Introduction of BILZ Vibration Technology AG

BILZ Vibration Technology GmbH was founded in 1985, specializing in the field of vibration isolation of high sensitive measurement equipment and machinery. BILZ is a worldwide market leader in this field as a supplier to machine builders and the research centers, as well as the semiconductor industry and their suppliers.
The product range covers a wide range of applications. From isolation of an optical working bench with membrane airsprings to active airspring systems which are protecting highly sensitive machines in the semiconductor industry, there is practically no vibration problem which cannot be solved by Bilz today. The really flexible and reliable engineering allows Bilz, to provide customized solutions with predictable results at a fair price level.


Headquarter in Leonberg/Germany

General information about vibration isolation

Today the need for high effective vibration isolation is increasing because of shrinking structural sizes down to the physical possible minimum and therefore increasing resolutions of inspection and measurement equipment. On the same side the throughput of processing equipment has to be increased to be still economically affordable. Bilz developed a modular interchangeable vibration isolation system that meets your requirements of today and of the day after tomorrow. The level controlled passive airspring system BiAir® provides a superior isolation against sinusoidal and transient disturbances. The actively controlled AIS™ system provides a superior vibration isolation starting at subherz-frequencies without resonance amplification and fastest settling times through easily adjustable control parameters of damping and virtual natural frequency.

BILZ® product line

References

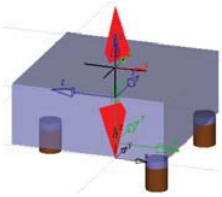
Applied Materials Inc. / USA, Photon Dynamics Inc. / USA, Zygo Inc. / USA, Carl Zeiss AG, HSEB Dresden GmbH, Vistec Semiconducter Systems GmbH, GSI Group, Aerotech Inc. / USA, Schneeberger AG / Swiss, FEI / USA-NL, etc.

BILZ product line and BILZ services for semiconductor, FPD and PV

No matter what technique our customers are using to archive their goals, we're adapting our products to their needs. We help them with our experience out of 30 years in vibration isolation to get the best performance out of their products. Simulation and measuring helps us to anticipate system performances. Thus we're able to engineer the right solution without expensive tryouts. On our in-house test stand we can set up dummy systems to evaluate new system components before installing them in the field. None of our customers is a beta tester; only market-ready systems are leaving our stock. Easy to integrate and setup, both for the mechanical set up and the software parameterization.

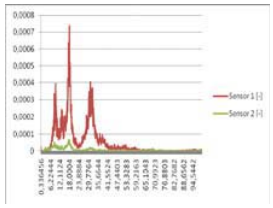
BILZ® Engineering
Custom engineering and construction of steel pedestals are as well as customized isolators made by our versatile and flexible engineering. We're using the latest CAD Software to assure best quality and short development times.

BILZ® Simulation
Computer based simulations and our in-house test stand are allowing us to anticipate system performances and specifications before even manufacturing a single isolator.




Shaker test stand

BILZ® Measurement
A precise on-site measurement allows us and our customer to choose the right isolator technology. We're using state-of-the-art accelerometers and geophones together with high end data acquisition units to provide always a reliable result.



Membrane Air Spring BiAir®
BiAir vibration isolation systems are providing a superior isolation performance with a precise level control down to 10 microns. A high damping and low natural frequencies down to 0,8 Hz are enabling measurements possible even in harsh environments down to submicron resolutions.


FPD-Inspection

Active Isolation System AIS™
Realtime controlled vibration isolation with up to six degrees of freedom. Shortest settling times, superior isolation and highest position control for applications in the (sub-)nano range or semiconductor industry. Boost your tools productivity by the unmatched dynamic control the AIS is offering to you.


Wafer-Inspection

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