

About the Magico Tour

This Magico tour was conducted by Jeff Fritz and Peter Roth on March 30, 2011. Magico's main factory is located in Berkeley, California, USA, and their machine shop is in nearby San Jose. The combined facility size is 9000 square feet. Magico has been in business since 2004, employs 28 people, and their products are distributed in 30 countries.

For more information about Magico, LLC, visit www.magico.net.

Introduction

Magico, LLC is a manufacturer of high-fidelity loudspeakers and, while founded as a custom, boutique fabricator in the 1990s, has been operating in its present commercial mode since 2004. The products are conceived by the company's founder, Alon Wolf, and engineered by Yair Tammam, Magico's chief technical officer

The company's latest offerings are the aluminum-bodied Q-series loudspeakers, which currently consist of the four-way floorstanding Q5 (\$59,950/pr.), three-way floorstanding Q3 (\$34,000/pr.), and two-way stand-mounted Q1 (price TBA). Magico also has three floorstanding wood-based loudspeakers, the four-way M5 (\$89,000/pr.), three-way V3 (\$27,000/pr.), and two-and-a-half-way V2 (\$18,000/pr.).



Alon Wolf is the founder of Magico, LLC, seen here outside of the company's main headquarters in Berkeley, California, USA

Magico has onsite a well-treated listening room with products by Soulution, Spectral, Pacific Microsonics, MIT, and a custom music server designed and built by Matan Arazi. Here you see the company's newest product, the Q1 (outside edges), along with the discontinued Magico Mini II.





Magico's large warehouse space is packed with the various parts that go into assembling their loudspeakers.

There are stacks upon stacks of parts that come from the company's nearby machine shop. These machined-aluminum parts, drivers, and cabinets will eventually be used to build Q-series and V-series loudspeakers.



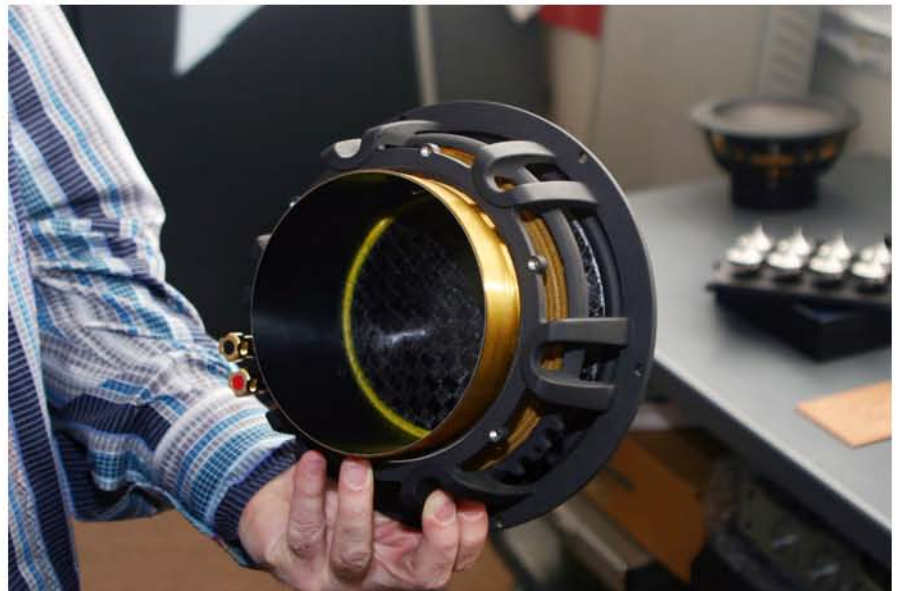
Alon Wolf (left) explains to SoundStage! Network writer Peter Roth how the parts are cataloged and arranged before use.

Drivers

Unlike companies that modify or spec drivers sourced from outside suppliers, Magico has designed their own driver platforms and builds them with parts they've had manufactured from the ground up. You won't see variants of these drivers in any other company's loudspeakers.



