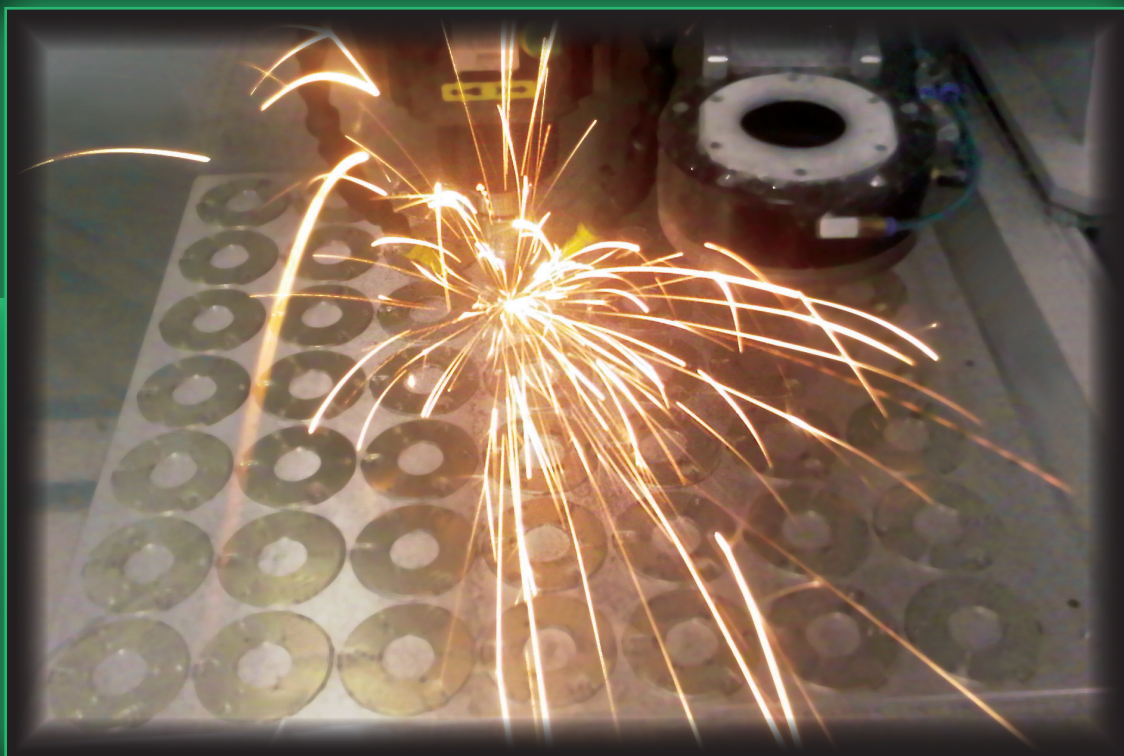


## ForgeCore™

### The ultra-low-distortion motor system

A tweeter's magnet system is a critical part of the design, as it typically serves as both its motor and its enclosure. YG Acoustics™' new ForgeCore™ magnet-system is unique in optimizing both functions (motor and enclosure), thus dramatically lowering distortion in tweeters. ForgeCore™ does so by introducing computer-optimized, highly sophisticated 3D geometries into the magnet system, using CNC-cutting

of the motor parts. In comparison, standard tweeters use stamped or laser-cut motors, which are limited to mostly 2D features. The process is extremely precise, and the resulting improvement is immediately audible as a sense of ease in the sound. It is especially noticeable in how relaxing long-term listening becomes thanks to ForgeCore™.



Tweeter motors being CNC-cut at the YG Acoustics™ factory

## How is ForgeCore™ different than BilletCore™?

- ▶ Both technologies work together inside YG Acoustics™ speakers, but are optimized for different frequency ranges: ForgeCore™ lowers distortion in tweeters, BilletCore™ lowers distortion in woofers and mids.
- ▶ Both technologies use CNC-cutting, but on different parts: ForgeCore™ is a magnet-system (motor) technology, BilletCore™ is a membrane (cone) technology.
- ▶ Technically (for gearheads only), ForgeCore™ uses CNC-cut steel forgings with some non-machinable features, whereas BilletCore™ uses CNC-machined solid aircraft-grade aluminum billet.



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## Measurements

Below is a distortion measurement of a YG Acoustics™ speaker utilizing the ForgeCore™ tweeter, and the same speaker using its predecessor tweeter, with its Scan-Speak Illuminator magnet system. As can clearly be seen, the ForgeCore™ tweeter dramatically reduces distortion over the already-excellent Illuminator motor. This independent measurement was conducted by the Canadian National Research Council (NRC).

Note: the total freedom from distortion throughout the midrange in both graphs is thanks to the BilletCore™ mid-woofer.

YG Acoustics™  
Sonja™ 1.1 with ForgeCore™,  
THD 90 dB @ 2 m (96 dB @ 1 m), 200-20k Hz, 10 dB Div  
Same mid-woofer, but with predecessor  
Illuminator-based tweeter

