

ANNEX VIII

GUARANTEED DATA SHEET

ENGLISH VERSION

GUARANTEED DATA SHEET

SCANNING ELECTRON MICROSCOPE - SEM		
Description	Required Feature	Guaranteed Feature
Minimum magnification	7x or smaller	
Maximum magnification	1.000.000x or greater	
Secondary electrons resolution - SE	3 nm at 30 kV in High-vacuum mode or superior	
Backscattered electrons resolution - BSE	4 nm at 30 kV in Low-vacuum mode or superior	
Electron-beam's acceleration	Range from 0.2 to 30kV or greater amplitude	
Electron-beam's flow	Range from 1 picoAmpère to 2 microAmpère or greater amplitude	
Sample station fully motorized and automated	05 concentric axis (with eucentricity in all work distances) with fully motorized and automated movements.	
Minimum dimensions of the sample accommodated in the analysis chamber	Diameter or equivalent edge: 220 mm Height: 80 mm	
Minimum movement of the sample stage in X, Y, Z, R e T	X = 45mm Y = 45mm Z = 45 mm R = 360° T = -5° a +70°	
Environmental pressure range	Minimum: less than or equal to 10 Pa Maximum: equal to or greater than 2000 Pa	
Resolution image generation	3072 x 2304 pixels or higher	
Peltier type or similar sample cooling system with operation range of 0 to 70°C or higher	Yes	
Features of the EDS detector	Resolution in Mn K α : 127eV or superior Area active minimum: 20mm ² Count rate: 50.000 cps	
Metallization system for samples, coating materials	Gold e carbon	
Minimum dimensions of the sample metallization system	Dome: 100 mm de diameter Height: 100 mm	
Supply of all consumables for 02 years of equipment operation, according to item 3 of the Technical Specifications	Yes	

SIGNATURE OF THE PROPOSER

_____/_____/_____
DATE

This data sheet shall be duly completed and signed by the Proposer and attached to its Proposal.