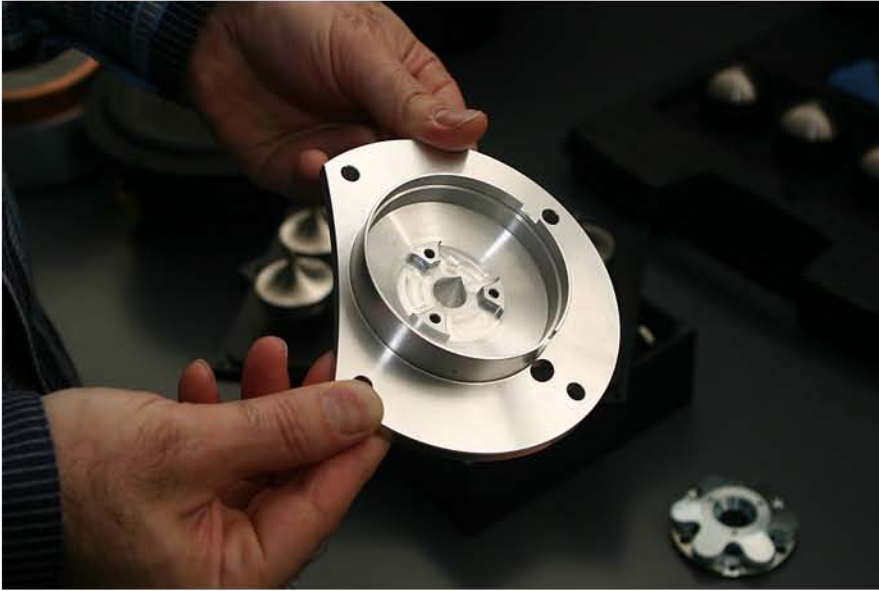
Alon Wolf holds a Magico driver that will be used in a Q-series loudspeaker.



The massive 5" voice coil seen on this Magico driver is a sight to behold.

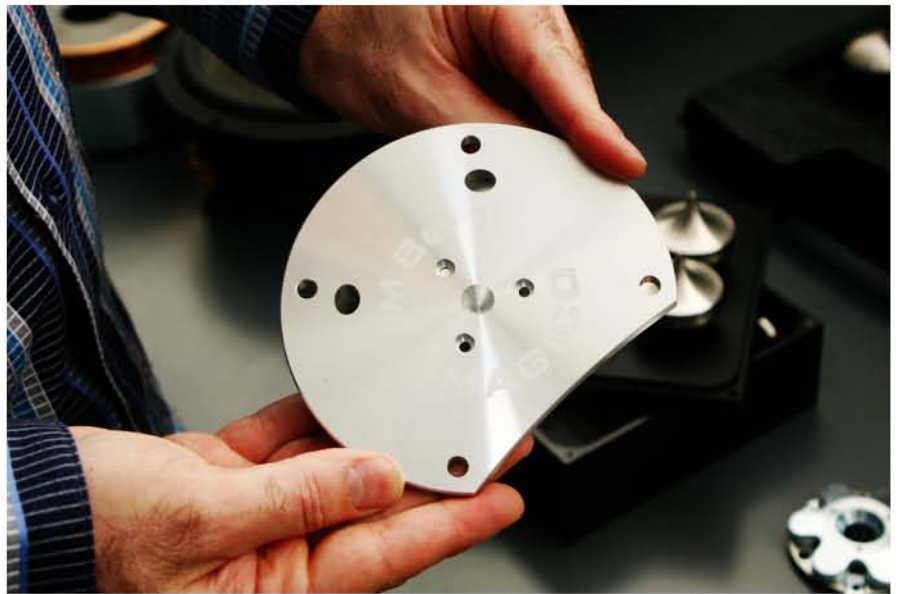


The Magico cones that go into the speakers use two different weaves of carbon fiber that are encapsulated in a high-modulus epoxy resin saturated with carbon nanotubes for strength and stiffness.



Magico's MBe-1 tweeter is built from aluminum housings they machine in-house.

Magico manufactures only top-quality products. Even the backplate of the MBe-1 tweeter, something the customer will never see, is engraved and finished to a very high standard.



Few high-end loudspeaker companies design and manufacture their own drive units. Magico's proprietary drivers help set them apart from their competitors.

