



Targus

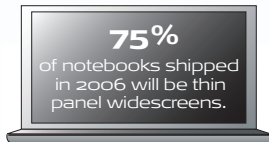


**Targus Protection Systems:
Getting A Handle On PC Drop Damage**

Targus Protection Systems: Getting A Handle On PC Drop Damage

Need Increases for Protective Notebook Carry Cases to Help Cushion Against Accidental Drop Damage

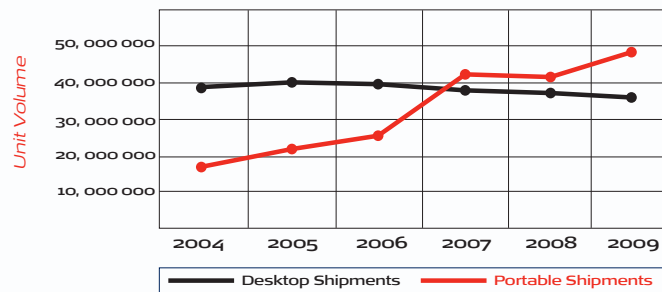
PC manufacturing and component companies continue to feel the effects of the robust demand for notebook technology. Thinner panels and widescreen displays are projected to make up 75% of all portable shipments in 2006 (IDC, 2005). According to the IDC, notebook shipments will overtake desktop shipments by 2007 (See Fig. 1).



Slimline widescreen notebooks are more susceptible to damage in transit due to droppage.

US notebook shipments are projected to overtake desktop shipments by 2007.

Fig. 1: U.S. Portable vs. Desktop Shipments



Source: IDC: April 2005



80% of all critical company data is held on employee PCs.

70% of companies go out of business after a major data loss.

Increasing desire for greater mobility continues to drive companies and PC users to purchase notebooks as their primary PC. With the increased desire for a more mobile workplace and personal computing lifestyle, business consumers can expect a higher risk of notebook damage due to drops while in transit and critical business data loss from this mode of accidental damage. IT managers, Procurement Officers, business owners, and consumers have become more concerned with the protection of the total cost of their notebook investment and seek solutions to protect their investment.

Over two hundred ten million business professionals who travel each year (Travel Industry Association of America, 2004), are familiar with the storyline of traveling to and from the airport where the notebook and its carry case are often subject to drops and being crammed into tight spaces such as the overhead compartment space of an airliner. A 2005 report released by the IDC found that 80% of all critical company data is held on employee PCs. Studies showed that companies were spending \$10.2 billion dollars in disaster recovery of critical business data from PC damage due to accidental damage while in transit (MegaNet, 2005).



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According to the Department of Trade and Industry 70% of companies go out of business after a major data loss; lack of PC protection and the increased risk of accidental damage due to drops and PC user mobility has become a major threat.

As technology continues to advance, notebook consumers turn to companies such as Targus to provide quality notebook protection while balancing style and functionality.



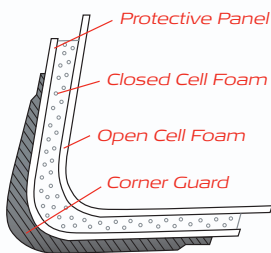
SafePort® Air Cushion System floats the notebook inside the carrying case providing both side and vertical impact protection.

Targus Provides Unique Carry Case Construction: Form and Function

According to the American Chiropractic Association, case weight is becoming an increasing problem. Studies show that carrying heavy cases can lead to both back pain and poor posture. In 2001, transporting heavy cases on your back or shoulders was cited as the cause of approximately 7,000 emergency room visits and countless complaints of muscle spasms, neck and shoulder pain. Trends appear to show that when it comes to the purchase of a notebook case, consumers prefer a more slim and sleek carry case. This has been a problem for consumers as many carry case providers sacrificed the slim and sleek designs in order to provide a bag with protection. Many notebook carry case providers build their notebook cases by loading them with bulky foam and heavy materials. Targus has differentiated their notebook carry cases by minimizing heavy foam and outer bag materials, utilizing unique patented protection features with the most storage options without compromising form for function.



Slim streamlined Targus protective carrying case and a bulky carrying case from a leading competitor.



