



## Mattel, Inc: The Lead Paint Recall<sup>1</sup>

Ron Montalto tossed the newspaper onto a growing pile. The Sept 22, 2007 *Wall Street Journal* headline read “Mattel Seeks to Placate China With Apology.” The headlines in the stack of papers told the story:

Mattel Announces Third Toy Recall – *CNN Money* (Sept 5, 2007)

Mattel Does Damage Control After New Recall - *Wall Street Journal* (Aug 15, 2007)

Owner of Chinese Toy Factory Commits Suicide – *New York Times* (Aug 14, 2007)

Lead Paint Prompts Mattel to Recall 967,000 Toys– *New York Times* (Aug 2, 2007)

The worldwide news coverage had been intense. Robert Eckert, Mattel’s CEO, had led the news on both morning and evening TV broadcasts, staring directly into the camera and apologizing for Mattel’s failure, while promising to take immediate steps to improve quality. Mattel had also launched a recall website that received millions of visitors and was later referred to as a model of excellence (see **Exhibit 1**). Corporate communication experts had given Mattel and Eckert high marks for the handling of the crisis. Yet Montalto, a long-term Mattel China veteran, still couldn’t grasp how it had all come to this. Ironically, the bottom paper in the stack headlined “Toymaking in China, Mattel’s Way” heralded Mattel’s decades of success operating in China and was published just days before the initial recall (*New York Times* July 26, 2007 – see **Exhibit 2** for full press list and links).

Montalto reflected on key sourcing decisions made nearly a decade ago. In 1997, Montalto had been embroiled in a debate over the sourcing strategy for the Mattel. The acquisition earlier that year of Tyco, maker of Matchbox cars, had driven the need for more capacity for die-cast cars. That summer, the company had decided to build a wholly owned manufacturing facility in the Guangzhou region of southern China, starting production in 1999. The Asian currency crisis that ensued later that fall had reopened the “build decision.” While in the U.S., Ron had met with his boss Joe Gandolfo, then President of Worldwide Manufacturing Operations and learned that he would be reassigned within the next month to oversee die-cast car operations. An ex-lawyer who had lived and worked in Hong Kong for

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<sup>1</sup>This case was written by Professor M. Eric Johnson. It relies heavily on an earlier Tuck case, “Mattel, Inc: Vendor Operations in Asia.” It is written for class discussion and not to illustrate effective or ineffective management practices.

nearly fifteen years, Montalto was a Senior Vice President and had been responsible for the company's Vendor Operations Asia division (VOA) which managed Mattel's outsourced production. Mattel began the vendor operation program in 1988 hoping to add flexibility to the company's traditional in-house manufacturing. Montalto had spent ten years developing VOA into one of Mattel's most valuable strategic assets. In 1997 it was responsible for manufacturing products that generated nearly 25% of the toy company's total revenue.

With demand for Matchbox cars at 64 million units in 1997 and growing, die-cast capacity concerned Montalto the most. Tyco manufactured the cars through joint-venture arrangements in Shanghai and Bangkok. Both of the joint ventures were minority share partnerships which raised questions for Mattel in the future. What's more, the quality of Matchbox products had been eroding for years and was currently at an all-time low. The production equipment and steel molds used in the manufacturing plants were becoming obsolete. Though it might be possible to upgrade the existing Tyco operation in Bangkok, Mattel saw little hope of expanding the Shanghai operation.

Mattel owned a state-of-the-art die-cast facility producing Hot Wheels brand cars that was operating at full capacity in Penang Malaysia (see **Exhibit 3**). Expanding that facility significantly beyond its 1997 volume of 120M cars would be expensive and complicated. There was no room for further building on the site and no available land adjacent to the plant. The proposed China facility would solve the immediate capacity problems. However, with the financial storm sweeping through Asia, some executives inside Mattel argued that they should reconsider building a new plant in Malaysia to concentrate die-cast production in a single country. Others felt that they should consider Indonesia as a way to take advantage of low labor costs and very attractive exchange rates. Mattel also operated a plant in Indonesia that produced Barbie® dolls.

After nearly a year of analysis and discussion, Mattel decided to move ahead with the Guangzhou plant in the spring of 1998. Consistent with Mattel's dual sourcing strategy, they did not size the plant to satisfy the entire long-term need, but rather planned to outsource some of the production to partners.

The initial 2007 lead paint recalls included a wide range of Fisher-Price toys representing various Nickelodeon and Sesame Street characters. They were manufactured by a Mattel vendor, Lee Der Industrial, who had partnered with Mattel for 15 years. Shortly after the initial recall, Mattel also recalled die-cast cars from the Disney/Pixar movie *Cars*. They were manufactured by another long-time vendor—Hong Kong based Early Light Industrial Company. Excess lead was found in yellow pigment on the olive-green top of the vehicle known as Sarge (see **Exhibit 1**). The offending part of the vehicle had been painted by a subcontractor, Hon Li Da Plastic Cement Products Co., Ltd. located in Shenzhen, China. Early Light assembled the top painted by Hon Li Da into the finished Sarge car in its manufacturing facility located in Pinghu, China. Mattel's CEO later testified that "Early Light had not identified its subcontractor, Hon Li Da, though it was required to do so by its agreement with Mattel." Some reports claimed that Hon Li Da had run out of certified paint supplied by Early Light, and had made a substitution that exceeded lead limits. During August, Mattel also announced an unrelated recall related to a magnet hazard—toys with strong magnets that posed a choking hazard.

