Active vibration isolation elements for heavy loads halcyonics_sandwich and duo series
Active Vibration Isolation Heavy Loads
Halcyonics_Sandwich and Duo Series

ABSTRACT
The compact and solid construction of the Halcyonics_Sandwich Series is used with many different sensitive heavy load systems throughout the world. Its load range, beginning at 600 kg (1.320 lbs) allows, e.g. to use SEMs up to their highest possible magnifications even under severe environmental conditions like building vibrations induced by machinery, nearby traffic, air conditioning units, etc. As an alternate solution to the Sandwich Series, Accurion offers the versatile heavy load Halcyonics_Duo Series – they carry up to 400 kg (880 lbs) per element. Two or more of these independent elements are combined to carry loads of 800 kg (1.760 lbs) or more. Only a standard AC wall outlet is necessary to run the system with its integrated controller. It provides vibration isolation unmatched by bulky pneumatic isolators. The easy manual adjustment procedure allows exact setting of the isolating units to optimum performance.

APPLICATIONS:
Applications for the Halcyonics_Sandwich Series include:
• SEM
• UHV STM
• Semiconductor Machinery
• ... and many more

FEATURES
• Modular design: two different Sandwich sizes – five load ranges
• Standard AC power is sufficient – no compressed air necessary
• Isolation starts at 1.0 Hz – reaching >98.2% at 10 Hz
• Separate Controller – no heat dissipation interferes with the experiment
• Active Control eliminates resonance frequencies – settling time only 0.3 s

BENEFITS
• Supreme performance even under severe environmental conditions: Active isolation with the Halcyonics_Sandwich Series starts from 1.0 Hz and is active until 200 Hz (and passive above 200 Hz) ideal to dampen vibrations caused by machinery, air conditioning systems, the shaking of buildings, vibrations caused by nearby traffic, etc.
• Easy to install: SEM lifting tools available
• Reliable systems: after passing an internal 48-hour run-in test we are happy to provide a 2 years guarantee
• Qualified service: for standard and customized solutions factory trained persons will support you in finding the optimal solution for your application and assist you with the installation
• Low voltage DC electromagnetic actors avoid high voltage used for Piezo systems = no interference with your delicate instrumentation
• Almost Off-the-Shelf availability and rapid delivery will allow you to start your work right away and shorten the time to publish your results
• Service hubs in Europe, US and Asia for fast support
Transmission graph of SW 1000 - measured at a velocity of 100 μm/s, with a payload of 60 kg (132 lbs)

RECOMMENDED ACCESSORIES

- SEM Lifting Tool
- Customer specific size and load range
- Site vibration survey to estimate improvement
- Factory trained on-site setup assistance
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