

## CASE STUDY:

# Coty Eliminated Overfill to Save \$270,000 from Fill Height Project

## COTY

### Coty is an emerging leader in the global beauty and

fragrance industry. The company was founded in Paris in 1904 by Francois Coty and today exhibits innovation and a drive to capture trends sooner, thereby creating enduring brands that speak to the aspirations and lifestyles of today's consumers.

The company boasts an annual revenue over \$4 billion, is headquartered in New York, with offices in more than 30 countries, and employs 10,000 worldwide. Coty's global manufacturing presence, including Research and Development Centers of Excellence, is spread across locations in Europe, the United States and China, with eight manufacturing facilities.

Driven by passion, creative freedom, and an entrepreneurial spirit, Coty has built a unique portfolio of beauty brands that have produced some of the strongest consumer franchises in history. The company's products span three categories of fragrances, color cosmetics, and skin and body care, with adidas, Calvin Klein, OPI, philosophy, Chloé, Davidoff, Playboy, Rimmel, Marc Jacobs, and Sally Hansen rounding out its top 10 brands. The full product portfolio is sold through distribution channels that include upscale department stores, specialty retailers, upscale perfumeries and pharmacies, mass-market retailers, duty-free shops in airports and cities, QVC and various e-commerce channels.



## Challenge

As part of continuous improvement efforts, Coty determined that its filling process was generating a higher level of waste than expected. This was due in part to some lines overfilling containers to ensure aesthetic fills were met, which led to higher expenses on supplies. When considering the price of some of the fill liquids, this was a significant opportunity to reduce overfill and save money. However, the company did not have enough historical data on these lines, which meant that process engineers and quality professionals did not have sufficient information to truly understand the entire problem and develop a viable solution.

In 2010, the manufacturing team at Coty's Sanford, N.C., manufacturing facility turned to statistical process control (SPC) analysis to better understand scrap at the point of manufacture on its filling lines. As part of an SPC Fill Height Project, Coty wanted to determine ways to reduce liquid scrap and better understand its process capability.

## Solution

Coty approached InfinityQS International, Inc., the global authority on Manufacturing Intelligence and enterprise quality, about implementing ProFicient, a proven Manufacturing Intelligence platform powered by a centralized SPC analysis engine, at its Sanford facility. Coty used InfinityQS' tech support to help ensure the most effective deployment of the solution.

The SPC Fill Height Project was incrementally implemented on 12 fragrance lines with target amounts set for every SKU (2,600 parts), control limits for each product and line combination (filling variation), and specification limits (min and max fill height levels). The process also included training for more than 100 users, from line operators and quality inspectors to managers and directors.

*By incorporating InfinityQS ProFicient into our plant floor quality efforts, Coty has realized benefits across all parts of the value chain.”*

~ Romina Colautti, Process Engineer, Coty

## Solution cont.

Coty found that it could consolidate all necessary key performance indicators (KPIs) into a single control chart for easy interpretation and analysis. With the information gathered, the company eliminated the need for overproduction of liquid to compensate for overfilling, identified special cause variation vs. natural variation with real-time information of the process, and eliminated time-consuming, after-the-fact quality checks that did not add value.

“By incorporating InfinityQS ProFicient into our plant floor quality efforts, Coty has realized benefits across all parts of the value chain – from quality professionals that experience unprecedented database accuracy, to executives seeing financial savings,” said Romina Colautti, process engineer, Coty.

## Results



In just two years, Coty has seen significant financial and resource savings with the implementation of InfinityQS ProFicient. With an initial investment of \$47,000, the carefully planned and executed projects have reduced variation, increased accuracy of set points, validated process capability, and reduced overfilling.

The SPC Fill Height project specifically saved Coty over \$270,000 by eliminating overfilling through more accurate fill heights. The project challenged the packaging design engineers to review the actual bottle designs and ensure ideal liquid fill amounts without compromising the overhead space.

Because InfinityQS ProFicient fuels continuous improvement, this project is just the beginning for Coty. The company plans to continue to use the system’s real-time capabilities to achieve Manufacturing Intelligence for more projects that could include other lines with similar bottle types, or even other product lines.

- > **Attained unprecedented database accuracy for quality professionals.**
- > **Eliminated overfill in SPC Fill Height Project to save \$270,000.**
- > **Realized over \$220,000 in ROI.**