



What exactly is VSS™ ?

VSS™, or "vibrating sound source," is our new patented (US Patent 7,081,576) technology that enhances the integrity and strength of our drum shells. We use innovative adhesives enhanced with "hollow spheres" that permeate the wall of each VSS™ drum shell, causing regenerated vibrations (i.e. more sustained sound), which elevates head response and increases drum performance providing more resonant tone qualities.

Have you tested this new technology?

We have conducted a number of tests on our new VSS™ drum shells, and have compared our new shells with standard drum shells using the M-Box Data Acquisition System. During our testing sessions, we have collected information about decay time, frequency and relative amplitude, and have found that VSS™ delivers a wider tonal range, more resonant frequencies, and noticeable volume increases. For example, we tested a 5.5 x 14 inch snare VSS™ versus our standard Maple shell and the decay time increased by 1.5 times with the VSS™ shell. We have also conducted vigorous heat testing on our new VSS™ shells to ensure durability. Our tests conclude that our VSS™ shells are even stronger than our standard drum shells.

Why did you develop VSS™ ?

We have been manufacturing quality drum shells for nearly 50 years. Some things have remained the same during our history. For example our skilled craftsmen have always created our shells from the finest materials using a proven molding process. We are, however, consistently developing and testing new technologies in order to set the pace in the percussion industry.

We were the first company to react to clear drum heads by sanding the inside of our shells to provide drum manufacturers and consumers with smooth, aesthetically pleasing inside surfaces. We were ahead of the curve when we provided our customers with tighter seams so that they could use clear finishes. And, we were the first to introduce varying plies for different drum manufacturers, enabling our customers to finish and sell drums of varying thicknesses.

Following our long tradition of delivering innovative products, we created our VSS™ drum shells to help manufacturers meet the market demand for instruments with

accelerated performance and unique sounds. Like our other musical breakthroughs, we believe our VSS™ shells will be popular with manufacturers and players alike. *Is there anyone I can speak with who plays or has played your drums made with VSS™ shells and can provide insight as to how they differ from drums made with standard shells?*

Being a key component supplier to OEM drum manufacturers, Keller does not fabricate complete drums; however, numerous product reviews, press releases, and customer testimonials have been received directly regarding Keller shells as well as our customers finished products. Our Distributors Anderson International and Precision have switched to exclusively stocking the new VSS™ shells.

What are some other benefits of the VSS™ technology?

Another benefit is an improved strength to weight ratio, improving the structural integrity of the shell. Improved bonding of the laminates facilitates cleaner entry and exit of drill bit and other finishing tools. Due to the integrally bonded plies, these stiffer shells machine like solid wood. Due to the wider, more resonant tone qualities, you can increase the tuning and volume ranges with our shells as well.