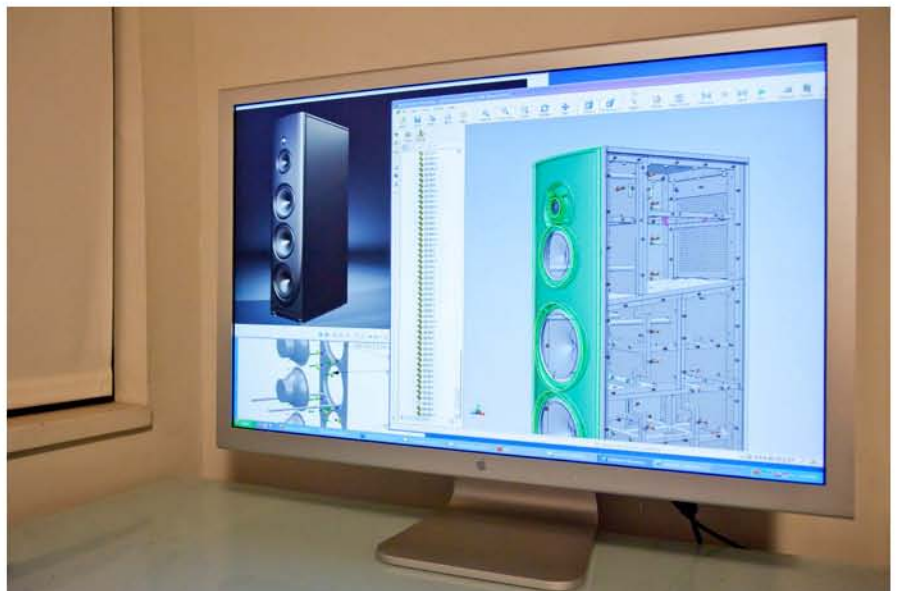
Machining

To better control all aspects of production, Magico acquired a full CNC (computer numerically controlled) machine shop in San Jose, California, which is where all of their Q-series speaker cabinets are manufactured. This vertical integration gives the company tremendous capability to create exactly the parts they need for their products.



The Magico machine shop is located in San Jose, California, about 40 minutes from their main headquarters.

Computer-aided design (CAD) is utilized at the machine shop. This image shows a Q-series speaker.

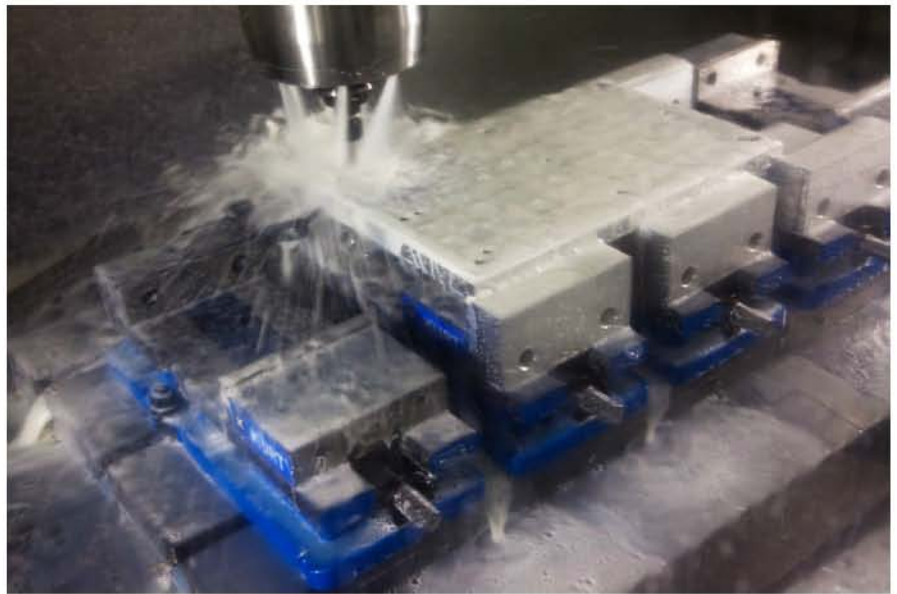


Machinists work two shifts at this Magico facility. There are a lot of parts in each Magico loudspeaker, and that keeps the machines cranking out pieces almost constantly.



Raw 6061-T6 aluminum stock is used for all Q-series speaker cabinets.

The various types of CNC machines allow Magico to create complex, high-quality parts. A new CNC machine had just been added to the shop floor on the day of our visit.



Every part is engraved with a part number for quick identification and cataloging.

Building the Qs

Magico's new Q-series products best represent their current thinking on high-performance loudspeaker design. The Q-series loudspeaker line currently consists of the four-way Q5 (\$59,950/pr.), three-way floorstanding Q3 (\$34,000/pr.), and the two-way Q1 (price TBA). On the day of our visit, evidence of Q-series speaker construction was everywhere.



Q-series enclosures await driver insertion and final assembly.



The machined parts are transported from the Magico machine shop to the storage area of the main factory where they await assembly.



A Magico assembly technician wraps the aluminum parts where internal speaker wiring could contact the metal, thereby protecting the wires from potential tears.



Magico's Alon Wolf explains the Q assembly process to Jeff Fritz. This construction process is done in a room dedicated to this task alone.



Crossovers consist of parts from Mundorf, a company located in Germany.



