



LAMINATION

RCN

Engineering:

CONFIRMING
AND CONFORMING
TO QUALITY
STANDARDS;
RESPONDING
TO CHANGING NEEDS
AND DEMANDS





Lamination is an essential process when speaking about glazing — the present-day norms and regulation have specifics that glassmakers must respect, and that are there to ensure our safety, avoid the fall of glass on breakage. RCN, with its more than 20 years of experience in this sector, shows us how it continuously studies and develops its kilns.

“ Needs and demands are changing — RCN is ready! ”

RCN Engineering started the production of kilns for glass fusing and bending in 1990 and, since then, the company has been researching and developing serious alternatives enhancing technical and creative opportunities. Versatility, innovation and service are the pivots RCN Engineering moves on, giving value to every small detail of its production never neglecting the customers' requirements, following suggestions and advice with the will of those who recognize and face the daily challenges for innovation. Continuous updating, company philosophy based on self-motivation and the

wish to take part in the future are the daily incentives of this company that looks not only to, but also beyond the future.

GLASS LAMINATION

Glass lamination is not merely coupling two or more pieces of glass together; each and every system should guarantee excellent vacuum result, according to the laminating interlayer. This requires skills that are not limited to the manufacture of the machines, but to in-depth knowledge of glass in all its possible aspects and uses, since lamination output is strictly based on the lamination experience that should be transferred



to customers who buy an RCN laminating kiln.

RCN solutions are the starting point to help those who are interested in finding a system suitable for their production, space and logistics: kilns for high volumes, small size, lamination tests only, solutions for all needs, for small investments, for companies who wish to experiment different types of lamination, with EVA or PVB or other materials.

REACHING THE HIGHEST QUALITY LEVELS

“Twenty years ago we could never have imagined that EVA would have had such an important and dominating role in glass lamination.” – But who said it?

Definitely not RCN, who is never surprised by the results achieved and, on the other hand, actually expected and these same results thanks to its continuous hard work over the past 20 years, also going against the trend.

We are, of course, speaking about REVA BF, developed in a historical period of the glass industry, during which EVA was usually considered a marginal and secondary element, or a weak link in the laminating process that would never be able to excel.

RCN has changed the ideas regarding lamination around, which continuously led to a great deal of imitation and competition

but, at the same time, low levels of professionalism. And now clients know that RCN supplies products with the highest quality, in combination with excellent technical services and support.

Feedback from the market has shown that RCN is right – an Italian company that started right from the bottom with the enthusiasm and determination of those who truly believe in what they are doing, and who look to the future without being afraid of getting back into the game each time, which is the best way of staying young at heart!

THE EVA MARKET

There are many different ways of considering the EVA market but the most specific and constructive is to be found in the technical skills of the manufacturer to be able to keep pace with his products, taking them to the highest levels of resistance and use thanks to daily and systematic controls and checking. But obviously this is not enough – we also need cross checks with other organizations able to support the professional route of manufacturers. And this is how, in this past year, RCN has been working together with the University of Trento in research for a serious reference point in the field of chemical materials studies.

The University, which is



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also collaborating on other projects with RCN, has identified one of the strong points of REVA BF: its adhesion - 12.2N/mm – without rivals.

Also important to mention is that REVA BF is a cross-linked and highly transparent product, which is resistant to humidity and climate conditions, but many other manufacturers say the same. RCN, on the other hand, does not want to be repetitive, and wants its certifications from Italian Giordano Institute and American AINSI speak instead.

These tests demonstrate that the product's resistance to impact and to harsh weather is considerably higher than expected and, moreover, surprising for such as high-performance product.

HIGHLY SPECIALIZED INTERLAYERS

A great deal has been said with regarding to the comparison of EVA and PVB, which we all know about. But what is important right now, regardless of the limits of PVB, is to be able to take advantage of the precise point in which the two interlayers are similar, and, in some cases, the same with regards to safety aspects in terms of buildings, and to work to improve production in response to the ever increasing demand.

The new norms regarding safety foresee the limiting of risks of collapse due to immediate post-breakage and the consequent danger

of fall in the case of external use. The norm therefore states the need to use interlayers with thicknesses of no less than 0.76mm, so as to respond/resist to harsh weather conditions such as hailstones, for example, and different impacts.

REVA BF responds ideally as can be seen from its European and American certifications, and is therefore a valid alternative.

At the same time, demand is also increasing for highly specialized interlayers for applications such as those in the aeronautic sector, or with resistance to extreme conditions, where specifics even higher than those of EVA and PVB are requested, which RCN is presently working on to diversify its products so as to respond in the best way to market demands.

Last but not least, we cannot speak about lamination without also highlighting the importance of the choice of the kiln with technological features that must offer heat uniformity, with low energy consumption. The choice of insulation of the kiln from floor level, temperature control on the glass surface, have enabled RCN to build kilns that are totally reliable and perfectly responding to the use of REVA BF. This means being able to control processing times, without long heating times and high energy use that can be found in other kilns.