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Montalto picked up one of the Sarge trucks sitting on the counter, turning it over and over, and wondered what had gone wrong?

## **Company Background**

Based in California, Mattel, Inc designed, manufactured, and marketed a broad variety of toy products. The company's core product lines included Barbie fashion dolls, Hot Wheels die-cast vehicles, Fisher-Price preschool toys along with Disney toys and games like Scrabble. The company also produced toys under license agreements with movie makers. Most toys were manufactured outside of its largest market (U.S.), primarily in Southeast Asia. Mattel's principal manufacturing facilities were located in China, Indonesia, Thailand, Malaysia, and Mexico. Mattel also utilized third-party manufacturers (vendors) in Mexico, Brazil, Asia (including China and India), New Zealand, and Australia.

Mattel was founded in 1944 by Elliot and Ruth Handler. Neither Elliot nor Ruth had much business experience or capital, but they both had dreams. The post World War II demographics of a huge baby boom plus a virtually toyless marketplace provided a unique opportunity to gain a place in a growing toy market. Mattel's first products, simple picture frames and doll house furniture, met with mixed success. The first really big hit was a music box. By partnering with another toy inventor, they developed a music box that could be mass-produced, dramatically reducing its cost. The product went on to sell more than 50 million units over the next 20 years. By 1955, annual sales reached \$5 million and the Handlers decided to take a gamble that would forever change the toy business. In what seemed at the time a risky investment, the Handlers signed a 52 week contract with ABC Television to sponsor a 15-minute segment of Walt Disney's Mickey Mouse Club at a cost of \$500,000 - a sum equal to Mattel's net worth at the time. Up until this move, most toy manufacturers relied on retailers to promote their products. Prior advertising occurred only around the holiday season. The popular daily kids show made the Mattel brand well known among the viewing audience, translating quickly into sales. The success of the Handlers pact with kids TV started a marketing revolution in the toy industry.

Mattel made toy industry history again in 1959 with the introduction of Barbie. Ruth Handler got the idea for the toy after watching her daughter play with adult looking paper dolls. In spite of the cool reception to the Handlers' teenage fashion doll at the 1959 New York Toy Fair, the early sales quickly signaled a winning product. With the success of Barbie, Mattel made its first public stock offering and by 1963 was listed on the New York Stock Exchange. In the next two years Mattel's sales skyrocketed from \$26 to \$100 million. The introduction of Hot Wheels miniature model cars in 1968 was another spectacular success making Mattel the world's largest toy company by the end of the decade.

Unfortunately, the Handlers' good fortune in the toy industry was quickly tarnished. Plagued by operational problems including a fire in their Mexican plant and shipping strikes that interrupted the flow of goods from Asia, Mattel's growth stumbled. In 1973, Mattel was caught issuing misleading financial reports. The SEC filed charges against the Handlers and a federal judge ordered Mattel to restructure the board, forcing the Handlers out. Under a new management team, Mattel regained profitability and started diversifying into other children's products including publishing and entertainment.

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By 2007, Mattel's revenues had grown to \$5.97B (see **Exhibit 4**). Its three largest customers (Wal-Mart at \$1.1 billion, Toys "R" Us at \$0.7 billion, and Target at \$0.6 billion) represented approximately 41% of worldwide sales. Over the years, the ability to create new products and quickly meet demand remained non-negotiable requirements for success in the toy industry. Manufacturers had to live with the reality that inventory in times of hot sales could reap large rewards, but often became worthless overnight. In 2007, Mattel introduced hundreds of new toy products. Many of the new toys reflected increased demand among core product lines—for example, the market's interest in collectible Barbie and Hot Wheels products. Beyond core products, there remained a large, lucrative segment of non-core toys whose market life was typically less than one year. Many of these products were related to popular movie characters. More and more, filmmakers and toy manufacturers combined their efforts to market their products to the public. These were high turnover products where time to market was critical. Mattel typically produced core product lines in-house and outsourced the production of non-core lines to a network of vendors. Outside vendors gave Mattel the needed flexibility to handle hot products and the seasonal changes in toy sales. In the U.S., toy sales historically followed strong seasonal trends with nearly half of all sales coming in November and December.

## Miniature Car Market

While both 1:64 scale miniature car replicas, Hot Wheels and Matchbox competed in very different market segments (see **Exhibit 5**). Matchbox cars emphasized realism in both scale and detail. For years they had been manufactured entirely of metal, making them heavier and more durable. These elements made the car more appealing to younger children, typically 2–4 years old. Moreover, much of the Matchbox sales were outside of the U.S. while Hot Wheels were an American phenomena. Hot Wheels cars featured more fantasy designs both in form and decoration. With a larger creative element, they appealed to older children who participated in more imaginative play patterns.

