

## MISCO product comparison 10 years ago to today

A decade ago in response to medical device application requests, MISCO provided a 2.5" square speaker for voice and alarm tones that function over a normal frequency range. Currently, medical device companies require the ability to closely listen to body sounds on an ultrasound system. MISCO has designed and manufactured a loudspeaker line array that reproduces this sound with higher definition, allowing the technician more accuracy in diagnosis.



MISCO's model number #Z5001 line array for medical ultrasound.

Just ten years ago, pro-audio specialists asked for a full-range speaker smaller than 8" round. MISCO produced a 5" round speaker, optimized for voice and paging. This speaker had a magnet weight of 10 oz. with a rated power of 15 watts. The basket was manufactured out of zinc plated steel. Today with increased demands in the Pro-Audio field, MISCO produces a 21" round subwoofer, with a magnet weight of 110 oz. and a rated power of 1,000 watts. This model (#WX21W-4A) offers a basket in cast aluminum, and is designed for the high power sub-woofer systems used in live entertainment. The suspension has dual opposed 8" flat spiders. Low distortion is achieved by an aluminum faraday ring and a T-pole yoke.

Ten years ago, in the mass transit industry, MISCO supplied a 6" voice range - pin cushion speaker which required supplementary system components. Today the company supplies an entire assembly, which includes a 70-volt transformer, a labor-saving barrier strip for ease of connection, and a stainless steel grill with enclosure. The new speaker (model #MS-6SYS) is optimized for mass transit use. It comes ready to install in the ceiling of a rail car.



MISCO's model number #MS-6SYS for mass transit use.

From its earliest days through to the present, MISCO's guiding principles have been to listen to customers, identify the specific requirements needed, and solve the challenges of the application through smart engineering and efficient manufacturing.

1

— more —

2/12/19

MISCO models its quality system on ISO9001-2000 practices and employs a custom-configured final QC tester for statistical verification of critical metrics, such as frequency response, polarity, sensitivity, distortion, and rub/buzz.

MISCO listens carefully to what its customers need, and the engineering team works quickly to solve the technology challenges that come their way. They use the latest modeling software to integrate driver, crossover, and enclosure to simulate total system performance. MISCO's internal engineering staff is led by chief engineer Gary Church, recognized in the



**Typical Misco Custom Product** ~ With a combination of custom-designed and existing parts, Misco designed and manufactured this woofer to replace an expensive and hard-to-find European driver.

audio industry as a loudspeaker transducer and system design expert. Select consultants also join the development process. Internationally renowned acoustics and loudspeaker systems consultant D. Michael Shields joins the team when advanced acoustic, electronic, and system design elements are involved. MISCO also is pleased to partner with Digital Audio Labs (DAL) on projects that include amplifier/DSP components. Like MISCO, DAL products carry a worldwide reputation for providing the highest sound quality available. The company's flagship product is CardDeluxe, a professional 24-bit 96kHz sound card for Windows PCs, which is used in a wide range of applications, including mastering, PC recording, studio production, broadcasting, music editing, and more.

Inquiries about specialized speakers for any of a wide variety of industries may be made to MISCO's engineering information line at (612) 825-1010, or by email at info@miscospeakers. com. MISCO is a global loudspeaker design and manufacturing company with a technologically advanced line-up of custom sub woofers, woofers, mid-bass, midrange, tweeters, piezo speakers, RoHS speakers and full range coaxials, as well as waterproof, weatherproof, and voice communications transducers.