbordes  
Z.I. de Flourens  
BP 73103  
31130 Flourens  
France

Cage Code: F0095

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<sup>1</sup> Published as European Union Regulation (EC)

#### 4 Cross-References

Airbus P/N	Supplier P/N
NSA5042A04-*	NSA5042A04-*
NSA5042A04A*	NSA5042A04A*
NSA5118A04-*	NSA5118A04-*
NSA5119A04-*	NSA5119A04-*
NSA5118A04A <sup>*2</sup>	NSA5118A04A*
NSA5119A04A <sup>*2</sup>	NSA5119A04A*
NSA5042A05-*	NSA5042A05-*
NSA5042A05A*	NSA5042A05A*
NSA5118A05-*	NSA5118A05-*
NSA5118A05A <sup>*2</sup>	NSA5118A05A*
NSA5119A05*	NSA5119A05*
NSA5119A05A <sup>*2</sup>	NSA5119A05A*
NSA5042A06-*	NSA5042A06-*
NSA5042A06A*	NSA5042A06A*
NSA5118A06-*	NSA5118A06-*
NSA5118A06A <sup>*2</sup>	NSA5118A06A*
NSA5119A06-*	NSA5119A06-*
NSA5119A06A <sup>*2</sup>	NSA5119A06A*
NSA5042A08-*	NSA5042A08-*
NSA5118A08-*	NSA5118A08-*
NSA5119A08-*	NSA5119A08-*
NSA5042A90-*	NSA5042A90-*
NSA5118A90-*	NSA5118A90-*
NSA5119A90-*	NSA5119A90-*
NSA5042C06-*	NSA5042C06-*
NSA5118C06-*	NSA5118C06-*
NSA5119C06-*	NSA5119C06-*
NSA5042C06A*	NSA5042C06A*
NSA5118C06A*	NSA5118C06A*
NSA5119C06A*	NSA5119C06A*
NSA5042C09-*	NSA5042C09-*
NSA5118C09-*	NSA5118C09-*
NSA5119C09-*	NSA5119C09-*
NSA5042C09A*	NSA5042C09A*
NSA5118C09A <sup>*2</sup>	NSA5118C09A*

<sup>2</sup> Note: NSA5118, NSA5119 under update for missing diameter.

Airbus P/N	Supplier P/N
NSA5119C09A* <sup>2</sup>	NSA5119C09A*
NSA5042C12-*	NSA5042C12-*
NSA5042C12A*	NSA5042C12A*
NSA5118C12-*	NSA5118C12-*
NSA5118C12A* <sup>2</sup>	NSA5118C12A*
NSA5119C12-*	NSA5119C12-*
NSA5119C12A*	NSA5119C12A*
NSA5042C14-*	NSA5042C14-*
NSA5042C14A*	NSA5042C14A*
NSA5042C140-*	NSA5042C140-*
NSA5042C140A*	NSA5042C140A*
NSA5118C14-*	NSA5118C14-*
NSA5118C14A*	NSA5118C14A*
NSA5118C140- <sup>2</sup>	NSA5118C140-*
NSA5118C140A* <sup>2</sup>	NSA5118C140A*
NSA5119C14-*	NSA5119C14-*
NSA5119C14A*	NSA5119C14A*
NSA5119C140- <sup>2</sup>	NSA5119C140-*
NSA5119C140A* <sup>2</sup>	NSA5119C140A*
NSA5042V04A*	NSA5042V04A*
NSA5042V04-*	NSA5042V04-*
NSA5118V04-*	NSA5118V04-*
NSA5118V04A* <sup>2</sup>	NSA5118V04A*
NSA5119V04-*	NSA5119V04-*
NSA5119V04A* <sup>2</sup>	NSA5119V04A*
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NSA5118V05-*	NSA5118V05-*
NSA5118V05A* <sup>2</sup>	NSA5118V05A*
NSA5119V05-*	NSA5119V05-*
NSA5119V05A* <sup>2</sup>	NSA5119V05A*
NSA5042V06A*	NSA5042V06A*
NSA5042V06-*	NSA5042V06-*
NSA5042V60-*	NSA5042V60-*
NSA5118V06-*	NSA5118V06-*
NSA5118V06A* <sup>2</sup>	NSA5118V06A*
NSA5118V60-*	NSA5118V60-*
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NSA5119V06A* <sup>2</sup>	NSA5119V06A*

Airbus P/N	Supplier P/N
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NSA5118V07B*	NSA5118V07B*
NSA5119V07-*	NSA5119V07-*
NSA5119V07A*	NSA5119V07A*
NSA5119V07B*	NSA5119V07B*
NSA5042V08-*	NSA5042V08-*
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NSA5118V09A <sup>#2</sup>	NSA5118V09A*
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NSA5118V10-*	NSA5118V10-*
NSA5118V10A*	NSA5118V10A*
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NSA5042V12A*	NSA5042V12A*
NSA5118V12-*	NSA5118V12-*
NSA5118V12A*	NSA5118V12A*
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NSA5042V14-*	NSA5042V14-*
NSA5042V14A*	NSA5042V14A*
NSA5042V140-*	NSA5042V140-*
NSA5042V140A*	NSA5042V140A*
NSA5118V14-*	NSA5118V14-*
NSA5118V14A*	NSA5118V14A*
NSA5118V140- <sup>#2</sup>	NSA5118V140-*
NSA5118V140A <sup>#2</sup>	NSA5118V140A*

