



CASE STUDY Erpro 3D Factory

THE COOPERATION



ERPRO 3D Factory is part of the French company Erpro Group which specialises in 3D printing and plastic injection. It was founded in 1997.

The group comprises 6 subsidiaries including Erpro 3D Factory:





Among the many subsidiaries of the group, TCN worked with Erpro 3D Factory on a specific project to dye spectacle frame for Atol company.



"The TCN's approach is what we called agnostic, technologically speaking. "

TCN met with Loïc Cliquennois, R&D Project Manager at Erpro 3D Factory, to collect his testimonial about this collaboration.

THE NEED OF ERPRO

"For many years Erpro Group has been working with TCN on many projects.

In this particular case, we had a request from Atol via the Abeye startup that manufactures electronic glasses.

The challenge was to achieve a color finish on a constraining raw material. Indeed, not only the shades could not be vivid but also it was rough to the touch.

We finally managed to develop a product with a final aspect that matches the expectations of the massmarket." "The challenge was to achieve a color finish on a constraining raw material."

THE TCN SOLUTION

"The TCN solution has multiple advantages: For Epro 3D Factory

- The dye penetrates everywhere because of its application process and its liquid form. Quite the opposite as with a manuel spray application.
 - The mass processing doesn't require major investment in cumbersome equipment.

For the final client

- A product binded in the mass has a better resistance to external agressions such as scratching, peeling off and abrasion reaction,
- Time and environmental resistance (skin contact, UV and sweat resistance),

. Oeko-Tex certification because the products are worn by the general public. " $${\rm Page}\,1/2$$



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THE BENEFITS

From the very beginning of our collaboration with TCN, we have identified several benefits which are unique on the market.

1. The open system of the TCN coloring process

TCN's process is very open because we can use dye solutions which are compatible with a lot of systems. We can dye any type of plastic material with what we want and as we wish.

Then, the personalized support set up by TCN is definitively their great strength.

« We rely on TONs experts when we look for a specific dye and face complexity in products regulatory compatibility. »

Loic Qiquennois, Erpro 3DFactory

2. The personalised assistance

We highly appreciate, the advices and recommendations which are **directly** made by the TCN's chemical experts.

A real follow-up and **a shades tailor-made conceptual** work in the development of our projects is actually put into place.

There is a process with TCN that we call "Agnostics", technologically speaking. I mean, there is no preconceived idea about how to proceed. They are open-minded. We are developing the process together so that it fits the project. »

To illustrate this support, there is a concrete example of Atol company. When we collaborated with Atol spectacle frames, we wanted to use a specific range of TCN products.

However, we quickly realized that the roadmap, and mainly the mixing method, should be reviewed. Finally, thanks to the follow-up and advices of the TCN 's experts, we were able to develop a dyeing protocol. We got exactly the expected result.

Another benefit with TCN is the different packaging sizes. The one litre jerry can is ideal for testing.

For our current use, we really appreciate the 10 litres jerry can. It presents several practical advantages such as the transport, the storage and facility to shake the product before use.»