



**INDIAN INSTITUTE OF TECHNOLOGY BOMBAY**  
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## **Technical Specifications for Scissor for Z axis and Sand Spreader**

### **A. Scissor type Mechanism for Z axis**

Designing as per concept design from RML  
Ball screw and guide unit for motion  
Motor mounting  
Bellows for Sand Box  
Fabrication and Manufacturing of Scissor mechanism

### **B. Belt Driven type Sand Spreader**

Dual Belt Driven Actuators with total stroke 1500mm  
1.4Nm Servo motor and Servo drive with EtherCAT  
Gearbox Ratio 10:1  
Power and feedback cables 5mtrs  
Bellows for Belt driven actuators  
Mechanical structure for Belt driven actuator system  
Aluminium roller based conveyor  
1.4Nm Servo motor and drive with EtherCAT  
Gear box ratio 20:1  
Power and feedback cable 5 mtrs  
Aluminium Hopper  
Fabrication and Manufacturing  
With Installation.