In recent years, the demand for aluminium is constantly growing: thanks to its characteristics of versatility and lightness, this particular material has managed to conquer previously unattainable sectors, such as the automotive industry. The COVID-19 pandemic has only slowed its development, and that, consequently, of its surface treatments, without being able to stop it: our interview with José Almeida, President of ESTAL, offers an overview of this optimistic approach to future developments of the market, which aluminium faces as one of the leading elements of the circular economy.

The European aluminium industry and, consequently, the sector addressed to its surface treatments, always shows great ferment. Could you give us an overview of its pre- and post-pandemic situation?

In the past couple of years, most European countries recorded a substantial growth in aluminium demand (and consequently, in aluminium surface treatment demand) in all sectors, namely construction, industrial, automotive markets for example.

During the pandemic period, total aluminium business was less affected compared to the other sectors such as automotive, tourism. However, the pandemic period brought considerable changes in the demand for aluminium/aluminium surface treatments in most of the countries in the world. I will try to give you a picture of the European aluminium industry with the actual situation from some of our members. In Portugal, the construction sector is one of the few that is still with significant growth, whereas in Turkey, most of the surface treated aluminium goods are consumed in the country for the architectural area and the construction sector was severely affected by the pandemic situation. Total exports from Turkey decreased about 10% while total imports fell by around 5% for the aluminium sector. However, for Turkish surface treatment business, more decrease is expected.

In Belgium, many companies in the building industry immediately closed their shops during the lockdown, others tried to continue but once the suppliers from abroad could not deliver anymore, they also had to close down. Three weeks after lockdown, things seemed to start up again and the industry tried to make up for lost time/business.

For Austrian companies, the situation seems to be stable but on a lower basis, with a loss of approx. 10% in 2020.

The industrial sector suffered considerably during the confinement...
period, but it is recovering slowly, the demand for aluminium/aluminium treatments being at this moment, basically the same as last year.

The automotive sector is suffering considerably in these pandemic times, thus aluminium demand (and consequently, aluminium surface treatment demand) is in a historical low.

We believe that the post-pandemic (if a vaccine is massively distributed in the near future) will be of great growth in the aluminium surface treatment.

Currently interesting developments for the surface treatments sector concern the antimicrobial protection of aluminium surfaces. What are the most important projects?

Many companies are searching different additional functions for their surface treatments, other than the simple colouring. Some companies propose enforced scratch resistance or bring anti-graffiti as well as antimicrobial properties. Although we know that various antimicrobial protection powder coatings are at this moment in our market, the demand for such kind of products is, for now, residual and insignificant in most countries. Most of these developments are also more expensive or more difficult in application. Therefore, the impact of changes in the market are there but come slowly. On the other hand, the anodized aluminium surface is already an antimicrobial surface.

Depending on the evolution of the science on COVID-19, namely of its transmission rate by contact with surfaces, the state of the art at this moment is that this transmission isn't very significant, so we believe that this antimicrobial surface protection will not transform itself into a trend, remaining simply as a niche market product.

What are the sector’s current priorities, in general and from a legislative point of view, in particular?

Generally speaking, in most countries, today's current priority is to survive the COVID-19-crisis. Currently most of the companies are concentrating on cost reductions, recovery of debts, maintaining human resources and sustaining the company.

In the majority of the European countries/EU members, from the legislative point of view, one of the biggest issues for the aluminium surface treatment is the forthcoming revision of the BREF STM (Reference Document on Best Available Techniques for the Surface Treatment of Metals and Plastics), document, first edited in 2006. The future of the surface treatment business will be strongly conditioned by this new document, so ESTAL is following with great attention all this process.

Another issue at the legislative level that we follow intensively is the
REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) legislation that addresses the production and use of chemical substances, and their potential impacts on both human health and the environment. REACH has great impact directly at an industrial level, due to the fact that any substance included in the List of substances included in Annex XIV of REACH (“Authorisation List”) has its use banned (or strongly conditioned) in all of Europe. For example, the inclusion in this list in September 2017 of Hexavalent Chromium (Cr 6+) - the substance that had been mostly used for the pre-treatment processes for coating treatments in Europe for decades until the 90’s - has forced a profound change to other alternative authorized products both in the pre-treatment and coating industry in Europe.

Finally, the rising of recycled aluminium may increase the difficulty in the following production chain and may bring new challenges to the aluminium surface treatment industry, for instance problems encountered with the corrosion resistance of powder coatings or bad surface structures in anodising.

One of the most important themes concerns the circular economy applied to the aluminium sector. What future do you foresee for this particular approach?

As President of ESTAL and president of the Portuguese association APAL, I believe that the circular economy policy is the future, and one of the aluminium sectors greatest assets when compared with other materials and industries. As the sustainability and green economy are getting more important in the EU, aluminium usage and business will increase gradually due to its unique properties and highly recycling capability. Consequently, we also believe that circular economy will go from being a trend, to a standard policy in all industry, namely in aluminium/aluminium surface treatment industry. We have great interest in the surface treatment of secondary (recycled) aluminium alloys, with growing demand on a daily basis, and this is why, at ESTAL, we have initiated a working group in order to promote a systematic study of this issue. This work is strongly supported by various members of ESTAL and of European Aluminium.

For example, we believe that the aluminium window to window recycling will be a fact in the next years. This need will be created by consumer demand and it will be inevitable.

Today it’s difficult to make a forecast of the economic situation over the next year. From the point of view of your Association, could you give us some indications of future developments both in your geographic area and in all the world?

Various European countries (Belgium, Austria, for instance) expect to see a temporary drop in activity in the first quarter of next year. Other countries, like Portugal, are very optimistic and believe that the post-pandemic aluminium/aluminium surface treatment market will be of great growth both in Portugal and in Europe. This growth may start slowly, but the growth trend from the last decade will continue, and we believe that our business will thrive in the next years. The future for aluminium and consequently for surface treatment of aluminium is certainly bright.