

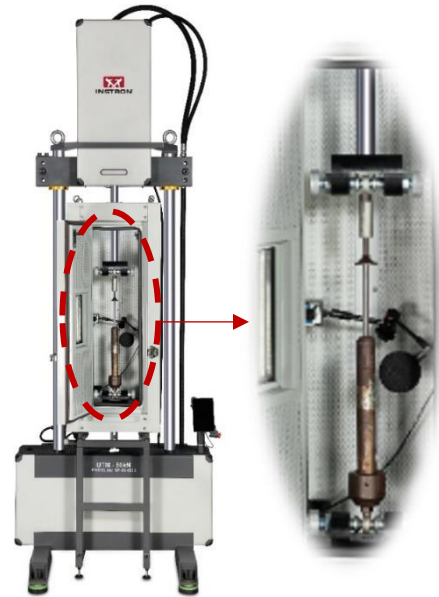
# NOISE DETECTION TEST SYSTEM

## BI-7086N

A typical passive vehicle damper is a compromise between handling properties of a car, passenger comfort and safety as well as NVH (Noise, Vibration, and Harshness). The dominant source of noise in today's vehicles is from the suspension. This knocking noise (a transient of structural noise) is a result of the subtle vibration of chassis components. It occurs due to the vibrations of the piston rod in the shock absorber, making it a key element of a vehicle suspension system. The piston rod vibrations are caused by the continuous opening and closing motion of the valve, valve impacts, dry friction during stroking inversions and fluid cavitation. The purpose of our system (intended to measure the level of piston rod noise as a quality check of shock absorber in a production line) is ultimately to enhance overall vehicle performance, comfort and to facilitate a seamless transportation

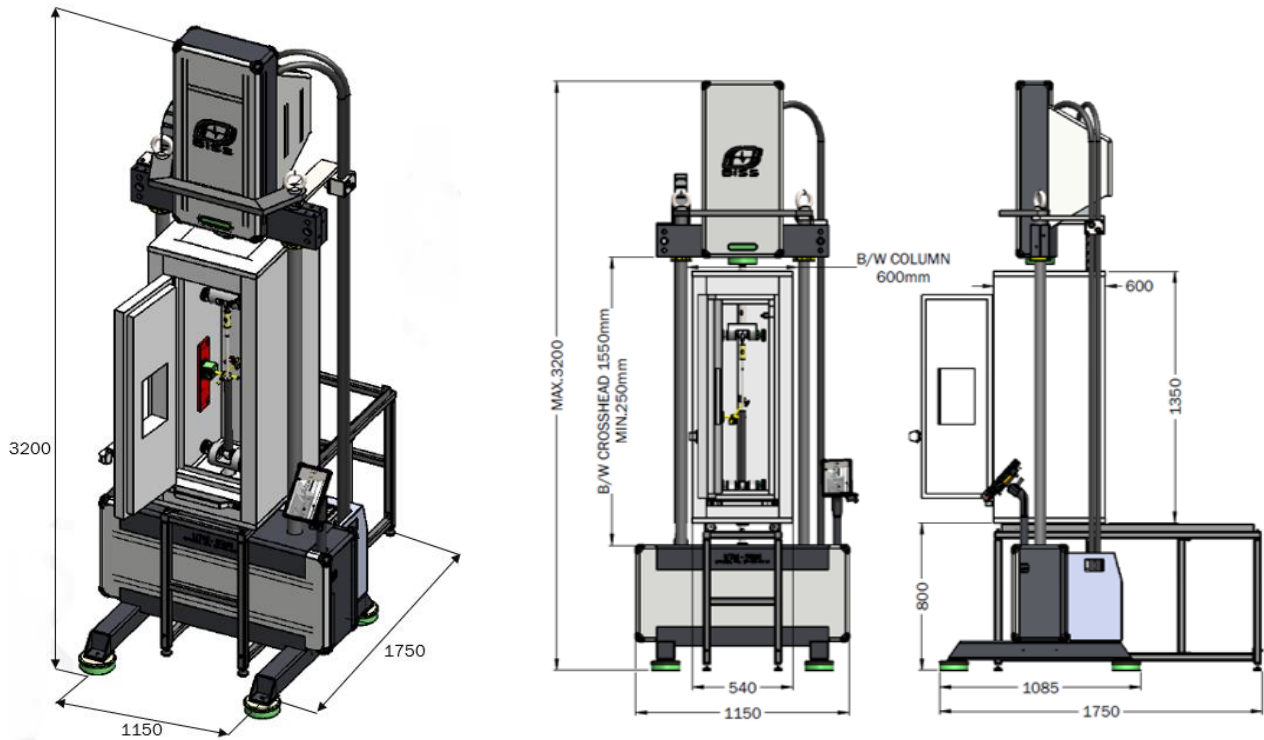
### FEATURES

- Stand-alone fully integrated test system equipped with state-of-the-art controller and energy efficient servo-controller pump.
- An-echoic chamber housed within the horizontal and the vertical space of the test system that isolates external noise sources down to 40dB.
- Industry standard microphone mounted within the an-echoic chamber to measure noise from the shock absorber in the range of 40 – 160dB.
- Equipped with adjustable mounting for microphone positioning.
- User friendly application software with intuitive graphics featuring acoustic signal analysis in time and frequency domain.
- Noise correlation with damping force/piston stroking/acceleration.
- Noise measurement by constant amplitude stroking/road-load data stroking



### TEST RESULTS

## SYSTEM DIMENSIONS



## SPECIFICATIONS

Model		BI-7086N
Dynamic Load Capacity	kN	15
Total Actuator Stroke	mm	150
No. of Columns		2
Actuator Position		On Top Crosshead
Frame Stiffness	MN/m	500
Loadcell Accuracy		±0.5% of reading down to 1/500 of load cell capacity
Column Clearance	mm	600
*Daylight Opening	mm	1200
Electric Supply		380/400/415 VAC, 3 Ph, 50/60 Hz
Max. Frame Weight	kg	750

## NOTE

Please refer to individual brochures for information on the selected power packs & accessories.  
Optional vertical & horizontal daylights are available  
Specifications are subject to change without prior notice

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