

Spacecraft/Project	HERSCHEL / SPIRE	Document No	SPIRE-RAL REP-002018		
Instrument/Model	SPIRE / PFM	Issue No	1	REV	0
Subsystem	Mirrors & SMEC Simulator	Date	8 th June 2004		

Report at receipt/delivery or other major movement of instrument/hardware and associated GSE.

Inspection Report	Incoming	
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FROM	TO
<p>LAM France</p>	<p>SPIRE SSTD RAL</p>

<i>Inspection conducted by</i>		<i>Witnessed by (Product Assurance)</i>	
Name	Signature / Date	Name	Signature / Date
Marc Ferlet		Eric Clark	

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INTRODUCTION

This inspection report shall be completed for formal transfers of hardware between RAL and customers, agencies or collaborating organisations

The following must be inspected:

	SECTION	No
Documentation	YES	1
Containers	YES	2
Visual Inspection of Hardware	YES	3
Connectors	N/A	4
Harnesses	N/A	5
Pre Closure Checks	N/A	6
Interface Verification	N/A	7

Each section contains a checklist that shall be completed.

Unused boxes should have N/A entered.

Deviations e.g. items not delivered or incomplete documentation must be noted in the comments column.

For previously agreed deviations refer to the Delivery Review Board (DRB) minutes of meeting (MOM) or similar.

NCR's must be raised for other deviations, damage or defects noted.

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SECTION 1: DOCUMENTATION

Documentation shall be checked for completeness, any items not received or to be delivered later should be noted.

Note 1: The delivery review board minutes should list outstanding items, e.g. open work, open NCRs and Waivers etc. A copy should accompany or form part of the EIDP. If there is no EIDP then it should be referenced on this report.

Note 2: All items dispatched from the Laboratory must have a Dispatch Note completed and signed, with a copy filed in the appropriate section of the EIDP.

No.	Procedure	Comments (Include NCR Number if applicable)	Check N/A or ✓
1.1	Is the documentation complete		✓
1.2	Is the accompanying documentation compliant with project requirements		✓
1.3	Note DRB/MoM Document Number, minutes and note any discrepancies with respect to agreements recorded. OR attach copy of minutes.		
1.4	Additional Remarks		

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SECTION 2: INSPECTION OF CONTAINERS

No.	Procedure	Remarks (Include NCR Number if applicable)	Check N/A or ✓
Transport Containers – External condition.			
2.1	Inspect the outside of the containers for obvious mechanical damage: Cracks, fasteners/locks clips, physical damage, dents or scratches etc. Handling provisions, Other damage	Foot print on one case with contents document holder torn & list missing	✓
2.2	Markings for description and destination		✓
2.3	Packing / unpacking instructions	Unpacked by LAM Gerard Rousset & Alain Origne.	✓
2.4	Warning labels relating to handling, lifting, stacking limits		✓
2.5	Additional Remarks Check security of container		
Transport Containers – Internal condition			
2.6	Check environmental monitors such as humidity indicators, shock recorders and record the location and readings on the inspection	5g & 15 g covering all axis fitted to all Mirror boxes None tripped.	✓
2.7	Check mounting fixtures or brackets and screws, padding and packing.		✓
2.8	Additional Remarks Check security of container		

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SECTION 3: VISUAL INSPECTION OF HARDWARE

Insert one copy of the following section for each configuration item, OR Individual unit.

Note: Section 3 when used with the front sheet may be used as a complete report for small units prior to final closure, if this is done confirm unit interior check carried out before closure Interior check will be limited to visible items.

CI NUMBER		SERIAL NUMBER	
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No.	Procedure	Remarks (Include any NCR Numbers if Applicable)	Check N/A or ✓
3.1	Check contents against shipping list	Lists attached	✓
3.2	Note external contamination		✓
3.3	Inspect the outside for physical damage, cracks, dents, scratches		✓
3.4	Degradation of painting		✓
3.5	Mounting provisions		✓
3.6	Fasteners correctly locked		✓
3.7	Check for protective covers on all electrical and fluid connectors and on optical and sensor apertures		N/A

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SECTION 4 CHECK ALL CONNECTORS NOT APPLICABLE

**SECTION 5 CHECK ANY HARNESS AND ASSOCIATED
CONNECTORS ASSOCIATED WITH THE HARDWARE NOT APPLICABLE**

SECTION 6 PRE CLOSURE CHECKS NOT APPLICABLE

SECTION 7: VERIFICATION OF INTERFACES NOT APPLICABLE

1 Shipping Documents

The delivered parts are the mirrors for the FM model of the spectrographic and photometric channels of the SPIRE instrument.

The mirrors are delivered in 3 containers:

- Container 1 contains the following mirrors :

Mirrors	Id Number	Used for
SM7	03	Spectrometer
SM12A	02	Spectrometer
SM12B	02	Spectrometer
PM10	02	Photometer
PM11	03	Photometer
TM	02	Witness mirror

Table 1: Container 1 - mirror list

- Container 2 contains the following mirrors :

Mirrors	Id Number	Used for
CM3	03	Photometer
CM5	02	Photometer
PM6	02	Photometer
SM6	02	Spectrometer
SM8A	03	Spectrometer
SM8B	03	Spectrometer
SM11A	03	Spectrometer
SM11B	02	Spectrometer
TM	03	Witness mirror

Table 2: Container 2 - mirror list

- Container 3 Contains the following mirrors :

Mirrors	Id Number	Used for
PM7	03	Photometer
PM8	02	Photometer
PM9	01	Photometer
SM9A	02	Spectrometer
SM9B	01	Spectrometer
SM10A	03	Spectrometer
SM10B	02	Spectrometer
TM	06	Witness mirror

Table 3 : Container 3 – mirror list

The identification number is engraved on the rear part of the mirrors

A picture of the containers is given here after

LABORATOIRE D'ASTROPHYSIQUE DE MARSEILLE

CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE
Traverse du Siphon - 12^{ème} Arr. – B.P 8 – 13376 Marseille Cedex 12
Tel 04.91.05.59.00 – Fax 04.91.05.69.69

Container weight 19 kg (size 80 cm x 60cm x 40 cm)

Directly inside container:

- 1 Aluminium mount with black angle bracket (long 60 cm) ✓

Inside a plastic case:

- Diffuser screen for Minolta camera (Macro photography) ✓
- Remote control for Minolta camera ✓
- Optical device (magnifier) for M2 tool ✓
- Batch of stainless screws M8 (about 10) and two kind of washers ✓
- 2 aluminium cylinders for M2 tool (thickness < 10mm) ✓
- 1 blue screw clamp ✓
- 1 drill gauge 8mm ✓
- 1 bore gauge 8mm ✓
- 1 great aluminium plate 45cm for M2 tool (screen) ✓
- 1 batch of CS Tools for photometer and spectrometer ✓
- 1 batch of plastic protection for mirrors ✓

Inside a Plexiglas box:

- Optical tool for simulation of the spectrometer mechanism (4 aluminium mirrors mounted on a aluminium structure) *S.M.E.L.* ✓