Prior to 1994, sales of die-cast cars, including Hot Wheels, were relatively flat. However, over the course of the next three years, demand for the Hot Wheels skyrocketed to 155 million units in 1997 while Matchbox saw much slower growth. Mattel attributed much of the growth to a new rolling mix marketing strategy. Mattel sold its Hot Wheels cars to retailers in 72-car assortment packs. The 'Assortment Pack' was more commonly referred to as the master carton. Stock keepers at various retail outlets shelved the individual Hot Wheels blister packs directly out of the 72-car master carton. In the past Mattel relied heavily on retailer's POS data to help forecast future demand and determine what the actual assortment mix should be. Starting in 1994, Mattel incorporated a new marketing strategy to sell die-cast cars. Mattel determined that variety was the key driver of sales. If customers saw new products every time they went in the store, they were more likely to buy. The company implemented a rolling mix strategy that changed the physical 72-car assortment mix by 7–8% every two weeks. Over the course of a year the product line changed over two times entirely. This strategy developed an organized, non-reactionary method of new product introduction and old product obsolescence. New products varied from brand new 'First Edition' cars, to redecorated models of cars already produced. By rolling the mix, Mattel

was able to market a much broader range of SKUs without requiring any additional retail shelf space.

Through its rolling mix strategy Mattel no longer had to rely on POS data to forecast market demand for specific SKUs, but rather to plan the changes to the mix. Since Mattel guaranteed its retailers that the mix would sell, the retailers stocking problems were simplified to merely purchasing assortment packs and stocking the store shelves. Mattel believed it could incorporate the same strategy into the newly acquired Matchbox line and experience similar results (see **Exhibit 6** for market forecasts of both Hot Wheels and Matchbox cars). No other manufacturer had the capability to offer consumers Mattel's level of variety.

### **Mini-Vehicle Manufacturing**

The manufacture of die-cast cars (DCC) involved well-defined production steps that could be performed either in-house or by third parties. Among die-cast manufacturers, there was a continuum in terms of the degree to which the processes and manufacturing steps were conducted in-house, as opposed to being subcontracted to other firms. While most firms had in-house die-casting, plastic injection molding, and basic painting and decorating processes, there was wide variation for other processes, including electroplating, vacuum metalizing, and package printing.

In the first step, a press injected molten zinc into a mold to create the body of the vehicle and/or the chassis (unless one or both of those parts were plastic). Mattel made most of its own die-casting molds at a facility in Malaysia, but also outsourced them from firms based in Hong Kong and China. The bodies and chassis were then removed from the press by the operator. Bodies and chassis would be separated from the excess metal that flowed through the mold ducts into the cavities. This excess metal would be removed and recycled. The bodies and chassis would then be deflashed, deburred, and polished by vibrating the parts with smooth ceramic stones in a large bowl for 30 minutes. This process removed all the unwanted metal while smoothing sharp edges and seams.

The decoration of the car involved an electrostatic application of base and top coat to the car body via a painting system. A common system was supplied by Ransburg and could be used to paint any metallic surface.<sup>2</sup> Die-cast cars were attached by hand to a "tree" that hung from a conveyor line which carried the cars through the painting and drying processes. Each tree carried up to 72 cars. The trees themselves were spaced 16 inches apart and run at the conveyor speed of 7 feet per minute. On the other hand, chassis were electroplated to prevent corrosion and to maintain a shiny appearance.<sup>3</sup> The electroplating process involved dipping the metal chassis in a series of chemical baths to deposit a thin layer of shiny metal.

After applying the base color, additional decorations were applied to the car body and other parts using a "tampo" machine. Aside from the zinc weight of a die-cast vehicle, the major

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<sup>2</sup> Ransburg and other electrostatic painting systems are used in many industries including the automobile industry, to paint metal products.

<sup>3</sup> Many mini-vehicles, including many Hot Wheels cars, had plastic chassis in order to reduce zinc cost, and thus did not use electroplating.

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source of variance in the cost<sup>4</sup> of a car was the number of tampo operations the car underwent. Each “hit” by a tampo machine added one color to one surface of the car. Highly decorated cars with dozens of colors, like NASCAR replicas or highly detailed collectibles, tended to cost more than vehicles with fewer colors and decorations. The determination of how much decoration to apply to a product was purely a marketing decision.<sup>5</sup> Standard Hot Wheels and Matchbox cars typically sold for under \$1.00 in US retail stores, while NASCAR and other collector edition cars were usually priced at \$3.00 or more.

In addition to die-cast parts, most mini-vehicles included plastic injection-molded parts, notably the interior, the windows, the wheels and sometimes the chassis. These parts were produced on conventional plastic injection molding machines that were commonly used to produce other small plastic toys as well as thousands of other products. As with die-cast machines, there were many types and sizes of plastic injection molding machines.

Plastic parts were sometimes finished using vacuum metalizing (VUM) to impart a silvery metallic sheen to the parts. The plastic parts were first painted with a base coat of lacquer. Next a thin film of metal was applied to the plastic parts by ionizing lengths of tungsten metal in a vacuum chamber. While some vendors had electroplating systems, most would choose not to purchase VUM systems, but rather outsource that process for the relatively few vehicles having VUM parts. After VUM, the plastic bodies would be given a top coat of clear lacquer to preserve the finish. If a colored metallic was desired, the clear coat could be dyed (for example red or gold).

