

Rapport de validation ou Qualification Procédé Spécial	A-TM0010109	Version A
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Renouvellement qualification PAEDX Spectro UK  
RQPS

Langue principale / *Principal language* : Français

Langue secondaire / *Secondary language* :

## LIENS / *Links*

### Documents de description / *Description documents* :

Référence / <i>Doc Number</i>	Désignation / <i>Designation</i>	Type / <i>Type</i>	Version / <i>Version</i>
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### Documents de référence / *Reference documents* :

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### Documents CAO / *CAD documents* :

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### Traduction de / *Translation of* :



Référence / <i>Doc Number</i>	Désignation / <i>Designation</i>	Type / <i>Type</i>	Version / <i>Version</i>
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Ref: A-TM0010109

Ind:

<b>Nom du Laboratoire</b> <i>Laboratory name</i>	<b>Spectro   Jet-Care</b> (a Trading Name of Palace International Ltd)	
<b>Adresse</b> <i>Address</i>	Hatchwood Place, Farnham Road, Odiham, Hampshire, RG29 1AB <b>United Kingdom</b>	
<b>Contact</b> <i>Contact</i>	<b>Nom :</b> <i>Name:</i> Andres Grille	<b>Fonction :</b> <i>Title:</i> Chief Scientific Officer
	<b>Adresse mail :</b> <i>E-mail address:</i> andresgrille@spectro-oil.com	
	<b>Qualification initiale</b> <i>Initial approval</i> <input type="checkbox"/>	<b>Renouvellement de qualification</b> <i>Renewal qualification</i> <input checked="" type="checkbox"/>
	<b>*Si Autre préciser :</b> <i>* If other, please detail:</i>	

<b>Technique analytique</b> <i>Analytical technique</i>	<b>Référentiel Technique</b> <i>Technical specifications</i>	<b>Installation</b>	<b>Décision</b> <i>Decision</i>	<b>Restriction techniques</b>
<b>SEM Microanalysis</b>	022765 Qualification requirements for Particle Analysis	SEM JEOL 5500 / X MAX DETECTOR s/n MP17800067 MP13100075 MP13100073	<b>Qualifié/Qualified</b>	N/A

<b>Représentants Safran</b> <i>Safran representative</i>	
<b>Rédacteur/Editor</b>	<b>Auditeur SAFRAN MTL/ Auditor SAFRAN MTL</b>
Nom / <i>Name</i> : Martine Jimenez	Nom / <i>Name</i> : Martine Jimenez
Date : 27/01/2023      Visa : 	Date : 27/01/2023      Visa : 

Spécifications de la qualification/ Qualification Specifications	
Référentiels techniques Safran Safran technical specifications	022765 Qualification requirements for Particle Analysis
Autres référentiels Other specifications	

Produits audités Products audited
Samples SafranHE A-TM0009084-1.

Motivation de la décision Roots of the decision
<p>Spectro UK meets the Qualification requirements described in document 022765. Cross over tests; The results provided by the laboratory are in line with those expected.</p> <p><b>Spectro UK is qualified for the particles analysis by SEM-EDS.</b> This qualification reported in the <b>AQL AA264426</b> is valid <b>until January 2026</b>.</p> <p><i>This agreement is garanted according to the conditions mentioned in this report (equipment, method, staff in charge of analyzes).</i> <i>In the event of a change of one of these conditions (equipment, technical intervention on the device, people in charge of analyses ...) which could modify the results, the laboratory must initiate a process of renewal of correlation with Safran HE (DT/MPE).</i></p> <p>Concerning analysis for SAFRAN HE engines, you will have to send the particles results by email to the following recipients :</p> <ul style="list-style-type: none"> <li>• the customer for action (PDF files)</li> <li>• the DT/MPE of SAFRAN HE for information : <a href="mailto:oilssystem-analysis.fr.she@safrangroup.com">oilssystem-analysis.fr.she@safrangroup.com</a> (PDF files + Excel file according to the given model).</li> </ul>

Eléments analysés Items reviewed			
1	Report SMUK17326	6	Qualification request dated september 7th 2022
2	Report SMUK17327	7	
3	Report SMUK17328	8	
4	Report SMUK17329	9	
5	Report SMUK17330	10	

**1) Contexte / Context**

This qualification concerns the realization of quantitative analyses of metal particles by SEM-EDS.

The qualification process consists in checking that the laboratory :

- Has the necessary equipment (SEM and EDS microanalysis system) and the relevant qualified technicians required to conduct these measurements.
- Is able to carry out the quantitative measurements in order to differentiate the various material grades found on our samples.

**2) Résultats de la reconnaissance d'aptitude / Results of the capability recognition survey**

*3.1) Examen des moyens / Survey of the facility*

The laboratory has the necessary equipment (SEM + EDS)

Technique	Manufacturer	Model	Serial number	Installation date
SEM	Jeol	5500 / X MAX	MP17800067	October 2002
		DETECTOR	MP13100075	October 2009
			MP13100073	October 2009

*3.2) Examen documentaire / Survey of the documentation*

N/A

*3.3) Examen de la qualification des opérateurs / Survey of the qualification of the personnel*

**STAFF QUALIFIED TO CONDUCT THESE TESTS**

Surname	First name	Training	Position	Experience in the position
Pearce	Mike		Senior Lab Technician	22
Cheyne	Simon		Lab Supervisor	15
McLean	Matthew		Senior Lab Technician	25
Simpson-Li	Daniel		Senior Lab Technician	10
Bayless	Peter		Lab Technician	4

3.4) Examen de la mise en œuvre du procédé / Survey of the implementation of the process

The implementation of the means was verified by a cross-correlation test on metal particles between the Spectro UK laboratory and the one of Safran HE (DT/MPE).

3.5) Examen des essais croisés/ Survey of the cross tests

	SAFRAN HE	Spectro UK
Echantillon n°1	100C6	100C6
	XC18	XC...
	15CDV6	15CDV6
		100MCV4
Echantillon n°2	AU4G1	AU4G1
	Z12CNDV12	Z12CNDV12
	16NCD13	16NCD13
	35CD4	25CD4 ou 30CD4 ou 35CD4
		100MCV4
Echantillon n°3	25CD4	25CD4 ou 30CD4 ou 35CD4
	Z10CNT18-10	Z6CN18-8/Z2CN18-10/ Z12CN18-10
	35NCD16	35NCD16
		100MCV4
Echantillon n°4	16NCD13	16NCD13
	35NCD16	35NCD16
		100MCV4
Echantillon n°5	100C6	100C6
	16NCD13	16NCD13
	Z12CNDV12	Z12CNDV12
	15CDV6	15CDV6
		100MCV4

All the materials present in the different samples were identified by Spectro UK.

The laboratory detected, in all the samples, 100MCV4 ..... This material is not present in the sample but it could be a pollution of the samples.

These results make it possible to pronounce the renewal of the qualification of the laboratory