



Attestation de Qualification des Procédés Spéciaux

Special Processes Qualification Certificate

N° AQPS : SAFRAN AB-AE-TS / 2161 IND : 01

CODE FOURNISSEUR : MDM539583
SUPPLIER NUMBERSociété Safran émettrice : Safran Aircraft Engines
Issuing Safran company Safran Transmission Systemsprononce la qualification sur les référentiels indiqués suivant GRP-0087 – GRM-0123.
grants the qualification on the specifications indicated as per GRP-0087 – GRM-0123.

GMA Werkstoffprüfung GMBH

Hochgrasweg 52
86316 Friedberg, GermanyPour les procédés spéciaux suivants, les domaines sont précisés page suivante
For the following special processes, refer to next page for scope definition

N° procédé Safran Safran process N°	Procédés Processes	Référentiel Technique Technical Specification	Statut Status	Restrictions techniques Technical limitation	Fin de Validité Expiration Date
4.4.1	Ressuage Sensibilité S2 - FPI S2	DMC0010 ; Pr-5000	Qualifié provisoirement / Temporary qualification	For Safran Aircraft Engines Only	30/04/2022
4.4.3	Ressuage Sensibilité S4 - FPI S4	DMC0010 ; Pr-5000	Qualifié provisoirement / Temporary qualification	For Safran Aircraft Engines Only	30/04/2022
4.4.2	Ressuage Sensibilité S3 - FPI S3	ASTM E-1417	Qualifié / Qualified	For STS - Only for the CEROBEAR references (bearings)	Monitoring according to GRM-0123
4.4.3	Ressuage Sensibilité S4 - FPI S4	ASTM E-1417	Qualifié / Qualified		Monitoring according to GRM-0123
4.2.1	Magnétoscopie / MPI (Magnetic Particle Inspection)	DMC0070 ; Pr-5300	Qualifié provisoirement / Temporary qualification	For Safran Aircraft Engines Only	30/04/2022
4.2.1	Magnétoscopie / MPI (Magnetic Particle Inspection)	ASTM E-1444	Qualifié / Qualified	For STS - Only for the CEROBEAR references (bearings)	Monitoring according to GRM-0123

N° de rapport Report No.	Contact du fournisseur Supplier contact	Observations Remarks
Dq-5000 (18/10/2021) Dq-5300 (01/07/2021) Nadcap Accreditation #9840200267	Sylvio Großer / Responsable Level 3 s.grosser@gma-group.com	Ind 00 : Initial qualification for Safran Transmission System Ind 01 : Initial temporary qualification for Safran Aircraft Engines, pending an on site audit

La validité des qualifications des fournisseurs est confirmée et actualisée par la publication d'une liste des procédés spéciaux qualifiés. L'adresse pour accéder à cette liste est disponible dans la GRM-0123, paragraphe « Qualification et surveillance des procédés spéciaux ». L'activation des accès fournisseurs à cette liste se fait par demande à l'adresse suivante : saf.admin-gps@safran.fr / The supplier qualification validity is confirmed and updated by the publication of qualified special process list. The address to access to this list is available in GRM-0123, paragraph "Special Process Qualification and Monitoring". The activation of suppliers access to this list is done by request to the following address: saf.admin-gps@safran.fr

Auditeur / Responsable de la Qualification
Auditor / Qualification Leader

Date :	Nom / Name :	Signature / Visa :
27/10/2021	Valentin CONTAT	

Domaine de Qualification des Procédés Spéciaux

Special Processes Qualification Scope

Identification des installations <i>Facilities identification</i>	Caractéristiques de l'installation <i>Facilities features</i>		Matériau(x) <i>Material(s)</i>	Domaine d'utilisation <i>Operating scope</i>	Commentaires <i>Comments</i>
Surface Preparation before FPI and MPI <i>Degreasing</i>	<u>Degreasing Product :</u> <u>Concentration :</u> <u>Temperature :</u> <u>Tank Size :</u>	Turco 5948 DPM / Immersion 25% ± 5% 70°C ± 5°C 1200 x 1200 x 600 mm	Steel	Machined Parts	1A3a is considered as sensitivity Level 2 for SAE according to DMC0010 §9.2
FPI Sensitivity Level 2 <i>1A3a</i>	<u>Penetrant :</u> <u>Pre-washing :</u> <u>Emulsifier :</u> <u>Washing :</u> <u>Drying :</u> <u>Developers :</u> <u>Reference Panels :</u> <u>Maximum Parts Size :</u>	Ardrox 970P25E / Electrostatic Spraying NA NA Water/Air Spraying In Oven / Maximum 70°C Ardrox 9D4A / Electrostatic Spraying Ardrox 9D1B / Aerosol / For wipping method only PSM5 Panel 600 x 2000 mm			
FPI Sensitivity Level 4 <i>1D4a</i>	<u>Penetrant :</u> <u>Pre-washing :</u> <u>Emulsifier :</u> <u>Washing :</u> <u>Drying :</u> <u>Developers :</u> <u>Reference Panels :</u> <u>Maximum Parts Size :</u>	Ardrox 9814 / Electrostatic Spraying Water/Air Spraying Ardrox 9881 / immersion Water/Air Spraying In Oven / Maximum 70°C Ardrox 9D4A / Electrostatic Spraying Ardrox 9D1B / Aerosol / For wipping method only PSM5 Panel 600 x 2000 mm			
MPI Equipment <i>Line 1</i>	<u>Equipment Model :</u> <u>Circular Magnetization :</u> <u>Longitudinal Magnetization :</u> <u>Circular Range of use :</u> <u>Longitudinal Range of use :</u> <u>Maximum Separation :</u>	Karl Deutsch UWE900 / S/N FR0128 With Conductors / Alternate Current By Magnetic Flow or Coil / Alternate Current 100 A to 2000 A 2000 A/tr to 20000 A/tr 900 mm	Steel Cobalt Base	Forging Parts Machined Parts	

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Special Processes Qualification Scope

Identification des installations <i>Facilities identification</i>	Caractéristiques de l'installation <i>Facilities features</i>		Matériau(x) <i>Material(s)</i>	Domaine d'utilisation <i>Operating scope</i>	Commentaires <i>Comments</i>
MPI Equipment <i>Line 2</i>	<u>Equipment Model :</u> <u>Circular Magnetization :</u> <u>Longitudinal Magnetization :</u> <u>Circular Range of use :</u> <u>Longitudinal Range of use :</u> <u>Maximum Separation :</u>	K+D Flux Technik Multitest 1600 cc / S/N FR0191 With Conductors / Alternate Current By Magnetic Flow or Coil / Alternate Current 100 A to 4000 A 500 A/tr to 10000 A/tr 1600 mm	Steel Cobalt Base	Forging Parts Machined Parts	
MPI Equipment <i>Line 3</i>	<u>Equipment Model :</u> <u>Circular Magnetization :</u> <u>Longitudinal Magnetization :</u> <u>Circular Range of use :</u> <u>Longitudinal Range of use :</u> <u>Maximum Separation :</u>	Karl Deutsch UWE600 / S/N FR0382 With Conductors / Alternate Current By Magnetic Flow or Coil / Alternate Current 100 A to 2000 A 2000 A/tr to 20000 A/tr 600 mm			
Magnetic Liquors	<u>Liquid Vehicle :</u> <u>Magnetic Powder :</u>	Ardrex Base Oil HF Chemetall Lumor J Powder			
Demagnetization Equipment	<u>Type of Demagnetizations :</u>	AC demagnetization on machine by solenoid AC demagnetization system			