After molding, wheels were decorated in a hot stamping process used to apply the metallic appearance to the hub cap area of the plastic wheels. The assembly of the wheels and axles, called the “barbell” assembly, was traditionally performed by hand. Because Mattel's Malaysia factory was located in a relatively high labor cost area, Mattel had developed machines to automatically insert the pins into the wheels to form the barbell assembly.

The assembly of the various pieces of the vehicle into a final product was performed manually by unskilled labor. This operation often involved small 2–6 person manufacturing cells, where the main piece of equipment employed was a device that fastened the body and chassis of the car together (a process called “staking”) after it was manually assembled.

Packaging the product, usually in blister packs, was often carried out at the manufacturing facility. Most vendors had heat sealant machines which sealed plastic blisters to pre-printed “blister cards,” and used those devices to package a variety of other toys and products in addition to mini-vehicles. The printing of the blister cards or other packaging, and the vacuum forming of the blister was often outsourced, but could be performed in-house, depending on a vendor's preference.<sup>6</sup>

The process of manufacturing a mini-vehicle was labor intensive and involved machine production processes that were, for the most part, modular in nature. Operating in low labor

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<sup>4</sup> The number of moving parts, i.e., moving doors and hoods, can also affect cost significantly. Most of the basic vehicles produced by Mattel did not have moving parts.

<sup>5</sup> As a marketing ploy, Matchbox enclosed an unpainted, untrimmed “first shot” car in the same box with the corresponding, finished collectible to illustrate the “before and after” effect of decorating.

<sup>6</sup> A new vacuum forming machine cost approximately \$105,000.

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cost countries like China or Malaysia, labor cost typically represented 10–20% of the product cost. With the possible exception of the Ransburg painting system (and the more rarely used electroplating and VUM systems) most segments of the production process could be expanded incrementally as needed, without creating significant excess capacity at any step in the process or requiring significant capital expenditures. In fact, whether a vehicle was all plastic or part die-cast metal and part plastic, the production process was generally not susceptible to large economies of scale—aside from the usual economies associated with spreading facility and plant management costs over a large number of products. Mattel’s own experience as well as that of the vendors Mattel had engaged, demonstrated that multi-product production was sufficient to obtain much of the possible production economies. Aside from facility and management overhead costs, most of the mini-vehicle production process could be described as proportional to the incremental machinery that was added to the plant as production needs increased. Transportation costs from Asia to Los Angeles varied between \$3,000–\$4,000 for a shipping container that could hold up to 300,000 cars.

## Vendor Operations

VOA was the outsourcing arm of Mattel, Inc. Ron Montalto and his personal assistant started operations in 1988 with very little capital and a lot of faith. The vendor concept was initiated following an extensive competitive study by McKinsey and Company. The study recommended that Mattel differentiate between core and non-core products, manufacturing its core products in-house and outsourcing all non-core products. Mattel originally decided that it’s Barbie and Hot Wheels products were core. In the following years, the company added selective Disney and Fisher Price lines to the list. Non-core products tended to be promotional items, or toys with short life cycles that were often introduced together with a children’s television series (examples include The Mighty Ducks and Street Sharks). Non-core toys experienced the fashion-like demand typical in the toy industry.

In 1997, VOA employed over 400 staff and generated sales revenues in excess of \$1.4 billion. The group operated through a network of approximately 35 vendors that were contracted to manufacture Mattel products. Vendors were typically registered Hong Kong companies with manufacturing facilities and political expertise in mainland China. VOA selected vendors to produce new toys based on expected time to market, a vendor’s manufacturing competence, unique process capabilities, and price.

VOA enabled Mattel to produce a large number of short life-cycle toys without the capital commitments required in wholly owned manufacturing. Moreover, it enabled Mattel to push certain risks onto its suppliers. These risks included demand variability and product diversity. Supplier metrics were based on the ability to produce high quality goods at a competitive price, and to deliver them to end-users on time. Toy sales were directly related to the number of new product introductions and speed to market. In recent years, Mattel had introduced roughly 300 new, non-core toys each year.

The strength of VOA rested on its vendor relationships. Mattel was a marketing driven company that demanded high product quality and precise design conformance. Montalto’s organization had been challenged for almost a decade to help individual vendors develop the internal capabilities necessary to satisfy Mattel’s standards. It was an ongoing process that

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spanned multiple types of manufacturing, from the assembly of plush toys (like Winnie-the-Pooh) to the fabrication of technology goods such as children's tape recorders and cameras (sold under the Fisher Price brand).

The new toy development process began at Mattel's corporate headquarters in California. Design teams created a *Bid Package* that contained the new product's blue print, engineering specifications and often a physical model. The *Bid Package* was sent to VOA for vendor quotation and selection. After a vendor had been selected *Tool Start/Debug* began. Each new toy required a set of tools for manufacture. The most common tools were hardened steel molds used in plastic injection and die casting. Shortly after *Tool Start* came *Tool Let*. This was a scheduling milestone and was considered day one of the production process. *Tool Let* was the point at which Mattel assumed liability for the tooling costs. Tooling costs varied considerably based on the complexity of the toy—tool sets for past toys ranged from \$50,000 to \$2,000,000. After the tools were completed the production process began. Step one or *First Shots* (FS) was typically a run of 50 units to determine what mold/process modifications were required. This was also the point at which a commitment date by the vendor was established. Step two or *Engineering Pilot* (EP) was for touch-up. There could be a second or third EP if necessary depending on the toy's complexity. Step three was the *Final Engineering Pilot* (FEP) that established complete test durability. Step four was *Production Pilot* (PP); typically 1,000 units were run at this stage and the manufacturer used the entire assembly line to run the product. When the new toy met design compliance, step five, *Production Start* (PS) began.

