## ANNEXURE-I

## **TECHNICAL SPECIFICATION**

Sl. No.	VSSC Specification	Qty.
1	High density Film Digitizer	1 No.
	a. Scanning Light Source He-Ne Laser (wavelength: 633nm)	11101
	b. Laser source class : Class II-b and device: class- I	-
	c. Sensor : Photomultiplier	-
	d. Film width to be scanned : around 14"/35cms (max.) and 60mm (min.)– small/cut films	
	e. Scan Resolution: Min 50µm to 500µm	
	f. Optical Film Density: 0 to 4.7 D	
	g. Interface: USB 2.0 or better	
	h. Pixel Depth: 12 Bits/Pixel (4096 gray levels) log(min) adjustable	-
	i. Scan Speed: 7 sec. in 200µm mode. Not more than 2 min. in 50µm mode	
	j. Self calibration	
	k. Power: Input 230 V AC 50Hz $\pm$ 10%	-
	1.       The Digitizer shall meet the requirements of ASTME1936, ISO/EN 14096-1 & -2 Standards &	-
	Equipment Class DS specified at ISO/EN14096.	
	m. The scanner shall be tested, approved & certified by BAM –Germany.	
2	Operating System Specifications	1 Set
		1361
	<ul> <li>a. Windows 10 professional or better</li> <li>b. Intel Xeon Processor E5-2650 or better</li> </ul>	-
	c.       RAM Memory 64 GB DDR4 or better         d.       Standard LED Colour Monitor-27 inch	-
	e. Graphics card NVIDIA with 8 GB or better with multiple graphics card output and multi	
	monitor support	
	f. Hard Disk 2 TB, 7200 RPM Enterprise SATA HDDs	
	g. DVDRW drive	-
	h. USB 2.0 ports or above	-
	i. Microsoft Office 2016 installed with licensed media	
	j. External hard disk 4-TB or better	
3	High Resolution Grayscale Monitor	1 11
	a. 5 MP, 21.3 inch Monochrome LCD Monitor with Dual Standard configuration	1 No.
	b. Type: Monochrome (IPS)	-
	c. Native resolution: 2048 x 2560(4 : 5 aspect Ratio)	-
	d. Viewable Image Size- 300 x 400 mm or better	
	e. Viewing Angles: 178°/178°	-
	f. Brightness : $2500 \text{ cd/m}^2$	-
	g. Recommended brightness for calibration: 600 cd/m <sup>2</sup> , 1000 cd/m <sup>2</sup>	-
	h. Contrast ratio - 1700 : 1	-
	i. Video Input terminals: DVI-D (dual Link)x 1, Display Port x 2	-
	j. Suitable interfacing cables are to be supplied to connect to PC to transfer Data and Power	
4	Interfacing Software requirements	
	a. 64 bit Drivers for scanner	1 Set
	b. Long Film scanning in 64 bits upto 35 x 500 cm	
	c. Complete package of functions for viewing and managing images	-
	d. Full support TIFF/DCM/JPG in 8 bit and 12 bits	
	e. Up gradation of scanning and viewing function for a period 12 months or more	
	f. Suitable image interpretation and measurement tools such as filtering/image enhancement	
	/dimension measurements/defect marking/stitching of images etc.	
	g. Installation and instruction manuals in English	
	h. Suitable viewing, searching, organizing and measurement modules inbuilt.	
	i. Fully Licensed Driver software	
	j. Images- 8 & 12 bit TIFF images	1
	k. Images shall be EN 14096 compliant	1
	1.     NDT report preparation options inbuilt.	1
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