

## SEVEN-POST-RIG



Our seven-post rig adapts to most vehicles and is a valuable development and proving tool for original equipment manufacturers and high-performance car developers. Our baseline configuration, featuring one frontal downforce actuator and two at the rear, is ideal for optimising the vertical dynamics of cars generating large amounts of downforce.

The versatile and robust seven-post rig also carries out complete car suspension friction measurements and inerter mass optimisation. For road vehicles also a four-post mode is available (i.e. comfort rating).

### APPLICATIONS:

- Track data replay with excellent correlation to the track
- Set-up optimisation for races (prior and during event)
- Definition of frequencies and roll, pitch, heave, warp stiffness
- Vibration measurements using synthetic or track inputs
- Complete car suspension friction measurements
- Noise, vibration, harshness (NVH) investigations
- Inerter mass optimisation
- System checks on ride height control systems

## SPECIFICATIONS

<b>Max. Wheel Pan Force</b>	29kN
<b>Max. Dynamic Wheel Pan Stroke</b>	±125mm
<b>Max. Downforce Actuator Force (down)</b>	15.6kN
<b>Max. Downforce Actuator Force (up)</b>	8.9kN
<b>Actuator Stroke</b>	±125mm
<b>Max. Vertical Wheel Pan Acceleration</b>	20-30g
<b>Peak Velocity of Wheel Pan @ 10Hz</b>	4.5m/s

## MAX. WHEEL PAN DISPLACEMENT @

<b>7Hz</b>	200mm
<b>10Hz</b>	100mm
<b>20Hz</b>	12mm
<b>30Hz</b>	10mm
<b>50Hz</b>	3mm
<b>100Hz</b>	1.5mm

