

La ricerca B&W

(estratto da Wikipedia [https://en.wikipedia.org/wiki/Bowers %26 Wilkins](https://en.wikipedia.org/wiki/Bowers_%26_Wilkins))

1974	The patented use of Kevlar fibers, impregnated with a stiffening resin, resulting in B&W's distinctive yellow speaker cones started in 1974. This composite material proved to provide controlled rigidity and internal damping, minimizing distortion, as Dr. Peter Fryer determined by using laser interferometry on speaker cones.
1976	Phase linear transmission was realized in the DM6 from 1976. In the DM6, the speakers are mounted in different vertical planes.
1977	In 1977 the DM7 introduced a tweeter separate from the main speaker cabinet. This has been a feature of many B&W speaker designs since.
	B&W's Laurence Dickie invented the 'Matrix' enclosure which reduces cabinet sound colouration. This bracing topology resembles a wine-case, providing multiple thin panel-braces, spaced throughout the enclosure, improving rigidity. This was in response to Celestion's SL6000 loudspeaker that was made with Aerolam cabinet walls. Dickie's response was to use the same concept but make it all the way through the cabinet rather than just the walls. Matrix has been used with great success by B&W ever since.
	The 'Nautilus' speaker resulted from research commenced by John Bowers into 'perfect dipoles'. Before John passed away, he handed this research to the young Laurence Dickie who discovered the principle of the exponential tapered tube. The Nautilus project was one of the most extensive research and development projects undertaken. Instead of open-backed drivers, it uses drivers loaded by reverse-tapered horns, or exponentially diminishing tubes, to absorb the rear radiation. The construction is based on fibre-reinforced plastic enclosures. The result of the distinct speaker shape was a near perfect response and near-zero enclosure colouration.
	The 'Flowport' is an improvement that reduces friction in the air moving through the bass reflex vent. This is realised by covering the surface of the vent with dimples, just like a golf ball.
	The diamond tweeter was developed to create the optimal ratio of tweeter dome mass and material stiffness. The tweeter is grown into shape by chemical vapor deposition.