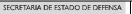


INSTITUTO NACIONAL DE TECNICA AEROESPACIAL Doc. Nº.:MA-INS-4740-002-INTA

**Issue:** 02

GENERAL DATA				
Equipment / System name:	Magnetic Cleanliness Facility			
Equipment / System number:	4740-K11			
Alias:	K11			
Location:	INTA Torrejón, K11 building			
Picture(s):				

	TESTING CAPABILITIES			
Types of tests that can be carried out in the Facility	<ol> <li>Magnetic cleanliness of equipment and mechanical parts: DC / AC magnetic field measurements, determination of the remaining and induced magnetic moments.</li> <li>Magnetization and demagnetization.</li> <li>Magnetic field susceptibility tests: DC, low frequency magnetic fields up to 1 kHz.</li> <li>Calibration of magnetometers.</li> <li>Thermo-magnetic signature.</li> </ol>			
Maximum dimensions of the equipment under test	1m x 1m x 1m.			
Restrictions / Limitations	EUT Weight < 300 kg			
Remarks	<ul> <li>Built in an area of minimum magnetic field gradient using non-magnetic materials.</li> <li>Temperature and humidity control is achieved by a system located 25 m away from the building and controlled remotely.</li> <li>Provided with two systems of three axes coils.</li> <li>The system is provided with a rotary table whose motor (with a precision better than minutes of arc) is placed at 6 m to avoid magnetic contamination.</li> <li>Geomagnetic compensation &lt; 5 nT. in a volume of approx. 1 meter in diameter.</li> <li>The facility has specific mobile coils for demagnetization with programmable AC / DC power supply up to a peak of 10 mT.</li> </ul>			
TECHNICAL CHARACTERISTICS				
Frequency Range	DC – 1KHz.			
Magnetization/Demagnetization Maximum level	500 μΤ			



MINISTERIO DE DEFENSA



**Issue:** 02

Maximum level of magnetic field intensity of the AC demagnetization system according to the waveform of the ECSS regulation	10 mT. peak		
	<u>9 x Mag-03 Flux</u>	Gates:	
	Bandwidth: 3 kHz		
	<ul> <li>Measurement range: from ±70µT to ±500µT</li> </ul>		
	Noise:		
	basic	>10 a 20pTrms/√Hz	
	version	a 1Hz	
	standard	6 a ≤10pTrms/√Hz	
	version	a 1Hz	
	low noise	<6pTrms/√Hz a	
	version	1Hz	
Magnetometers / Data Acquisition System	<ul> <li><u>7 x Mag-13 Flux(</u></li> <li>Bandwidth: 3 kHz</li> <li>Measurement range</li> <li>Noise:</li> </ul>	<u>Gates</u> : ge: from ±70μT to ±100μT	
	standard	6 a ≤10pTrms/√Hz	
	version	a 1Hz	
	low noise	<6pTrms/√Hz a	
	version	1Hz	
	DAS1-10 Data Acquisiti capacity of up to 10 sen	on System with simultaneous measurement sors.	
Temperature Testing	-100 °C to 40 °C		

## DRAWINGS / SCHEMES (if applicable)

Not applicable

