



MASON-DALLAS .INC

NEWSLETTER

THE VIBE OF DIAMONDS

AUGUST 2017
HVAC
EDITION



- WHY do we have the reputation of being the #1 Vibration Control Experts in the region?
 - ♦ 120 years of combined experience in the field of vibration & noise control.
 - ♦ Unparalleled service, knowledge and "our word is our bond" attitude.
- Since 1978 WE SUPPLIED OUR PRODUCTS ON MOST OF THE PREMIER PROJECTS IN THE REGION. A FEW ARE SHOWN BELOW.



777 Main Street, Fort Worth, TX
Provided Vibration/Noise Control Products



Audubon Aquarium of the Americas, LA
Provided Vibration/Noise Control Products



Fountain Place, Dallas, TX
Provided Vibration/Noise Control Products



Peir One Hdqtrs FW, TX
Provided Vibration/Noise Control Products



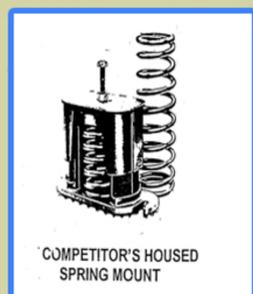
Open Springs: Round Them Up, Move Them Out!!!

We have been a major supplier to the Texas Semiconductor market since 1984. Our first semiconductor project in Texas was the Hitachi facility in Las Colinas. Since then we have provided products on a number of semiconductor projects throughout the state. Whether it is a new installation, retrofit or trouble job we have been the firm who gets the call. These days' most new semiconductor facilities are being built in Asia, however we still get calls when existing facilities are being retrofitted or have a vibration problem.

One such problem job involved a newly installed robotic unit. The robotic unit was part of an assembly line, it was programed to read bar codes and pick out specific parts for product assembly. However, vibration in the structure was causing the barcode to blur and the robot to malfunction.

Well, it was Mason-Dallas to the rescue again!

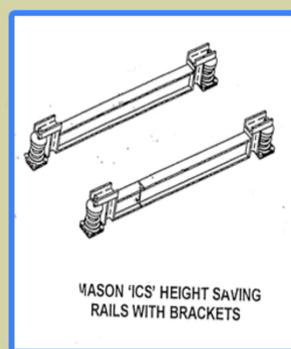
We received a call from the Manufacturer's Facilities Department asking for our help. During our investigation we determined the source of the structure borne vibration was an air handling unit installed on the floor directly below the robot. Even though the air handling unit was mounted on housed spring mounts, enough vibratory energy was passing through the mount housing, into the structure, causing the robot malfunction. Before the installation of the robot, the amount of vibration in the structure was tolerable and did not affect any of the existing processes. But unfortunately, it was too much energy for the robot's delicate chore.



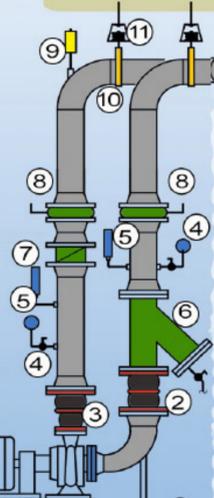
The fix was obvious to us, we recommended replacing the existing housed spring mounts with open spring mounts. Open spring designs (Model SLF) are free standing and laterally stable without the need of a housing. By removing the housings the paths of energy from the unit to the structure are eliminated. Our challenge is to maintain the existing operating height of the unit. By keeping the existing operating height, there is no need to retrofit the piping, ductwork and electrical connections attached to the unit. The major advantages are: no down time, saves the facility owner not only the cost of reworking the piping, ductwork and electrical, but also the inconvenience of possible tenant annoyance or factory shutdowns.



It turned out, maintaining the existing operating height was our greatest challenge. The existing housed spring mounts were too short for us to simply replace them with open spring mounts. The solution: we designed a structural steel rail system with height saving brackets (Model ICS)) to slide under the unit and maintain the existing elevations. We designed and fabricated the rail assemblies, at our Euless facility. The installation went off without a hitch and the vibration issue was resolved. The robotic unit was finally paying for itself now doing its job flawlessly.



This is another example of Mason-Dallas to the rescue! Whether it's a new project or a vibration and/or noise problem, make us your first call, at 817 - 267 - 8651.



- 1) MASON 'BMK' INERTIA BASE
- 2) MASON 'SFDEL' SAFEFLEX
- 3) MASON 'SFDCR' REDUCING SAFEFLEX
- 4) TRERICE PRESSURE GAUGE
- 5) TRERICE THERMOMETER
- 6) MUELLER 'Y' STRAINER
- 7) MUELLER SILENT CHECK VALVE
- 8) MUELLER BUTTERFLY VALVE
- 9) MAID-O- MIST AUTO AIR VENT
- 10) C&P CLEVIS HANGER
- 11) MASON '30' SPRING HANGER
- 12) FIELD FABRICATED ANCHOR
- 13) HYSSPAN '3600' EXPANSION JOINT
- 14) MASON 'ASG' SLIDE GUIDE

PRODUCT SHOWCASE





CONTROLS
SELF REGULATED HEATER
CABLES
MINERAL INSULATED
HEATER CABLES



AUTOMATIC AIR VALVES
JACOBUS® STEAM VENTS
VERTICAL RADIATOR STEAM
VENTS



PENETRATION SEALS
WALL SLEEVES

MANUFACTURER'S CORNER

MASON INDUSTRIES, INC ISOLATION OF GO-CART TRACK

The Minneapolis Mall of America is the largest shopping mall in the United States and perhaps the world. It is so large, it houses an Aquarium and a children's Amusement Park.

They just added another kid's complex called SMAAASH. SMAAASH includes simulators, video games, and a complete go-cart track. Management was aware that the noise and the vibration from the go-carts would drive the other tenants crazy, so the Mall's management team retained ESI (Engineering Systems, Inc.), a Minneapolis based consulting group specializing in Noise, Vibration and Structural Dynamics to avoid that problem before finalizing construction.

Fortunately, the future track was in the vacant 4th floor area. This allowed them to race a go-cart around the empty space and evaluate the noise and vibration transmission to the spaces below. During their "experiment", the building management was deluged with noise complaints, which made it a must to support the track as an independent, isolated structure.

Tony Baxter of ESI contacted Mulcahy our Minneapolis representative, for assistance in matching our isolation products to their study. ESI determined that the cars running down the ramps would produce the highest energy levels and recommended 2" deflection spring isolators as supports. These soft low frequency supports eliminated the transmitted vibration as predicted, but with the high variable loads of the passing carts, excessive track movement was another concern. As the carts break and turn, they impose lateral loads on the track, so ESI incorporated both vertical and horizontal isolated restraints to limit the motion as shown below.

We very much appreciate ESI letting us help work on this very interesting project. Whether you are isolating a go-cart track, a whole building exhaust fan, or anything in between, please give us a call. We will be happy to suggest the right product to meet your requirements, or where the application is complex or you are more comfortable working with a professional consultant, we will put you in touch with our consulting friends who can evaluate your predicament and provide a comprehensive solution.

After almost 70 years of problem solving and a line of products based on experience on virtually every type of application, we look forward to hearing from and helping you.

Best Regards,
Jim Sadler
Jim Sadler
National Sales Manager

Amusement Park located inside The Mall of America



HUMOR



FAMOUS QUOTATIONS

"Our greatest weakness lies in giving up. The most certain way to success is to always try one more time." -Tom Edison



We would appreciate your feedback, please send
Your comments to: Magen_brown@mason-dallas.com