## Production Options

In 1997, Montalto had analyzed numerous options for solving the die-cast capacity shortage including expanding existing plants in Penang, Bangkok, and Shanghai as well as VOA outsourcing options (in particular Zindart—a Hong Kong based company publically traded on NASDAQ). Each of these the existing plants had constraints making them diffident to expand along with other significant trade-offs (e.g., quality, productivity, labor availability, country stability). By the summer of 1997, Mattel was close to a decision to build a new plant in Southern China to handle the increased demand for Hot Wheels and to consolidate Matchbox production. Labor in the Guangzhou region was cheap and plentiful. Including benefits such as dormitories and educational programs the fully loaded rate was less than \$0.50/hour (see **Exhibit 7**). To avoid mainland China's 21% import duty on capital equipment, Mattel planned to locate the facility in one of the special Industrial Zones. The most promising site under consideration was located in the Guangzhou Baiyun Industrial Zone. The Baiyun zone was in Luogang Township, east of Guangzhou. It was 12 miles from Baiyun International Airport and 3 miles from Huangpu New Harbor. A medium-sized cargo railway station was located in the zone.

The idea of building the China plant had been analyzed for nearly a year. By July, Montalto's team had developed a capital expenditure request that was circulating at the corporate headquarters in California. The plan included three options for the initial size of the plant (50, 100, 150M cars). It appeared that one of the options would certainly be

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approved and that construction would commence in the beginning of 1998, with first production in 1999. Then overnight the environment changed. Starting with South Korea and spreading quickly throughout the region, plunging currencies and stockmarkets turned the fast growing Asian economies on their ears. It happened so quickly that companies like Mattel were caught by surprise.

By January, many of the Asian currencies had been sharply devalued (e.g., see **Exhibit 8**). Yet China, whose currency was not fully convertible and thus fixed by the central government, held steadfast. Thus, in relationship to other countries in the region, China no longer looked as inexpensive and the plant decision was back out on the table at Mattel. With the rapid devaluation of Indonesia's currency, some inside Mattel felt it should be considered again as a possible site for a new plant. Indonesia had very low labor rates and was thus suitable for high labor products. Because of this, Mattel had already built a doll factory in Jakarta in 1996. The reduction in currency value had made the labor even cheaper (as long as inflation did not kick up). However, labor productivity was low and managers at Mattel felt it was unlikely that productivity levels could ever be improved to Malaysian levels. Earlier investigations had identified Surabaya as a possible plant site where the costs of building a plant were similar to those in China. In addition to standard return on investment criteria, Mattel was also trying to diversify risk. There was inherent volatility in dealing with third world countries, due to both internal changes in regulations and external pressures. Adding Indonesia gave Mattel a diversification advantage its competitors didn't have, while at the same time allowing the company sufficient economic leverage to maintain some influence with local governments. In principle, these same advantages would apply to a new die-cast facility. In addition, Mattel's experience in running an operation in Indonesia would be a significant advantage when starting up a new facility. However, Indonesia's government was under intense public reproach and it was not clear if the long-time president could survive the crisis.

Another possible site for a new plant was in Kuala Lumpur (KL), Malaysia. Mattel already had a doll factory in KL and the existing die-cast plant in Penang. Adding another die-cast facility in KL would offer the company single country manufacturing and greater managerial control. Economies of scale would come in the form of internal tool production and inter-plant exchange, management staff, material input costs, and distribution. In addition, the labor population in Malaysia was, on average, more productive than anywhere else in Southeast Asia. There were two downsides to making KL a future plant site—labor availability problems and higher labor costs.

## **The Decision**

With the currency crisis raging, Mattel decided to put its decision to build a new plant in Guangzhou on hold so that it could reanalyze the options and watch the Asian economies cope with the changes. While some executives felt that the crisis could have lasting impact, Mattel's economists argued that the economic forces of purchasing price parity would, over time, bring the real labor costs back towards pre-crisis levels. Indeed, after a few months, inflation within Indonesia began driving real labor costs back up. Moreover, by January the exchange rate depreciation bottomed out and many Asian currencies began to slowly rise

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against the US dollar. Productivity and quality also had a significant impact on the decision. Even with the very low wage rate in Indonesia, factoring labor productivity into the analysis made the total cost difference between China and Indonesia much smaller. As exchange rates began to stabilize in January, the total labor cost (controlling for productivity and quality) in both Malaysia and Thailand remained higher than China with Indonesia about 30% less expensive. However, Indonesia had suffered from sporadic political and social disruptions and the economic crisis was increasing the unrest. Additionally, many inside Mattel felt that the local inflationary forces would continue to narrow any cost advantage.

