

## Annexure-1

### Specifications of Chromatic Confocal Sensors and Controller for Thickness Measurement

<b>Description</b>	<b>Specification</b>
<b>Sensor One</b>	
Measuring Range (n=1.5)	Greater than or equal to 90 $\mu\text{m}$
Start of Measuring Range / Working Distance	Greater than or equal to 40 mm
Minimum Measurable Thickness (n=1.5)	Less than or equal to 3 $\mu\text{m}$
Maximum Sample Slope	Greater than or equal to 5 degrees
Spot size	Less than or equal to 50 $\mu\text{m}$
<b>Sensor Two</b>	
Measuring Range (n=1.5)	Greater than or equal to 300 $\mu\text{m}$
Start of Measuring Range / Working Distance	Greater than or equal to 10 mm
Minimum Measurable Thickness (n=1.5)	Less than or equal to 20 $\mu\text{m}$
Maximum Sample Slope	Greater than or equal to 10 degrees
Spot size	Less than or equal to 15 $\mu\text{m}$
<b>Controller</b>	
Modes of Operation	Chromatic Confocal Sensing and/or Confocal Spectral Interferometry
Acquisition Rate	Greater than or equal to 2000 Hz
Number of Channels	Two
Multi-layer Thickness Measurement	Required (Three or more layers)
Synchronization (IN and OUT)	Required
<b>Software Requirements</b>	Should be capable of measuring and reporting single/multi-layer thicknesses
<b>Accessories</b>	All the necessary accessories, including two sets of cables of length at least 3 m each.

<b>Scope of supply</b>	<b>Complete chromatic confocal sensing/measurement system including two sensors, one controller, data acquisition software, and necessary accessories including cables</b>
<b>Other Requirements</b>	
Prior business experience	<b>Supplier should have supplied similar equipment to reputed academic institutions, research laboratories and/or industries. In support of this supplier must submit a list of customers using the sensor.</b>
Packaging charges	<b>Should be included in the quotation</b>
Transportation charges	<b>Should be included in the quotation</b>
Delivery	<b>10-12 weeks</b>
Warranty	<b>At least 1 year</b>