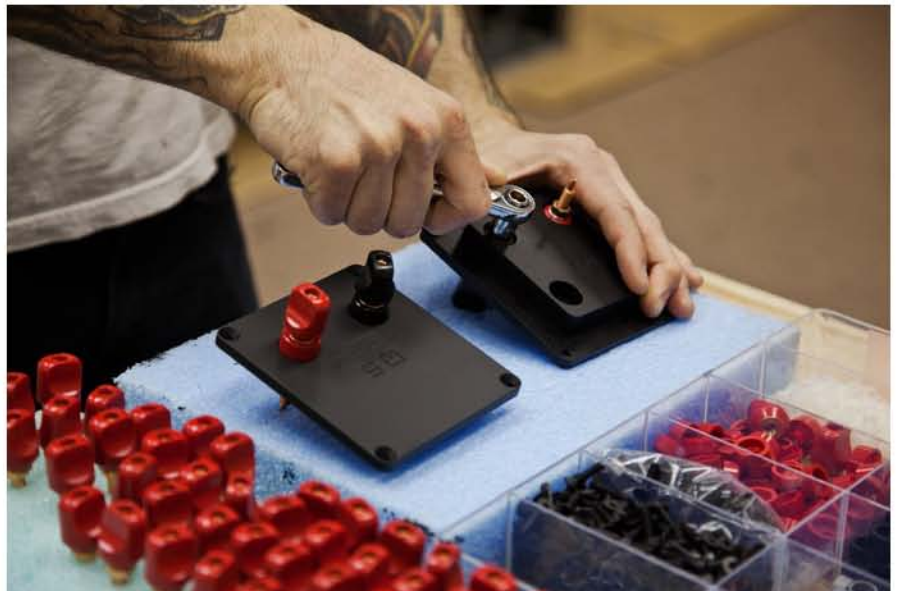
Finished crossovers are housed in dedicated compartments within the Q-series enclosures

Q-series loudspeakers require dozens of man-hours of labor to assemble the numerous parts that make up the enclosure. Each enclosure is properly damped to avoid resonances that could smear the sound with distortion.



Wiring within a Q-series enclosure is continuous to avoid wiring junctions and the sonic degradation they could cause.

Hundreds of machine screws are used in Q-series speakers, and these are held in place permanently using Loctite glue (no worries about screws coming loose and rattling during use).



The machine screws are torqued to just the right pressure.



All Magico speakers are acoustically tested before being packaged for shipment. They must exceed specified tolerances over multiple technical parameters.



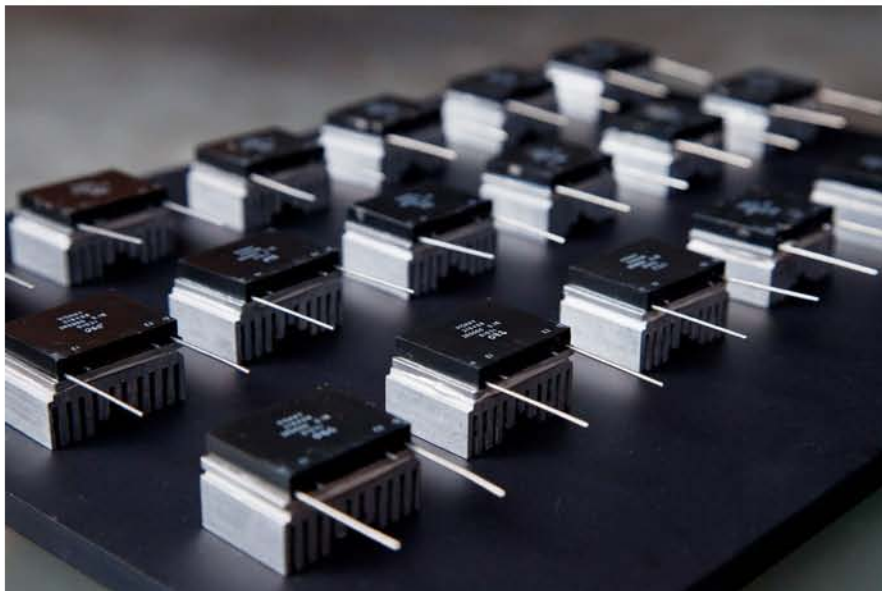
The accessory kit for Q-series speakers includes stainless-steel spikes shipped in a machined-aluminum case.



Heavy-duty wooden crates are used to ship Magico speakers to their final destinations.