Airbus P/N	Supplier P/N
NSA5119V14-*	NSA5119V14-*
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NSA5119V140- <sup>*2</sup>	NSA5119V140-*
NSA5119V140A <sup>*2</sup>	NSA5119V140A*
NSA5042V16-*	NSA5042V16-*
NSA5042V160-*	NSA5042V160-*
NSA5118V16-*	NSA5118V16-*
NSA5119V16-*	NSA5119V16-*
NSA5118V160- <sup>*2</sup>	NSA5118V160-*
NSA5119V160- <sup>*2</sup>	NSA5119V160-*
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NSA5118-04-*	NSA5118-04-*
NSA5118-04A <sup>*2</sup>	NSA5118-04A*
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NSA5119-04A <sup>*2</sup>	NSA5119-04A*
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Airbus P/N	Supplier P/N
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NSA5118-09A* <sup>2</sup>	NSA5118-09A*
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NSA5118-140A* <sup>2</sup>	NSA5118-140A*
NSA5119-140A* <sup>2</sup>	NSA5119-140A*
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NSA5042-160-*	NSA5042-160-*
NSA5118-16-*	NSA5118-16-*
NSA5118-160- <sup>2</sup> *	NSA5118-160-*
NSA5119-16-*	NSA5119-16-*
NSA5119-160- <sup>2</sup> *	NSA5119-160-*



## **5 Product Application**

The product shall be used in conjunction with the relevant design documents.

## **6 Qualification**

### **6.1 Status**

#### **6.1.1 Qualification Basis**

Following specifications have been the basis for qualification:

- Product Specification: NSA5042
- Technical Specification: NASM6812, NASM4004

### 6.1.2 Qualification Test Report

The successful qualification has been documented in the qualification test reports:

Reference number: QTR141044

Reference number: QTR150104

### 6.2 Manufacturing Schedule

The frozen manufacturing route is captured in:

TQ141044

- NSA5042A04-200-QTR – Qualification Test Report – Cadmium process qualification according to AMS-QQ-P 416 with the shouldered-bolt NSA5042A04-200 – Rev. 0 (12/06/2015)

- NSA5042-16-800-QTR – Qualification Test Report - Cadmium process qualification according to AMS-QQ-P 416 with the shouldered-bolt NSA5042-16-800 – Rev 0 (15/07/2015)

TQ150104

- NSA5042A05: Ref. NSA5042A05-270/ QTR, rev. 0, 07.08.2015 Reference number 0003062

- NSA5042A08: Ref. NSA5042A08-253/ QTR, rev. 0, 07.10.2015 Reference number 0003063

- NSA5042A90: Ref. NSA5042A90-520/ QTR, rev. 0, 21.10.2015 Reference number 0003062

- NSA5042V04: Ref. NSA5042V04-250/ QTR, rev. 1, 30.09.2015 Reference number 00302

- NSA5042V05: Ref. NSA5042V05-223/ QTR, rev. 1, 30.09.2015 Reference number 00302

- NSA5042V06: Ref. NSA5042V06-334/ QTR, rev. 1, 30.09.2015 Reference number 06615

- NSA5042V07: Ref. NSA5042V07-296/ QTR, rev. 1, 30.09.2015 Reference number 06615

- NSA5042V08: Ref. NSA5042V08-310/ QTR, rev. 1, 30.09.2015 Reference number 06615

- NSA5042V09: Ref. NSA5042V09-293/ QTR, rev. 1, 30.09.2015 Reference number 06615

- NSA5042V10: Ref. NSA5042V10-480/ QTR, rev. 0, 11.02.2016 Reference number 06615

- NSA5042V14: Ref. NSA5042V14-700/ QTR, rev. 0, 17.03.2016 Reference number 06615

- NSA5042V160: Ref. NSA5042V160-700/ QTR, rev. 0, 21.03.2016 Reference number 06615

- NSA5042V12: Ref. NSA5042V12-600/ QTR, rev. 0, 11.03.2016 Reference number 06615

- NSA5042C12: Ref. NSA5042C12-651/ QTR, rev. 1, 07.09.2015 Reference number 0003042

- NSA5042C14: Ref. NSA5042C14-520/ QTR, rev. 1, 23.10.2015 Reference number 0003042

- The manufacturing route for NSA5042C parts has been updated to add an operation step for passivation. The new route has the reference number 000310 revision date 12/017/2016

Changes in the manufacturing schedule which may adversely affect the quality of the product must be stated by the manufacturer and shall be subject to written approval of the Qualification Body before first delivery.

### **6.3 Special Storage Condition**

Not applicable.

## **7 Release**

Release testing shall be performed in accordance with the relevant specifications of clause 6.1.1 and specific agreements of clause 8 (if applicable).

## **8 Specific Agreements**

### **8.1 Anodising of Titanium bolts NSA5042V**

The standard requires Sulfuric-acid anodizing (SAA) as per ISO8080. AHG has modified the SAA process for environmental reasons and provided a justification "Study of impact of the deviation sheet 150401 concerning ISO8080", reference RT-243. The deviation is accepted, because the parts are completely machined after forging and heat treatment.

### **8.2 Passivation of bolts with finish code C**

The parts shall be passivated as required by NASM6812.

## **9 Material Safety Data Sheet**

The supplier shall provide information enabling a safe use, according to REACH (EC n°1907/2006) and CLP (EC n°1272/2008) regulations.

In particular, for preparations and for the first delivery, the manufacturer shall provide a safety data sheet appropriate to the country of purchase/use.

For articles, the manufacturer shall provide information according to REACH Article 33, and additionally, safety data sheet shall be provided whenever available.

Site competent environment health and safety authority shall be the final recipient of the documents.

At least, document has to be delivered simultaneously with the product.

Material shall comply with A1091.

The supplier should provide chemical composition of the cured product and propose recycling possibilities (cured/uncured product) whenever relevant.

**RECORD OF REVISIONS**

<b>Issue</b>	<b>Clause modified</b>	<b>Description of modification</b>
1 09/15		New Standard
2 08/16		Specific Agreements