



Case Study

GammaTech Computer

Durabook Semi-Rugged Notebooks Get Even Tougher With Seagate® EE25 Series™ Hard Drives

Notebook computers are commonly subjected to a punishing array of bumps, spills and accidental drops. But the sleek, lightweight notebooks favored by many consumers typically aren't designed to withstand such treatment, and they experience more failures than heavier-duty laptops as a result. According to Paul Kim, director of sales and marketing at GammaTech Computer, independent research and his own company's returns data underscore this vulnerability.

Kim explains, "Accidental damage is the number-one cause of notebook failures, and when you analyze and categorize that physical damage, over 60 percent is due to accidental drops and over 30 percent is caused by liquid spills. So there's a lot of this type of inadvertent damage. We looked into the market studies and case studies ourselves and said, 'Let's find a way to address this.'"

Company

GammaTech Computer Corp.

Location

Fremont, California

Contact

www.gammatechusa.com

Primary Focus

Durabook line of notebook computers, featuring rugged design that provides added protection to vital components (hard disk drive, LCD display, motherboard, optical drive, battery) from everyday mishaps; high-performance components and slim, lightweight design ensure maximum functionality and mobility.

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And so the Durabook line of semi-ruggedized notebooks was born, leveraging GammaTech's expertise in building fully ruggedized notebooks for Tier-1 vendors and its long history of manufacturing lightweight consumer notebooks. As Kim recalls, "We asked, 'What if we took the best features of ruggedized notebooks and the best features of consumer models and combined them?'"

"We created a new product classification of *semi-rugged* notebook computers, which offer greater resistance to shock, vibration and water than conventional notebooks, while being lighter, thinner, less expensive and more packed with features than full-fledged rugged notebooks." What's more, the award-winning line of Durabook semi-rugged notebooks delivers even greater durability when equipped with the Seagate EE25 Series ruggedized hard drive.

Born to Be Rugged

GammaTech had already achieved success with its SlimNote line of slender, battery-conserving notebooks (a favorite of executives), as well as with its bulkier ruggedized notebooks, which eschew many commercial features to focus on the needs of demanding government and military applications. But GammaTech also knew there was a key market still untapped: consumers who wanted an affordable, ruggedized notebook with the sleek profile and rich feature set of standard models.

Meeting these product objectives was challenging, causing GammaTech to review virtually every aspect of the Durabook's design. "We definitely did our research," recalls Kim. "A new technology had recently emerged, magnesium alloy casing, which is twenty times stronger than the plastic. I

said, 'Right, let's put that in as the outside casing.' The result is a far more durable computer."

That willingness to employ innovative approaches also led GammaTech to incorporate a brilliantly simple remedy to liquid spilled on a notebook. As Kim explains, "When water gets inside a notebook, sometimes there's quite a bit in there. How are you going to drain it? That's why we put a small drain hole in the bottom of the notebook, so if you pour liquid over the keyboard, it simply drains out." Kim was tickled that a major competitor soon followed suit.

Such dedication to real-world solutions also drove GammaTech to develop a patented locking mechanism that prevents the optical drive from popping open should the notebook be dropped. This both prevents the drive's drawer from being damaged and it also safeguards any data on a DVD or CD disc contained within.

How the Tough Gets Tougher

As a result of GammaTech's comprehensive approach to semi-rugged notebook computer design, the Durabook delivers a compelling mix of affordability, stylish form factor and extensive consumer-friendly features (high-performance video, multiple connectivity and expansion options, etc.) with impressive durability that rivals some fully ruggedized notebooks.

Enthuses Kim, "Our Durabook is made so well that it meets the military's MIL-STD-810F test standard, and by adding the Seagate EE25 Series hard drive, we give our customers even greater peace of mind, thanks to its superior tolerance for vibration, shock and extreme temperatures."

GammaTech's commitment to exceptional durability in real-world operating environments is pervasive, so it should come as no surprise that the company is preparing widespread deployment

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of EE25 Series drives in its new line of semi-rugged tablet computers.

EE25 Series Drives Are the Right Prescription for Tablets

Semi-rugged tablet computers are ideal candidates for the EE25 Series drive because their users are constantly on the move while still keeping the tablet in full-operating mode. "There's more potential for the computer to be jostled or dropped, so the fact that the EE25 Series drive has twice the shock tolerance of conventional drives when operating is very important," emphasizes Kim.

Furthermore, the EE25 Series drive will pay dividends in a broad variety of tablet environmental settings. "The customer could be working at higher altitudes, typical of mining companies," Kim explains. "Or in countries like Greenland or Iceland, any region that has extremely low temperatures. Another user might be sweltering in the Sahara desert or in the midst

of an ocean and its humidity. The beauty of the EE25 Series drive is that it can withstand all of these environments."

Winning Value Proposition

Kim concludes, "The Durabook semi-rugged notebook is practical for everybody because we made it affordable, comparable in price to Tier-1 business notebooks. We could charge a lot more, like other semi-rugged products on the market or even full-rugged notebooks, because Durabook meets the standards for ruggedized qualification and certification in terms of shock, vibration and moisture resistance.

"But we've tried to keep it affordable, and as a result, professionals, corporations, consumers, military and government personnel are all buying Durabooks. Users know they could buy a standard notebook for less, but if it breaks, they'll spend more money to replace it. We think the Durabook wins on total cost of ownership, and we're pleased to say the market seems to agree."

To Learn More:

Seagate® EE25 Series™ Drives

For more information on utilizing EE25 Series drives, visit www.seagate.com.

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