Softer open cell padding surrounds the notebook acting as a cushion while firmer closed cell padding and protective paneling forms an outer wall of stability and support.

Unique Targus Notebook Carry Case Features Include:

- Open cell padding acts as a pillow cushioning the notebook. Firmer closed cell padding provides outer structure and stability.
- Patented SafePort® Air Cushion System that combines vented air cushioning and high-density foam padding in a single chamber. These specifically engineered polyurethane cushions line the bottom and sides of the notebook compartment for side and vertical impact protection. SafePort® cushions float the notebook inside the chamber ensuring a snug fit and protecting against damage due to shifting.
- Two self-closing security straps are placed across the top of the notebook carry case minimizing movement.
- Internal side and bottom protective paneling, corner guards, and honeycomb frame adds case structure around the notebook compartment, absorbing shock, and preventing the case from breaking down when dropped.
- DPS™ (Dome Protection System)- provides key sidewall protection to help prevent damage to notebook screens.

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Targus Drop Testing Shows Unique Features for Protection Work

With more consumers and companies investing in notebooks as their primary PC, protection of this notebook investment is paramount. Recognizing this need, Targus is committed to providing their customers the best in notebook protection.

Recently Targus commissioned the Lansmont Corporation - a California based product and packaging dynamic testing group - to execute an instrumented drop test of a notebook PC contained in their carry cases. This test was done to compare the cushioning performance of Targus notebook carrying cases with a notebook simulator when subject to drop shock.

More and more consumers are turning to notebooks as their primary PC. Protecting this investment is paramount.

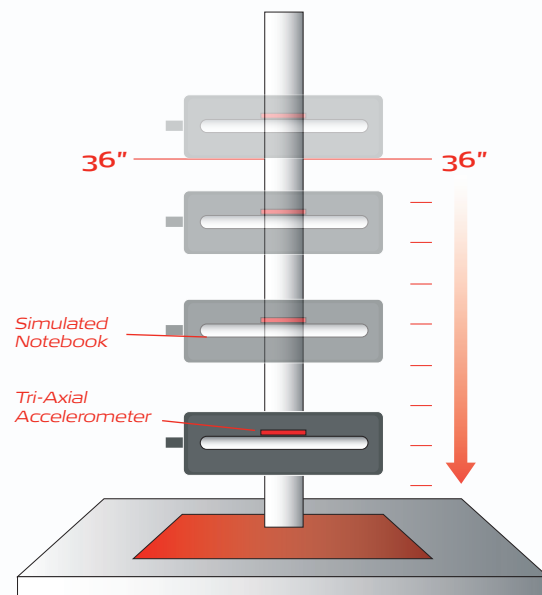
An acrylic notebook simulator 13" x 10.5" x 1.5" weighing 5.2 lbs. was instrumented with a tri-axial accelerometer and inserted into the Targus carrying cases. Each Targus carrying case was subject to 3 - 5 drops at heights of 12, 24, and 36 inches. For the purpose of this discussion we will focus on the drop test findings at the height of 36 inches.

An instrumented drop test was done to measure and compare the cushioning performance of Targus notebook carrying cases with leading competitors.

After each drop, the responses were tabulated and averaged. Responses were measured in "G's", a value of force, expressed as a proportion of the nominal gravitational force experienced when in free fall just above the earth's surface. The failure criteria was measured based on visible damage to the notebook case and acceleration levels of about 200G's.

To better understand the Targus Drop Test findings; be aware that the higher the G number equals the least amount of protection and the lower the G number equals better protection.

Fig. 2: The Notebook Carry Case Drop Test



An acrylic notebook simulator was instrumented with a tri-axial accelerometer and inserted into each notebook carrying case. Each case was then dropped 3-5 times X 6 sides and measurements taken.

