



MASON-DALLAS .INC

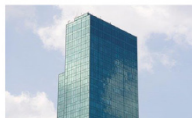
NEWSLETTER

THE VIBE OF DIAMONDS

**MAY 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

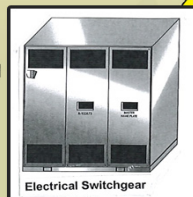


Pearl One Heights FW, TX
Provided Vibration/Noise Control Products

Getting to the Core of the Issue

Beginning in the 1980's, the electrical engineering community caused a paradigm shift in the HVAC Industry. Electrical switchgear, which had been installed typically outside, in parking garages or in basement equipment rooms was now being installed in the office buildings, close to occupied spaces.

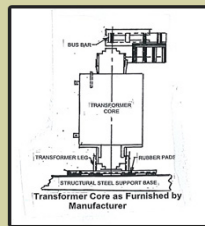
Switchgear is a combination of disconnects, switches, fuses or circuit breakers that open and close the electrical circuits under normal or abnormal conditions. Typical units consist of a high voltage section(s), transformer section and a low voltage section(s) that bolt together forming a large sheet metal box.



By moving the switchgear into the building and closer to the occupants the cost of the equipment and the installation was less expensive. This change led to smaller diameter primary wiring and smaller kVA requirements.

But there was an unforeseen side effect: the transformers were noisy. In addition, the hum and vibration generated by the iron core traveled into occupied areas, making some areas more noisy and difficult to work in.

We first became involved with these noise issues in 1983 when we received a call from BL&P Engineers in Dallas. Like so many other electrical engineering firms, BL&P had recently located the switchgear in an office building. As a result, the transformer hum was radiating in a restaurant located in that same building.



We requested and received submittals of the switchgear. They were 750, 1500 and 2000kVA in size. We reviewed the information and then met at the jobsite with BL&P's Mr. Jack Brady, P.E, the switchgear manufacturer's sales manager and the electrical contractor, W.B Moore.

Since we could not see the source of the challenge (the transformer), from the outside of the unit, the contractor needed to shut down the unit. They removed the transformer section panel and most importantly, discharged the transformer before we could get inside to take measurements.



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MANUFACTURER'S CORNER

On college campuses all over the country, the end of the school year is marked not only by graduations, celebrations, and the start of the summer vacation, but also the mad dash to get major projects and equipment upgrades completed before the start of the following school year.

At the end of May, we received a frantic call from a contractor in the midst of a cooling tower replacement at Carnegie Mellon University in Pittsburgh. They needed the cooling tower support steel frame designs, including certified wind calculations for the code prescribed 110 mph wind, and 4" deflection restrained isolators; **Right Now!**

By the time we got the call there was tremendous pressure on the customer to meet the schedule, and as is typical, they were running behind and were asking for our representative, Walsh Valve, to help get them out of this jam. The cooling towers were scheduled to arrive on site in 6 weeks and without our designs and material the towers could not be set. That gave us 4 weeks, including transit time to Pittsburgh. Just to help matters, the mounts had to be hot dipped galvanized, which normally takes two weeks.

Our team of engineers and production people took the challenge. Complete steel designs, wind load calculations and fabrication drawings were completed within a week. Our production team got the mounts fabricated and ready for the galvanizer within a week and a half. And the galvanizer came through too.

Working with several of these time sensitive projects most of the time, we are usually too busy to stop and take photos. Fortunately, the project manager was so impressed that they were kind enough to share a photo of the last piece of steel being installed only 5 weeks after we received the initial phone call and while indistinct you can see the size of the Isolators too.



Please keep us in mind when you need the impossible. Mason Industries is always there for you.
Best regards,

Raj Prime
Regional Engineering Manager

HUMOR



FAMOUS QUOTATIONS

Plan ahead, remember it
wasn't Raining when Noah
built the Ark!

Author Unknown



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