



"VSMPO-AVISMA Corporation"

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S957.13

INSPECTION CERTIFICATE

EN 10204-3.18 ISO 9002 CERT. No 09 100 96260



date 09.03.2008

Contract : 25002013T00 Annex 1

Purchaser order: #2004-10174 Airbus France PO 1050185

Terms of delivery AMS 03-18-001iss.2, ABS 5125, AMS 4911N

Dimensions (mm) or Drawing No 65.0 x 1000 x 2000

Heat No 8-21-1478-1

Lot No 20218

CERTIFICATE No 04039Y06C
Purchaser : VSMPO TIRUS GmbH, Deutschland

Quantity/alloy T6/AlV
Units 1
Weight, (kg) 583
Condition of delivery Annealed
Object PLATE

Chemical Composition, %

Requirement	Titanium									
	Al	V	Fe	C	N ₂	H ₂	O+2N ₂	Y	Re	total
AMS 03-18-001	5.5	3.5	max	max	max	max	max	max	0.10	0.40
AMS 4911N	6.75	4.5	0.30	0.08	0.03	0.0125	0.25	0.0950	<0.10	0.121
TOP	6.44	4.14	0.16	0.028	0.012	0.0010	0.198	<0.001	<0.10	0.124
BOTTOM	6.46	4.14	0.16	0.027	0.012	0.0010	0.198	<0.001	<0.10	0.124

Requirement

AMS 4911N AMS 03-18-001	0.20% proof stress MPa	Tensile strength MPa	Elongation %	Reduction of Area %	Beta-transus T _β , °C	In the Part. #	Hz	Heat treatment T, °C	time
1	872	969	15.0	40.9	1	0.0030	780°	3 h	
1	912	982	16.7	43.3	1		air cooling	50 min	

Macrostructure testing
Microstructure testing As per AMS 03-18-001 34 grain size # 9.0 par. 30, 3T25, 3T26 by arca 3T28, 3T100 par. 74 (free from alpha-case), AMS 4911N par. 3.5.3.1, 3.5.4.2.

Ultrasonic inspection As per AMS 03-18-000, DIN EN 4050-4, Cl. 3. Longitudinal wave, Immersion method, Immersion method: Focused transducer.

We certify that, subject to exceptions or reservations listed hereafter, the samples detailed here were manufactured in accordance with the technical specifications of the contract, order or sub-order and list, all inspection operations and tests. Non-conformances are considered, the samples comply in every respect with the relevant technical specifications, drawings and standard standards and regulations in force.

Information particular to the supplier (see page 2)

state by the reference of operations given:

Material Code "A"
Nonflatness Code "N"

AMS 03-18-001	Short-Transverse	Longitudinal	Heat treatment	time
1	871	975	12.0	22.4

Prepared by Dushina A.A.
Name Dushina A.A.

signature

