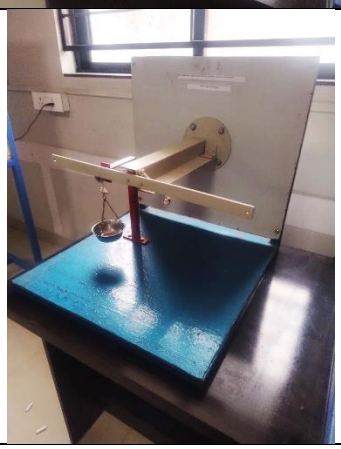
Sanjay Ghodawat University, Kolhapur

Established as a State Private University under Govt. of Maharashtra Act no. XL dated 3rd May 2017

Empowering Lives Globally !

DEPARTMENT OF AEROSPACE ENGINEERING

AIRCRAFT STRUCTURES LABORATORY

S.No	Equipment Name	Description	Equipment Photo
1	**Open Channel Section Setup**	• C Section 50mm Flanges 50mm web • Length 50cm • Thickness 2mm • Shear center Location • Loads up to 400grms • Distance between two loading 500mm	
2	**Closed Channel Section Setup D Section**	• Length 500mm • Thickness 2mm • Shear center Location • Loads up to 400grms • Distance between two loading 500mm	
3	**Unsymmetrical Bending Z Section Setup**	• Z Section • Flange width 50mm • Web 50mm • Loading condition: Horizontal and vertical loading	

4	**Combined bending and Loading Setup**	• Bending and Torsion loading setup • Strain Gauges used to find strain values • Length of the beam 340mm • Loading point from center of beam 210mm	
5	**Wagner Beam Setup**	• Thickness 1mm sheet • Breadth 225mm • Depth 270mm • Youngs Modulus 70GPa • Area of Flange 390mm^2 • Area of Stiffener 390mm^2 • Load Cells to calculate Loads • Strain gauge to measure strains	
6	**Simply Supported Beam Setup/Fixed Support Beam**	• Length of beam 800mm • Thickness of beam 4mm • Width of the beam 30mm • Young modulus of the beam 200Gpa	
7	**Cantilever beam Setup**	• Length of beam 470mm • Thickness of beam 4mm • Width of the beam 30mm • Young modulus of the beam 70Gpa	

8	**South well plot**	• Fixed - Fixed End Condition
		• Fixed - Pinned End Condition
		• Pinned- Pinned End Condition
		• Length of Column 900mm
		• Diameter of Solid Column 10mm
		• Hollow Column
		  o Outer Diameter 9mm
		  o Inner Diameter 7mm
		• Materials of the column-Steel, Aluminum, Carbon
			

9.	**Non Destructive Testing Kit- Dye Penetrant**	**Dye Penetrant Kit** • MR85 Cleaner/Remover • MR62 Penetrant • MR70I Developer	
10	**Non Destructive Testing Kit- Magnetic Particle**		
11	**Non Destructive Testing Kit- Ultra Sonic**		