Montalto concluded that if China made sense in the first place, a presumed short-term shift in real labor costs should not invalidate the location strategy. The Guangzhou location was aligned with Mattel's overall strategy for die-cast cars, it supported Mattel's diversified portfolio of operations, and it remained a cost-competitive option even after the currency shift. So Mattel went ahead with the plant in Guangzhou, breaking ground in June 1998. The first production occurred during the summer 1999. The plant was designed to handle 65M units with the possibility of adding another 65M. Matchbox production was centralized in the new plant and the rolling mix strategy was initiated in 2000. Bangkok and Shanghai were transitioned to Hot Wheels and other die-cast products (larger scale). In 1998, Penang was able to boost production to 12.5M cars/month covering most of the Hot Wheels demand. Hot Wheels cars that were outsourced were shipped to Penang to be assorted.

The subsequent years showed the Guangzhou decision to be a good one. Other outside vendors in the region grew up around the factory and were used as component suppliers and relief capacity when needed. Many articles and cases were written, praising Mattel for its savvy China strategy.

Now in fall of 2007 with the string of recalls, everything about the Mattel's supply chain was being questioned. Had Mattel lost focus on its vendors? Had cost pressures become too great? Were quality processes slipping? What had gone so wrong? Montalto was relieved to think that he wouldn't have to answer those questions. He had retired two years earlier.

## EXHIBIT 1: Recall Website

**MATTEL** Consumer Relations Support Center

[Guided Search](#)

[Order Status](#)

[Where to Buy](#)

[PRODUCT RECALL / ADVISORY](#) |
 [INSTRUCTION SHEETS](#) |
 [TECHNICAL PRODUCT SUPPORT](#) |
 [FAQ SEARCH](#) |
 [POWER WHEELS SERVICE](#) |
 [CONTACT US](#)

[Home](#) > Recall

### Recall Information

#### Pixar Cars Sarge Lead Paint Hazard Recall

Mattel, in cooperation with the United States Consumer Product Safety Commission is voluntarily recalling a limited number of the "Sarge" Die Cast toys from the Pixar Cars movie assortments. The affected toys were produced by one specific contract manufacturer during a narrow timeframe. The recalled Sarge Cars were sold individually and in assortment packs in retail stores nationwide from May 2007 to August 2007. The Sarge character is a small die cast car measuring about three inches in length. The car is an army green color and features a white star on the hood. Surface paint on affected products contains lead in excess of permissible levels.

**Lead is toxic if ingested by young children and can cause adverse health effects.**

Please have your product near you as you continue.



Please turn your Sarge vehicle over and locate the writing in the middle of the toy.



- My product says "Thailand" on the bottom.
- My product says "China" on the bottom.

[Product Recall / Advisory](#) |
 [Instruction Sheets](#) |
 [Technical Product Support](#) |
 [FAQ Search](#) |
 [Power Wheels Service](#) |
 [Contact Us](#) |
 [International](#)  
[Mattel Shop](#) |
 [Fisher-Price Shop](#) |
 [Barbie Collector](#) |
 [Hot Wheels Collector](#) |
 [American Girl Shop](#) |
 [Corporate Information](#)  
[Mattel](#) |
[Fisher-Price](#) |
[Barbie](#) |
[Hot Wheels](#) |
[Matchbox](#) |
[Power Wheels](#) |
[Tyco](#)

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**EXHIBIT 2: Representative press coverage of recall.**

*Mattel's Experience working in China:*

<http://www.nytimes.com/2007/07/26/business/26toy.html>

*Days later, Mattel's first product recall in 2007:*

<http://www.nytimes.com/2007/08/02/business/02toy.html>

*Mattel's Second product recall in 2007:*

[http://online.wsj.com/article/SB118709567221897168.html?mod=googlenews\\_wsj](http://online.wsj.com/article/SB118709567221897168.html?mod=googlenews_wsj)

*Mattel's Third product recall in 2007:*

[http://money.cnn.com/2007/09/05/news/companies/mattel\\_recall/](http://money.cnn.com/2007/09/05/news/companies/mattel_recall/)

