

## ISO 9001:2015 CERTIFIED

## KALPANA SCIENTIFIC KONNAGAR, HOOGLY, WEST BENGAL, INDIA

Email: <u>kalpanascientifickolkata@gmail.com</u>, Website: <u>www.kalpanascientific.com</u> Call: 7029894454

## **Technical Specifications sheet of Multi Function Rotor Experiment Bench**

## Machine fault simulator bench: The Instrument shall have the followings

- Experiment Bench with speed controller
- Data acquisition unit
- Eccentric rotors for balancing experiment
- Bent shaft
- Good and combined fault ball bearing set with complete rotor setup
- Tachometer sensor with TTL output
- Eddy current probes with signal conditioner
- Velocity probe with signal conditioner
- Uni-axial accelerometer with signal conditioner
- Teaching Software

Sl.	Item Name	<b>Specifications</b>	Compliance
No.			(Yes/No)
1.	<b>Experiment bench with</b>	Servomotor with speed upto 12000 RPM	Yes
	speed controller	Motor controller unit with speed display	
2.	Data Acquisition	Channel: 6 (Including the conditioner as per)	Yes
	System	DC input suitable for Eddy current probes-3 channels	
		ICP/IEPE: 1 channel	
		AC/DC input suitable for velocity probe: 1 channel	
		TTL/Tacho: 1 channel	
		Sampling: 100KHz	
		Resolution: 16bits	
		PC Interface: USB/Ethernet	
3.	Photo electric speed	Range: 0-30mm	Yes
	sensor	Speed: 0-12000 RPM	
		Shall be compatible to the proposed DAQ system	
4.	Eddy current probe	Range: 2mm	Yes
	with conditioner driver	Sensitivity: 4um/v or better	
		Frequency Range 0-2000Hz	
		Driver -24V suitable for the proposed eddy current sensor	
	W.L. & C	D1	V
5.	Velocity Sensor	Range: 1mm	Yes
		Sensitivity: 30Mv/mm/sec or similar	
		Natural frequency: around 10Hz	

6.	Accelerometer	Sensitivity: 10mv/m/sec <sup>2</sup> or similar	Yes
		Range: 0.5 to 6000 Hz	
		Max amplitude: 500 m/sec <sup>2</sup>	
		Type: Unlaxial	

Installation & demonstration shall be provided.

Warranty: 1 year

Delivery Period: 16 weeks delivery period is preferable for us.

