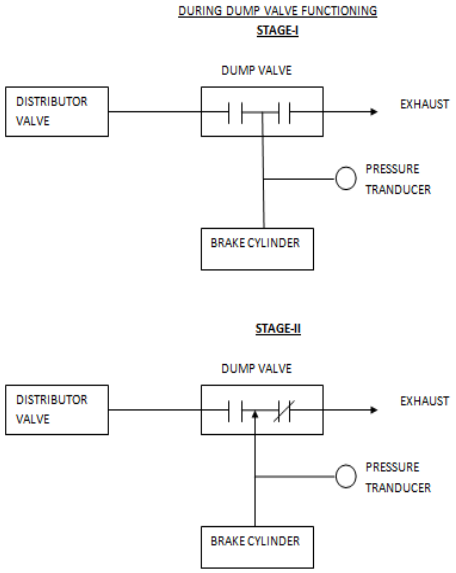
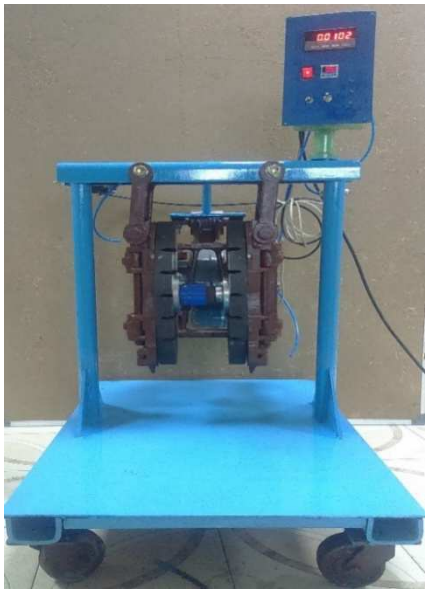
Testing of WSP System Functioning – CW/PER - February 2019

- The use of Wheel slide protection system depends on the reduction force applied in the brake disc.
- Brake is applied to the brake disc through brake pads by actuation of brake cylinder.
- The applied braking force is directly proportional to the air pressure available in brake cylinder.
- To simulate the reduction in brake power/force applied to the brake disc gadget is developed by staff of Mechatronics Lab/MW.
- This gadget consists of

I	Load Cell	IV	Dump Valve
II	Load Indicator	V	Brake Cylinder
III	Pressure transducer cum indicator	VI	Solenoid valve





- Dump valve works in two stages. During wheel sliding dump valve cuts the further entry of air to the brake cylinder. If the condition doesn't improve dump valve vents the air from the cylinder so that the force applied to the brake disc reduces rapidly and wheel starts rotating.
- The above principle of working is simulated in this gadget

This test gadget can be used to test the entire working of WSP system effectively.