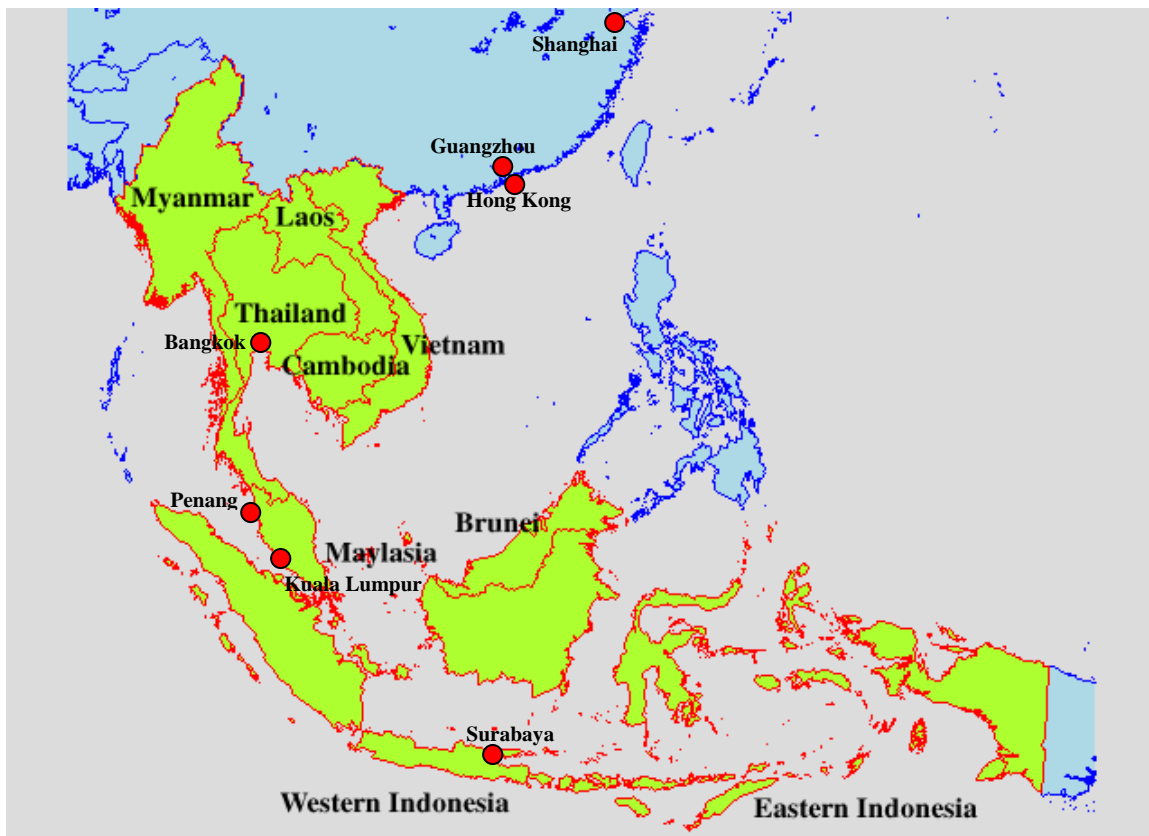
*Chinese factory owner committed suicide:*

<http://www.nytimes.com/2007/08/14/business/worldbusiness/14toy.html>

*Mattel's stunning apology to China!*

<http://online.wsj.com/article/SB119037171135935172.html>

**EXHIBIT 3: Die-Cast Plant Locations**



**EXHIBIT 4: Mattel Financial Information****CONSOLIDATED STATEMENTS OF OPERATIONS**

	For the Year		
	2007	2006	2005
	(In thousands, except per share amounts)		
<b>Net Sales</b>	\$ 5,970,090	\$ 5,650,156	\$ 5,179,016
Cost of sales	3,192,790	3,038,363	2,806,148
<b>Gross Profit</b>	2,777,300	2,611,793	2,372,868
Advertising and promotion expenses	708,768	650,975	629,115
Other selling and administrative expenses	1,338,454	1,232,000	1,079,224
<b>Operating Income</b>	730,078	728,818	664,529
Interest expense	70,974	79,853	76,490
Interest (income)	(33,305)	(30,468)	(34,211)
Other non-operating (income), net	(10,989)	(4,323)	(29,799)
<b>Income Before Income Taxes</b>	703,398	683,756	652,049
Provision for income taxes	103,405	90,829	235,030
<b>Net Income</b>	\$ 599,993	\$ 592,927	\$ 417,019
<b>Net Income Per Common Share—Basic</b>	\$ 1.56	\$ 1.55	\$ 1.02
Weighted average number of common shares	384,450	382,921	407,402
<b>Net Income Per Common Share—Diluted</b>	\$ 1.54	\$ 1.53	\$ 1.01
Weighted average number of common and potential common shares	390,612	386,422	411,039
<b>Dividends Declared Per Common Share</b>	\$ 0.75	\$ 0.65	\$ 0.50

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**CONSOLIDATED BALANCE SHEETS**

