E.F. SIEGFRIED CO., INC.

"HOT AIR" NEWSLETTER

It's been a little while since our last issue, but hopefully it was worth the wait. This month we are focusing on design considerations for the product line that we are currently promoting. We also have a name change to our sound attenuator line. Read on and enjoy!

Please distribute to all mechanical designers and engineers

First, we would like to bring it to your attention that **Transonics, Inc. has formally changed their name to Dynasonics, Inc.** Transonics was a second trade name under which Dynasonics has operated for several years. A corporate decision was made to permanently retire the Transonics name and operate exclusively as **Dynasonics**.

E.F. Siegfried Co. will now be the **exclusive** manufacturer's representative for Dynasonics. The Transonics catalog that I brought to your office last year will still be useful until I am able to bring you a new Dynasonics catalog. The **two product lines and catalogs are identical** (including model numbers) except that the **Transonics catalog is blue** and the **Dynasonics catalog is red**. The equipment specifications and performance are also identical.

Please make the necessary **corrections** to your sound attenuator **specifications**.

Since I am currently bringing the **Rickard VAV diffuser** catalogs to all of your offices, I thought it might be beneficial to elaborate on some of the **potential uses** of this product as well as some **design considerations** that I may not have covered during my visit.

VAV diffusers are not limited to retrofit jobs, as some manufacturers promote their product's usage. It is a very **energy efficient and economically beneficial product** to design around if you don't have the budget to install a VAV system, and the dient is looking for some degree of individual control. A thermally powered VAV diffuser **adds quick, low-cost, zone control to a constant volume system** and an electronically powered VAV diffuser adds even more control with the added flexibility of an optional wall-mounted adjustable thermostat.

Design considerations are **minimal** when using the Rickard VAV diffuser. The big difference between a VAV diffuser and VAV box is that the **diffuser is a pressure dependant unit** while the **box is typically a pressure independent unit**. One of the myriad benefits of a VAV diffuser is that as the airflow is reduced the outlet area of the diffuser is also reduced, ensuring that **air velocity and throw will be maintained**.

If the diffuser (thermally or electronically powered) is to be installed in a constant volume system, **no major duct revisions** need be done. Equal-friction duct design is acceptable as long as your duct velocities are kept below 1500 fpm (static regain is always acceptable). The only alteration to your duct design will be the possible addition of a bypass damper (available from Rickard) and duct depending upon what percentage of your air handler's air is passing through

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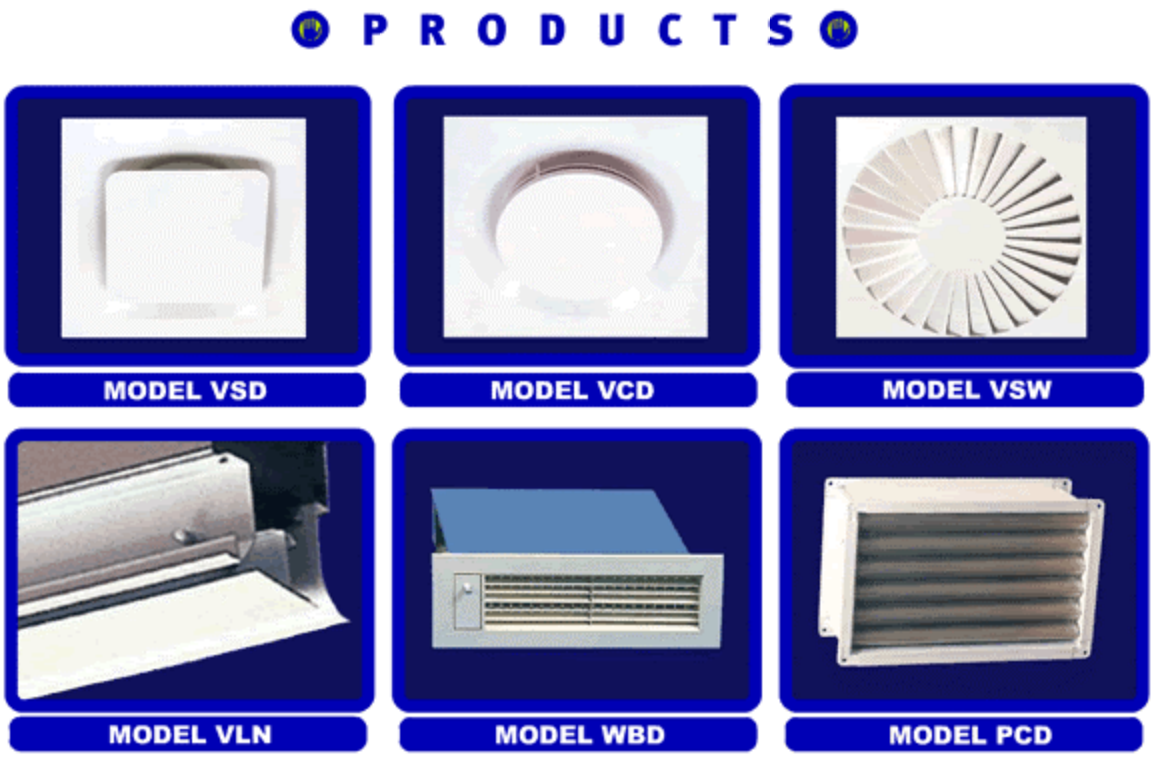
VAV diffusers. The diffuser **operates on low pressure,** so no modifications to your fan are required.

The unit may also be used **in conjunction with VAV box systems**. If boxes are supplying the air to the larger zones, a VAV diffuser may be used in lieu of a box as a way to **provide individual control** in a specific office. The only design consideration here would be the potential use of a pressure-reducing damper (**Rickard model PCD**) to ensure that the unit is not subjected to high pressures. While the suggested operating range of the diffuser (in terms of accuracy) is 0.08" - 0.40" inlet static pressure, **normal diffuser selection procedures** should then be employed (i.e. throw, NC) to optimize your selection.

In addition to the standard plaque face square diffuser, Rickard also offers other style square VAV diffusers as well as **round VAV diffusers**. To complete the line, Rickard also has **VAV sidewall registers** and **VAV slot diffusers**. Now, the versatility of VAV diffusers has been incorporated in these two other types of air outlets to give you as large a selection as possible when designing your HVAC system.

Regardless of which model you choose, the family of Rickard VAV air outlets provides an **economical** way of achieving the goal for which it was intended: **personalized comfort control**.



RICKARD

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