

## Kodak Disposable Cameras

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In 1987 Kodak developed disposable cameras using the best methods and practices in manufacturing and development; launching their disposable camera on time, within budget and delivering outstanding picture quality. Even with all of these positive areas surrounding this project, some political and environmental aspects of the camera were not covered due to one of the main design ideas behind the camera: to make sure consumers could not reload the camera, and therefore be forced into buying more. When these 'fling' cameras were introduced into the market, they took off; increasing in sales over 50 percent a year<sup>1</sup>. Environmentalists created a lot of negative press about their product; and even within the company it was clear it was clear that something needed to be done with the product, since cameras were being disposed of faster than they could be tallied up. These problems needed to be fixed if this product was to continue being one of Kodak's cash cows. By implementing plans that were shelved earlier, tweaking the design of the camera, and listening to social demands, these new design goals were met in record time with amazing results.

### **1. How did Kodak's single use camera get converted to a reusable camera?**

To reduced tremendous social pressures on Kodak for all of the environmental waste they were generating, they had to modify the designs of the original camera so that a portion of it could be reused, but still keep one of their original design goals in place: that the camera could not be reloaded. To do this, Kodak removed the plastic welding, and replaced it with snap joints. They also included deterrents inside the camera that would make reloading the camera extremely difficult for a non-technical person (i.e. your average consumer)<sup>1</sup>, which aided in one of their original design goals.

### **2. How did the reusable camera get converted to a recycled camera?**

Using the previous models as a base (the FunSaver, stretch 35, and the weekend 35) a new model was designed called the FunSaver flash camera. This camera was designed to be recycled, but the process to recycle the camera was shelved until Kodak was quite literally forced into using the process through social pressures. One of the keys pressures that forced this move was the awarded given to them by a congressman - "Wastemaker of the year award"<sup>2</sup>. Kodak implemented a recycling program in which it paid 5 cents for every empty camera to be sent to its recycling plant. The plant, using workers from sheltered workshops, stripped these cameras apart using a simple process (which also used the snap together process from the original camera), and divided the camera parts by color<sup>1</sup>. The electronic components of this camera were designed to be reused, with a counter built into the camera, so that after being used ten times it can be cycled out<sup>1</sup>. Environmentally safe batteries were chosen over mercury batteries, just in case the cameras were thrown out<sup>1</sup>. Most of the other plastic parts of the camera could be melted down and re-formed into new camera pieces<sup>1</sup>. This resulted in an 86% recovery and reuse of the camera's material<sup>1</sup>.

### **3. What happened to the single use camera after this case was written (case ends in 1990)? Bring the case up to date (2004):**

The camera became a commercial and political success, and the amount of material they are recycling is exponentially growing each year. Kodak has surpassed even the soft-drink industries recycling rate<sup>1</sup>, currently at a worldwide rate of approximately 60%<sup>3</sup>; and have received many awards for environmental protection including: 1998 Environmental Protection Agency (EPA) Program Champion Award, 1999 World Environment Center Gold Medal for International Corporate Environmental Achievement, 2001 EPA Waste Wise "Partner of the Year", 2002 EPA Energy Star Award, 2002 EPA Energy Star Corporate Commitment Award<sup>3</sup>. They also pay about 75 cents per pound now, which approximates to about 15 cents per camera returned<sup>4</sup>.

1 - Alan Van De Moere, "Design for Recyclability", Project Manager, Eastman Kodak Company

2 - Gene Bylinsky, "Manufacturing for Reuse" Fortune, February 6, 1995, 110, 112

3 - [http://www.kodak.com/eknec/PageQuerier.jhtml?pg-path=9/1026/1032&pg-locale=en\\_US#2](http://www.kodak.com/eknec/PageQuerier.jhtml?pg-path=9/1026/1032&pg-locale=en_US#2)

4 - <http://www.kodak.com/US/en/corp/environment/kes/faq/recycleFAQs.jhtml>