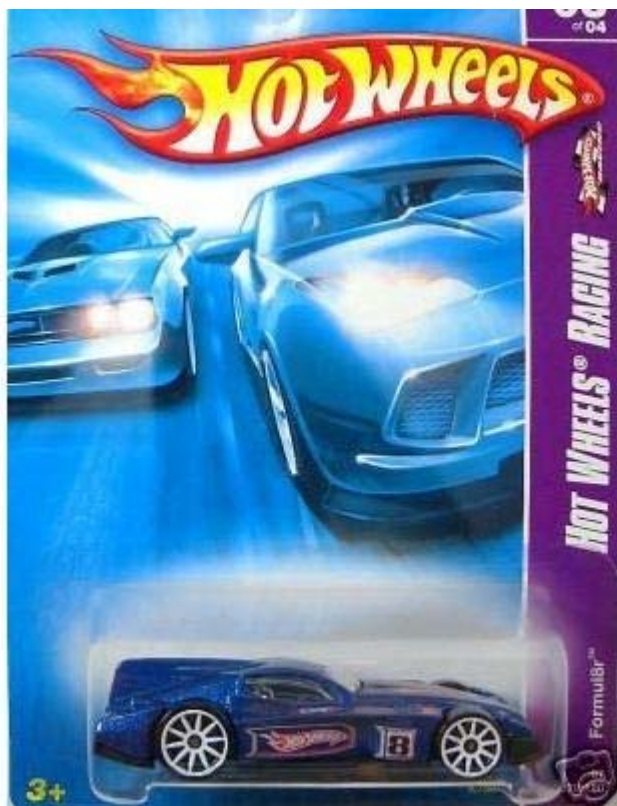
	December 31, 2007	December 31, 2006
	(In thousands, except share data)	
<b><u>ASSETS</u></b>		
<b>Current Assets</b>		
Cash and equivalents	\$ 901,148	\$ 1,205,552
Accounts receivable, less allowances of \$21.5 million and \$19.4 million in 2007 and 2006, respectively	991,196	943,813
Inventories	428,710	383,149
Prepaid expenses and other current assets	271,882	317,624
Total current assets	<u>2,592,936</u>	<u>2,850,138</u>
Property, plant, and equipment, net	518,616	536,749
Goodwill	845,649	845,324
Other noncurrent assets	848,254	723,673
<b>Total Assets</b>	<b>\$ <u>4,805,455</u></b>	<b>\$ <u>4,955,884</u></b>
<b><u>LIABILITIES AND STOCKHOLDERS' EQUITY</u></b>		
<b>Current Liabilities</b>		
Short-term borrowings	\$ 349,003	\$ —
Current portion of long-term debt	50,000	64,286
Accounts payable	441,145	375,882
Accrued liabilities	713,209	980,435
Income taxes payable	17,072	161,917
Total current liabilities	<u>1,570,429</u>	<u>1,582,520</u>
<b>Noncurrent Liabilities</b>		
Long-term debt	550,000	635,714
Other	378,284	304,676
Total noncurrent liabilities	<u>928,284</u>	<u>940,390</u>
<b>Commitments and Contingencies (See Note 9)</b>		

**Stockholders' Equity**

Common stock \$1.00 par value, 1.0 billion shares authorized; 441.4 million shares issued	441,369	441,369
Additional paid-in capital	1,635,238	1,613,307
Treasury stock at cost; 80.0 million shares and 57.1 million shares in 2007 and 2006, respectively	(1,571,511)	(996,981)
Retained earnings	1,977,456	1,652,140
Accumulated other comprehensive loss	(175,810)	(276,861)
<b>Total stockholders' equity</b>	<b>2,306,742</b>	<b>2,432,974</b>
<b>Total Liabilities and Stockholders' Equity</b>	<b>\$ 4,805,455</b>	<b>\$ 4,955,884</b>



**EXHIBIT 5: Hot Wheels and Matchbox Products**



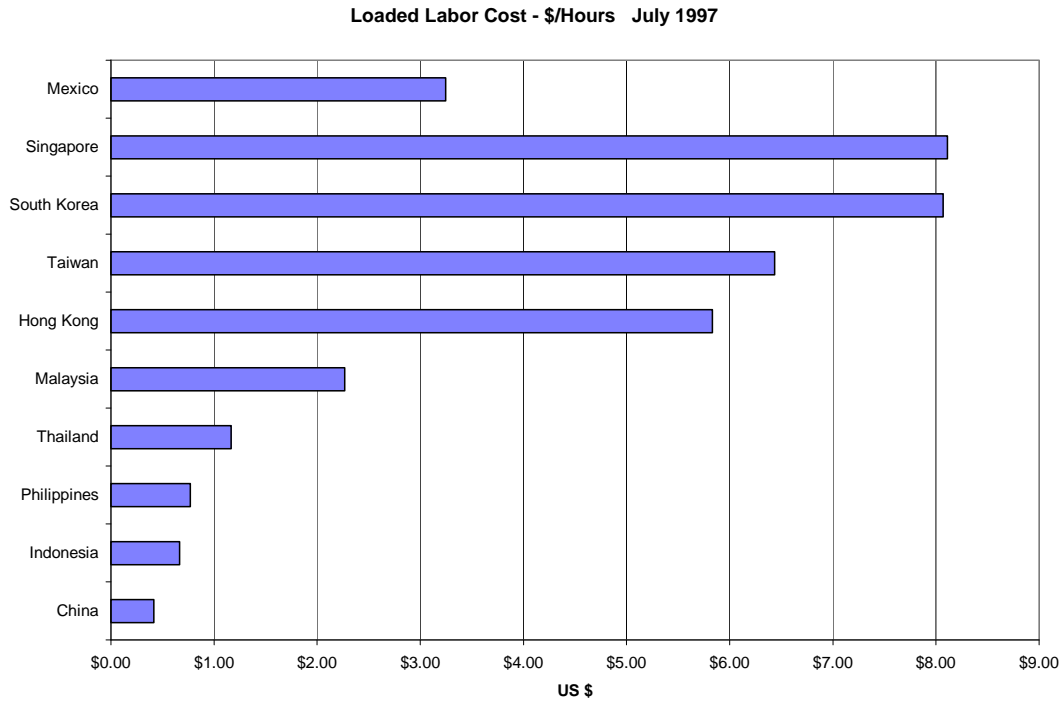
**EXHIBIT 6: Market Projections**

Hot Wheels and Matchbox Demand Forecasts  
(in millions of units annually)

Moderate Growth

		1998		1999		2000		2001	
Total	Total	237		256		276		299	
	HW   MB	169	68	184	72	200	76	218	81

**EXHIBIT 7: Labor Rates in July 1997**



### EXHIBIT 8: Indonesia Exchange Rate

