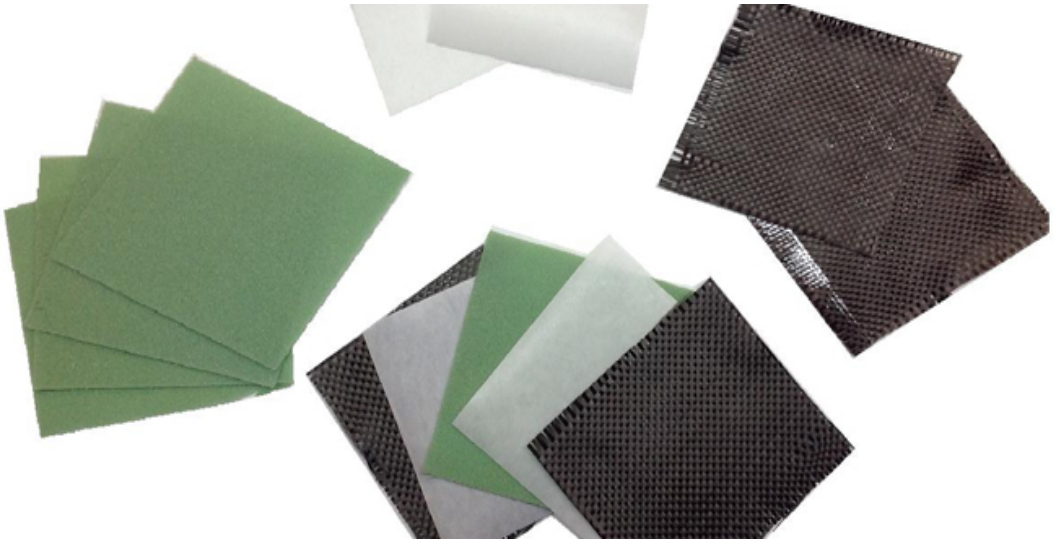

Diab Divinycell is a sound investment for Clarasonic

Over the past decade, Asia has become the leading source of speaker cones for audio products worldwide. Among the leading Asian manufacturers is Thailand-based Clarasonic, a company that uses Diab core materials to achieve composite speaker cones with excellent acoustic performance.

As sales of speakers for home, automotive, multimedia and pro audio applications continue to rise, business is booming for Clarasonic. Clarasonic has worked with some of the largest Asian speaker manufacturers, helping them to develop speaker cones using paper, carbon fiber, fiberglass, Kevlar and other materials.

All of the aforementioned materials are common in speaker cone construction, whereas a more unusual component is Divinycell foam core from Diab. Clarasonic's use of Divinycell as a basis for speaker cones is a way of achieving more uniform performance characteristics across the acoustic spectrum.

Sound is reproduced as an accumulation of complex waveforms, generated at different intervals and frequencies by the speaker cone. Unfortunately, none of the common speaker cone materials perform equally well at all frequencies. Lightweight materials are more sensitive, which means they reproduce mid-range and high frequencies with good quality and loudness. But in the bass range, materials with a dense cell structure are needed to capture the low-frequency waveforms.

Finding the right balance is difficult, and it has proven a stumbling block for many Asian speaker manufacturers. An ideal speaker cone combines low weight with a dense cell structure, which is where Clarasonic and Diab Divinycell come in.

Clarasonic specializes in composite cone solutions, in which a thin layer of inner foam is applied to other materials. This creates an ideal blend of sensitivity and density, which means excellent sound reproduction. Clarasonic has chosen Diab as its selected supplier, based on Diab's wide range of available foams and strong technical and sales support. Materials such as Divinycell 45, 60 and 80 are shipped by Clarasonic to its customers, either in sheets or as ready-cut pieces. At Clarasonic's new factory in Thailand, the foams can be cut into thicknesses of 1 mm and upward by means of a specialized slicing machine. To then form a composite cone, the layers of materials are heated and shaped using thermal forming machines.

Recently Clarasonic purchased its own thermal forming machines, which make it possible to supply customers with complete thermally formed parts. With Diab materials and the state-of-the-art equipment in its Thailand factory, Clarisonic is well positioned to meet the continued demand for Asian audio products.

www.clarasonic.com