

## **TETRAMAX AIR FILTER ELEMENT**

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Cummins Filtration is preparing to release a new patented air filtration technology. TetraMax™ tetrahedral air filter elements use a new innovative form of axial flow media which offers several advantages over existing technologies in the world of engine air filtration. In a TetraMax™ air filter element, a formed sheet comprised of nested, alternating tetrahedral shapes is bonded to a flat sheet for layer separation and alternately sealed at each end. The alternating tetrahedral form of the media means the forms taper down across the depth of the media pack in the direction of flow. Tapering towards the center creates a gap between layers, allowing for significant cross-flow of air and contaminant. Internal cross-flow reduces or eliminates the impact of localized element face plugging from larger debris, and therefore reduces pressure drop and increases filter life. TetraMax™ tetrahedral media can be utilized in several flexible media pack forms: it can be wound into round, obround, oval, or tri-oval shapes or can be cut and layered to form rectangular media pack configurations. The high media density and efficient utilization of air cleaner volume combined with the ability to tailor the individual form height to specific applications yields a highly flexible air filtration technology that can be applied to various markets and space claims. ISO 5011 lab testing indicates TetraMax™ exceeds the dust holding capacity of similar style competitive products by as much as 20% or greater at similar initial restrictions. The target market is medium- and heavy-duty engines in the 5 to 15 L displacement range for both on- and off-highway applications with expected release in 2019.