# The changing face of aerospace and avionics parts sourcing

SAE 100 Future look

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There is a quiet revolution taking place in the world of global aerospace and avionics parts sourcing, and it is making all the difference when it comes to fast, efficient searching for technical suppliers, parts, and services. Without a doubt, the Internet has proven to be an increasingly valuable tool for finding avionics and aerospace parts, but even the best general search engine is far too broad for finding things quickly and easily.

However, much like specialized cable TV "narrow-casting" (news, sports, weather, food, *etc.*), vertical search engines such as **GlobalSpec**'s engine are popping up on the Internet to serve specific audiences. They are focused and filtered—concentrating on one particular area and weeding out irrelevant, contextually erroneous results.

Vertical search engines are justifiably popular. They are organized and content-rich; gone are junk responses. Searching for bus systems on a vertical search engine built for the engineering community will not provide results about the Blue Line to the mall, but instead will provide useful bus system categories such as PCI products, busbars and busways, industrial communications computer boards/CAN bus, and so forth. Because a vertical search engine is targeted and understands the audiences, it is more efficient, offering domain expertise and an ability to provide organized, relevant results in context to a given search.

Another important driver in the accelerated use of the Internet for sourcing avionics and aerospace parts is the emerging availability of parametric search tools—that is, search systems with the ability to search for parts by the exact specifications required, and to search by multiple search criteria at the same time across multiple suppliers. This method differs radically in approach, speed, and efficiency from "tree" searches, in which one variable is eliminated at a time or a single supplier is eliminated at a time.

When it comes to sourcing technical components, what makes parametric searches work is a built-in and in-depth understanding of the underlying vocabulary and taxonomy of each product category. In short, the search engine has to "talk technical" and present relevant search choices based on the object of the search. For example, to find a military connector that needs to meet exact specification, a parametric search tool needs to consider conditions including number of contacts, contact size, the military specification that it needs to be in compliance with, terminal options, geometry, coupling type, mounting style, EMI or RFI filter/ESD shield, environment resistance, *etc.*

Need an aircraft bearing on the other hand? Parametric search will prove relevant and useful, presenting an entirely different set of possible search criteria—a different attribute set. Every time the part category changes, so do the search parameters, which is the key to making parts and products sourcing fast and efficient.

The bottom line is that the combination of vertical Web search and database-driven parametric search is undeniably changing the face of avionics parts sourcing. This potent pair gives the engineer who is searching for a particular technology, product, or part the capability to find not just a bunch of Web pages or a product directory, but laser-targeted Web pages and the exact items conforming to desired specifications—all with unprecedented speed. AE

*When seeking accelerometers—whose data output can be converted and used by aircraft engine vibration analyzers—a parametric search capability ensures suitable products can be located online by specification.*

*Engineers needing to access standards online can use a parametric search engine's ability to quickly locate and refine results against queries.*