## Time to speed up development

René Meuleman believes the glass industry needs to kick start its approach to innovative manufacturing processes.



René Meuleman.

Imost every glassmaker worldwide suffered during the 2009 economic downturn, as well as the industry's suppliers. Most furnace repairs were postponed and innovation investments became virtually non-existent. But the world kept turning; government legislation did not vanish overnight and energy efficiency improvement deadlines did not move further into the future. Perhaps our world leaders lost some of their focus on CO<sub>2</sub> emissions but fossil fuels still remain finite

In 2010, the glass industry recovered. Postponed furnace repair projects came back to life again and even some greenfield initiatives were started. Again, it became clear that we simply cannot do without glass and therefore, the industry needs to move on to find efficiency improvements, perhaps even totally different and new manufacturing methods. In other words, innovations are unavoidable and only those who are highly creative and dare to invest will be the successful glass suppliers of the future. Not only the glass manufacturers but also their systems, knowledge,

refractory and machinery suppliers need to participate; only if all think out-of-the-box, share ideas and are willing to take a certain risk can such a partnership become successful.

OUT-OF-THE-BOX THINKING Many suppliers presented at the 26th ATIV conference, most addressing improvements to existing technologies. Only a few threw some new ideas on the silver screen but they failed to generate an overwhelming positive response or enthusiasm. The European Emissions Directive talks about BAT (best available techniques) instead of pushing, promoting and granting the MBYNAT (many better yet not available techniques). The revision of the best available technique for the glass manufacturing industry (GLS BREF) took four years to complete. Didn't these techniques improve over the last four years and if so, what was revised?

Somebody told me a story about a group of young students who were locked away for a length of time and given the task of figuring out a new method to manufacture glass bottles. Unfortunately, they had access to the internet, started to look up existing production methods and ended up trying to improve this 80 year old technology. The conclusion drawn from this exercise is that even for young people, it would seem that out-of-the-box thinking is extremely difficult and at ATIV, there were few young people in attendance. As long as ROI of more than 24 months are out of the question, 'risk' is a dirty word and people of my age (56) strive to drive innovation, so we will keep on discussing 'best available techniques' for many years to come.

Most speakers at the Parma conference shared their ideas and research results but essentially, there was not very much to share and I question whether if somebody did have a truly innovative idea, he or she would be allowed to share it at such a gathering.

Obviously, the biggest dilemma is that if there was a world-breaking idea, it would still take a lot of money and risk to develop it to a level that it could 'fly'. Perhaps even the world leading glass manufacturers would not be allowed by their shareholders to take such a risk as long as daily routines and old-fashion production methods secure their investments for the next 18 months. Meanwhile, the industry is losing its appeal at a potential employer for enthusiastic youngsters. If the industry loses its expertise, the ability to recognise the innovation opportunities provided by suppliers will also be lost.

Eventually economics, fossil fuel shortages and price will force the industry to move on. But with furnace lifetimes of up to 18 years, innovation implementation and fast developments are difficult to achieve. Perhaps these long furnace lifetimes are no longer so desirable. In time, perhaps a concept of extremely high pull rates combined with relatively short furnace lifetimes would be a better fit to the innovation curve we have to follow to achieve the desired efficiency improvements.

If the return of investment could take half the time it takes today, perhaps investors would tend to take more risk. In fact, the whole concept of segmented glass furnaces and rapid melters seems to fit such 'investor attractiveness' but who will start the process?

At the Parma meeting, the next conference was announced in Maastricht for 2012 but which young girl or boy dares to come with a totally new, absurd, innovative and breathtaking idea for making glass?

You'll hear one of the old school - including me - saying "I should have thought of that one" which, in turn, will hopefully reduce the average age of attendees for the 201% conference by 20 years!

## ABOUT THE AUTHOR:

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