HOW DO YOU DOUBLE FILLER LOADING (20% TO 40%) AND INCREASE PRODUCT GLOSS?

Problem: The Core Conflict of "Cost vs. Quality"

A major manufacturer of PP injection - molded tables and chairs in Angola faced an extremely price-competitive domestic market.

Their business strategy depended on achieving two goals at the same time:

- Produce "good quality products"
- Maintain a "competitive price"

This created a core technical conflict.

In the injection molding industry, the primary method for cutting costs is using a High loading rate of CaCO3 Filler Masterbatch. However, this solution has a well-known technical problem: when you increase the loading rate, you typically degrade the product. The final items often become brittle, lose durability, and, critically, suffer from a dull, matte surface finish, which reduces their perceived value.

The Technical "Trap":

This client's challenge was far more severe than the general problem. They were in a complete technical trap.
The problem was not just failing to increase the loading rate; they were failing to achieve their quality standards even at a low rate.

The "Failure" Data:

Data from our tests showed that even when using a standard grade at a low 20% loading rate, the final product still suffered from poor gloss

The Market Problem:

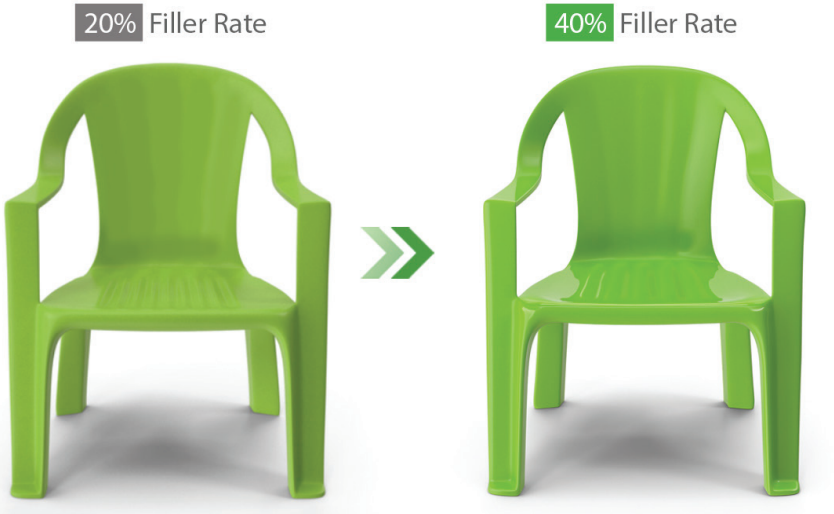
This was a systemic, market-wide issue since the report from other suppliers had the same problem

This created a business deadlock: They could not increase the loading rate to save money (to 30% or 40%), because it would further destroy the product's gloss. However they could also not stay at the current 20% rate, because the quality was already unacceptable.
They needed an R&D solution, not just a standard commodity product.

Mega Plast Solution: A Customized R&D Formulation

Mega Plast did not act as a supplier; we acted as a Global plastic partner. Our R&D and Sales teams launched a two-week project to engineer a new grade specifically for this client.

The Technical Breakthrough: Mega Plast engineered a new formula based on the client's goal: reduce the ratio of stone powder and add a specialized gloss additive. This R&D capability was the key differentiator that other suppliers lacked.



The new, customized PP Filler Masterbatch grade was a complete success, delivering wins on all three strategic goals: Technical, Operational, and Financial.

Metric	Result	Business Impact
Technical (Loading)	Doubled loading rate from 20% to 40%.	Achieved the client's primary technical goal while also improving the final product gloss.
Technical (Quality)	Improved product gloss and achieved Injection: Increase Stiffness.	The final product was visually superior and structurally sound.
Operational (Efficiency)	Production efficiency increased by 10%.	The new formula ran smoothly, optimizing the client's production line.

The client's feedback was direct: "Good grade, good formula optimization, increased loading."

Download
The Detailed Case Study

This story from our Angola partner is clear proof: with the right partner and the right material solution, any production challenge can be overcome.

Optimize your PP Injection costs

Request a sample today

Do not choose between cost and quality. Contact our technical team to find your custom solution.

Nhat Huy Group is a pioneering manufacturer and exporter of plastic products in Vietnam, established in 2004. We offer a range of high-quality products including mineral powder, filler masterbatch, and PVC compound, serving global markets. Committed to innovation and improvement, Nhat Huy Group is dedicated to providing sustainable, efficient, and environmentally friendly plastic solutions, contributing to community and societal development. Our team of experts is always ready to deliver products and services that meet international standards, ensuring maximum satisfaction for our customers.

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