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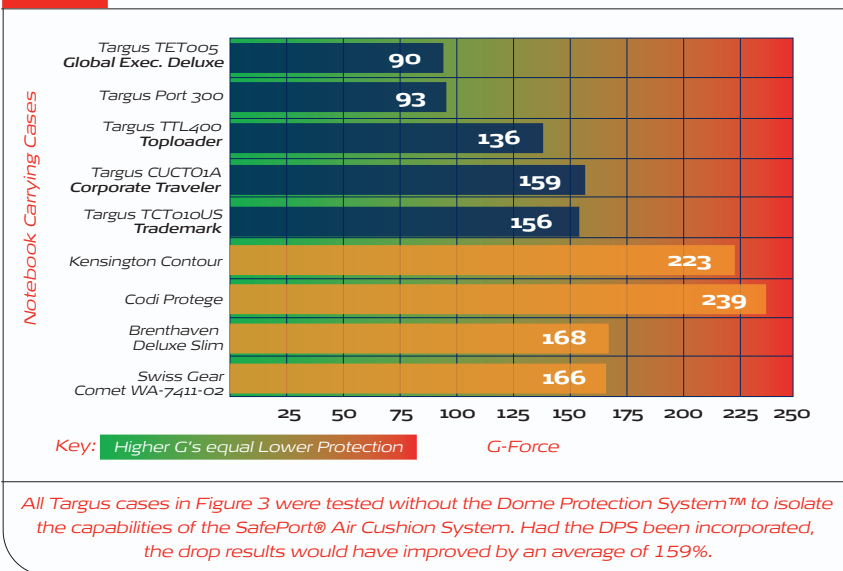
High G-force readings equal lower protection. Lower G-force reading equal higher protection.

In reference to operating and non-operating G forces, understand that operating G force equates the force at which a notebook can experience without damage while turned on, and non-operating G force equating the force a notebook can experience when turned off. For example a Dell D510 Latitude Notebook can experience a G force up to 142G while operating and 163G while not operating, or an HP NC6620/6230 at 125G while operating and 200G while non-operating.

In the comparison of Targus carrying cases and competitor carrying cases, operating and non-operating test results were held to the average of 200G as a standard before damaged occurred. This standard was set by the Lansmount Test Facility as their simulator notebook would have been severely damaged at G levels beyond 200Gs. Based on those standards, all Targus notebook cases performed very well. Compared to competitor carry cases Targus performed better, most notably at the 36" drop height. The competitor carry cases did not perform well at this height and were reported as not passing the standards. (See Fig. 3).

Targus notebook carrying cases provided better protection against G-force shock than it's competitors.

Fig. 3: Targus Drop Test Results (Avg. of All Sides)



For more information about this and other innovative solutions provided by Targus, please visit www.targus.com

Conclusion


This test was done to compare the cushioning performance of Targus notebook carrying cases when subject to drop shock. Cases tested utilized only SafePort® technologies. Targus plans to continue to be proactive with their uniquely designed and patented protective notebook carry cases. Providing strength and protection without sacrificing sleek and lightweight design is a commitment Targus has made to their customers. Currently the SafePort® Air Cushion System and other protective technology, such as the Dome Protection System™ offering 54% better front panel protection and 264% better back panel protection, are available in the Targus Global Executive line with plans to incorporate the technology across many platforms. This combination of unique protective technologies proves the commitment to protection that Targus offers their clients. The Targus Global Executive Carry Cases are available today to Targus approved Distributors, Alliance Partners and via the Targus Custom Solutions Team.

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About Targus

Targus is universally recognized as the world's best selling notebook carrying case brand, and the leading provider of accessory products for the mobile lifestyle. Targus offers a complete range of mobile accessory products to enhance the mobile computing experience, and continues to set the standards in excellence for protection, craftsmanship, and functionality in portable carrying cases and accessories for notebook and other portable electronics.

"With Targus our customers are confident that our uniquely tested and patented notebook carry case designs will protect their notebook investment, their work, and their memories."



- Roger Murphy, CEO, Targus



TET005- Global Executive Deluxe
(Features the SafePORT® Air Cushion System & the Dome Protection System™)



PR300- Port 3.1 Commuter Case
(Features the SafePORT® Air Cushion System)



TTL400- Revolution Toploading Case
(Features the SafePORT® Air Cushion System)



CUCT01A- Corporate Traveler
(Features the SafePORT® Air Cushion System)



TCT010US- Trademark Toploading 300 Case
(Features the Honeycomb Frame)