The Small Details

On the day of our tour, we witnessed the attention to smallest details, something we believe has helped make Magico successful. Looking after the little things is part of what has vaulted Magico from fledgling boutique to one of the top high-end speaker manufacturers in the world.



Magico seems to sweat all the fine points, all the way down to the R&D-intensive resistors they use in the Q5's crossover.

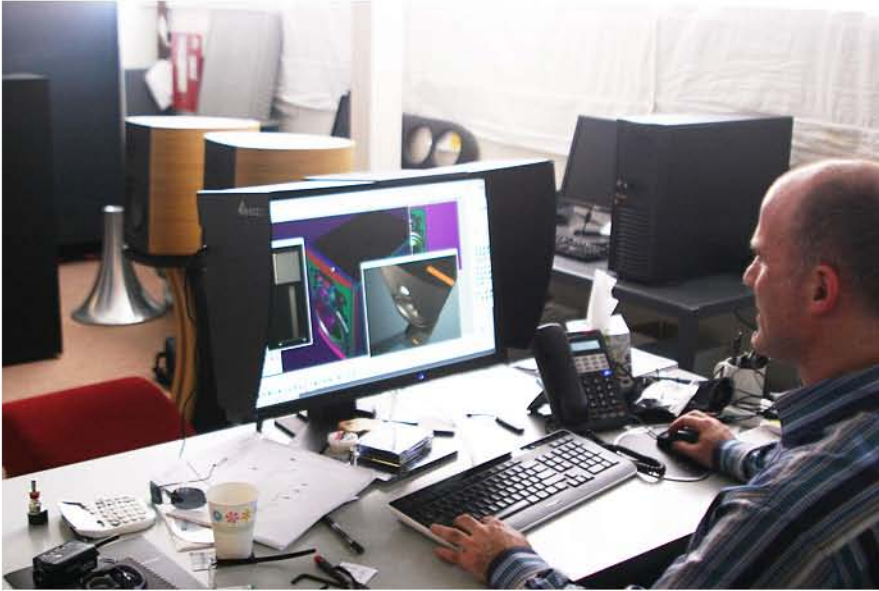


The Magico QPods proudly display "Made in USA" engraving.

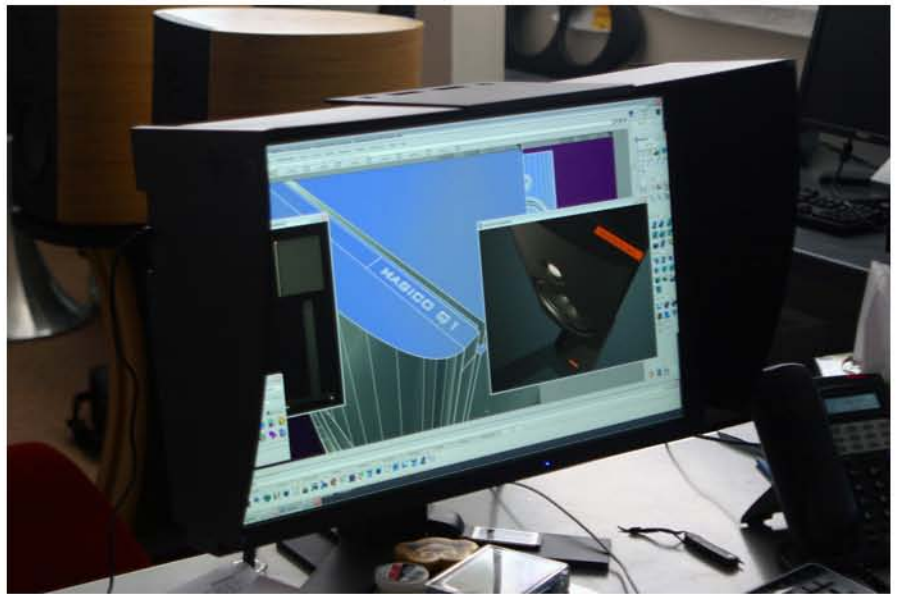


We were able to compare Magico's discontinued Mini II with the almost-done version of the company's new Q1 stand-mount loudspeaker. We listened to both. Sonically, the Q1 is better in every conceivable way: more extended top and bottom, improved resolution across the entire audioband, and simply breathtaking in terms of midrange clarity. The differences were not subtle!

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Alon Wolf showed us the CAD drawings of the finalized Q1, which will incorporate some changes that will make the speaker slightly larger and more stylish.



Note the copper-engraved model name seen on the front corner of the Q1 cabinet.



Pack 'em up and ship 'em off!