

## DAMPER TEST SYSTEMS

### TESTING RAILWAY SHOCK ABSORBERS BI-7080R

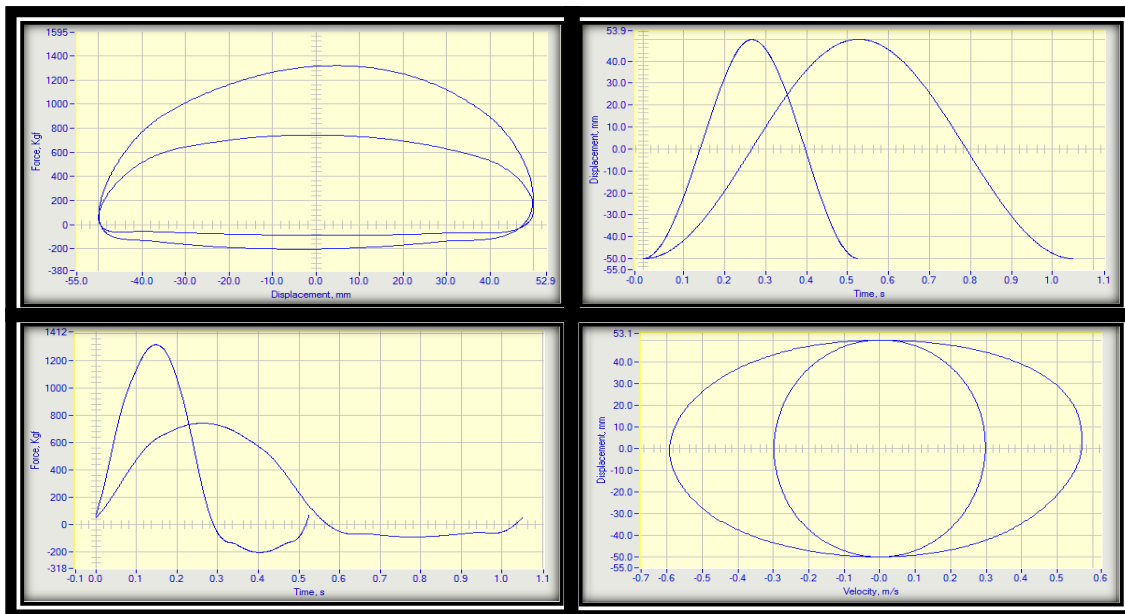
The BI-7080R is meant to test shock absorbers used in the tilting position, as used on railway coaches. The machine is used to ensure that assembled parts meet specified performance specifications. It is the result of over seven years of R&D with a focus on harmonizing tilt test requirements.

#### FEATURES

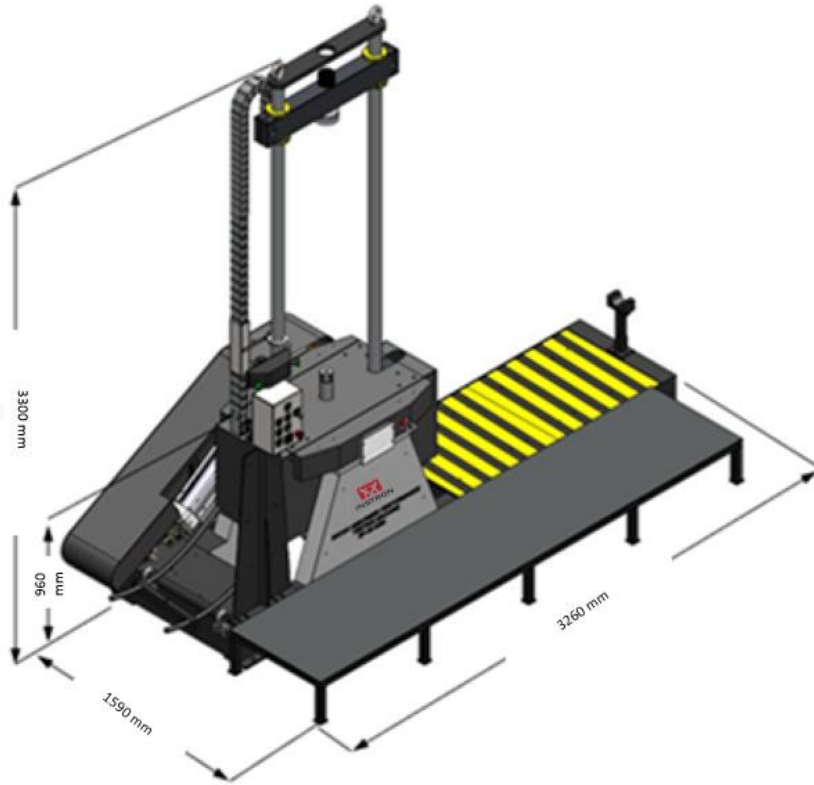
- Two column load frame with a bottom mount actuator
- Hydraulic/Manual tilting option for the load frame to test shox/strut at user defined angle between 0 to 90°.
- Evaluation of seal friction, gas charge, static and dynamic response
- Quick change jaw faces and spacers to switch between parts
- Proprietary low noise, servo-controlled pump for energy efficiency. Down to about 40% of most conventional pumps
- Contamination insensitive servo-hydraulics with readily available COTS spares
- Dust proof air-conditioned enclosures for electrical and electronics



#### TEST RESULTS



## SYSTEM DIMENSIONS



		BI-7085R
Dynamic Load Capacity	kN	50
Total Actuator Stroke	mm	150
Column Clearance	mm	600
Vertical Daylight measured b/w actuator and loadcell	mm	1500
System weight	kg	1400

## COMMON SPECIFICATIONS

Actuator stroke: 150 mm as standard  
 Displacement resolution: 0.5  $\mu$ , optional 0.1  $\mu$ m  
 Column clearance: 600 mm  
 Operating / working pressure: 210bar  
 Frequency range of operation: 0.001 to 200 Hz

### Hydraulic Power Supply Voltage Options

380/400/415 VAC, 3 Ph, 50/60 Hz  
 Extra vertical daylight options available  
 24-bit analog data acquisition, 32-bit digital encoder inputs and data logging,  
 40-bit digital servo-loop update  
 Offers accuracy of  $\pm 0.5\%$  (optionally  $\pm 0.25\%$ ) of read out value on stroke, load & channels

## NOTE

Please refer to individual brochures for information on the selected power packs & accessories.  
 Optional vertical & horizontal daylights are available up to 2500mm and 800mm respectively.  
 CE certification on Demand  
 Specifications are subject to change without prior notice

[www.instron.com](http://www.instron.com)



Worldwide Headquarters  
 825 university Ave, Norwood MA 02062 – 2643, USA  
 Tel: +1 800 564 8378 or +1 781 575 5000

India Headquarters  
 #497 E, 14<sup>th</sup> Cross, 4<sup>th</sup> Phase, Peenya Industrial Area,  
 Bangalore – 560058, India.  
 Tel: +91 80 283 60184 Fax: +91 80 283 60047

Instron is a registered trademark of Illinois Tool Works Inc. (ITW). Other names, logos, icons and marks identifying Instron products and services referenced herein are trademarks of ITW and may not be used without the prior written permission of ITW. Other product and company names listed are trademarks or trade names of their respective companies. Copyright © 2016 Illinois Tool Works Inc. All rights reserved. All of the specifications shown in this document are subject to change without notice.