

THE GLOBAL NOISE CONTROL MARKETPLACE FOR THE NEW MILLENNIUM

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INTRODUCTION

Global competitive pressures have created a new economy. Manufacturers must design and sell products which satisfy customers from a wide range of cultures and legal environments. They cannot expect to survive if they compete successfully in their own market area alone. Today's market demands that producers sell worldwide. If they don't they may be swallowed up or die. Product noise is increasingly a key factor in the purchase decisions made by many people in various places, for products ranging from consumer goods to industrial and transportation equipment. The challenges of the global marketplace in the coming years will accelerate the demand for quiet products, regardless of where they are built or sold.

THE ECONOMIC NEED FOR QUIET PRODUCTS

It may be said that all noise of interest is due to the operation of manufactured products. Therefore, all noise problems are ultimately issues of product noise.

With the globalization of the marketplace, product manufacturers must compete for sales on a worldwide basis in order to survive. Not only must they compete for export business to other countries with foreign and domestic manufacturers, they must also strive to maintain their share of sales in their home markets.

As awareness of noise and its control increases, noise is becoming more important as a factor in product purchasing decisions [1]. Along with functional performance and price, emitted noise level is now being included in more industrial product purchase specification agreements. Further, noise is increasingly being used as a marketing tool by the manufacturers of consumer products, and as a selection determinant by buyers of those products [2]. With the expected near term global growth in population, means of production, and information reach, the need for low noise products will only escalate.

Noise is a product sales factor in both industrialized countries with strict noise regulations, and also in developing economies without governmental noise controls. Manufacturers which have the experience to design and build low noise products will have more success in global markets. This gives the advantage to firms which already operate in an environment of noise regulation. This factor is reaching critical importance

for manufacturers in the US, where noise regulation lags the rest of the industrialized world.

BRINGING THE US INTO THE GLOBAL MARKET

In the past, manufacturers in the US have sustained themselves in their large domestic market, with some forays around the world. Large US trade deficits and multi-national mergers indicate that firms must now look for global business to survive.

Two recent actions, although conceived with unrelated purposes, may converge to provide impetus to US manufacturers to intensify their efforts in noise control, and thereby become closer with the world community. These actions, taken by the S12 committee of the American National Standards Institute (ANSI), were the formation of working groups to develop standards for product noise labeling, and for classroom acoustics.

At present there are no generally accepted standards for product noise labeling in the US, and efforts by manufacturers and trade groups have been meager, at best. This is in contrast with the requirements of the EU Machinery Directive. The issues being explored by the ANSI working group include the purpose of a product noise label, with some agreement that such a label should apply to a general class of products, reflect the product's functionality, indicate precise and repeatable measurements, and be interpretable in terms of "good", "average" or "poor" performance, as understood by the lay person. In short, the purpose is communication [3]. Moreover, the benefits of product noise labeling go beyond the better informed purchasing decisions of a buyer. Labeling will eventually transform the market, forcing manufacturers to address noise issues. This medicine will provide the incentive needed for US firms to face their overseas competition.

Similarly, there is no US national standard for classroom acoustics, as there are in other developed nations [4]. Classrooms are one segment of the built environment. The primary noise source over which the school builder has control is the heating, ventilating and air-conditioning (HVAC) system. Window ventilator units, emitting 70 dB(A) at 1 m, are commonly being installed in US schools. These units would never be allowed in countries with classroom standards. Meeting a lower noise standard would enable US manufacturers of HVAC equipment to enter, and compete, in the world market.

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