GCFDA System

Glass Container - Forming Defects App

The Glass Industry is the most demanded one in the world. Especially when we talk about glass container production. It is hard to imagine how brand owners, such as Coca-Cola, Ferrero, Budweiser and many other corporations would have built their brand without glass containers. What's even more astonishing is the fact that the United States alone produces over 40 billion glass containers each year and it doesn't cover the demand. All this means that the glass container industry is huge with a truly boundless potential.

THE PROCESS

Now, let's consider the production process itself and the problems it faces. It is obvious that the technology behind it has been improving all the time. Back to the 1880s when the automatic glass bottle manufacturing revolution happened, the highlight then was the creation of the first glass blowing machine. Those bottle making machines were so primitive that even children could operate them (they actually did). From that time the inventors such as Michael Joseph Owens, Karl E. Peiler, Henry W. Ingle and others made a significant impact on glass machinery by making them more efficient. Making the machines more efficient, consequently meant that the cost of these highly effective machines increased immensely. Now there are very efficient and robust machines on the market, however, there is a problem…

WHAT'S THE PROBLEM

The production process today is nearly fully automated and manufacturers are spending billions on the latest and greatest equipment. But, for some reason the process is still flawed.

Despite the fact that companies can achieve high efficiencies, the probability of production failure still exist (the average plant efficiency around the globe is below 90%, more like 85%). Every production failure (forming defect) leads to financial losses for the glass container manufacturer. The logical conclusion is that machines alone cannot provide 100% perfect containers.

Production engineer works on the system via remote access.

IS machine operator works with the system to fix the defects.


Pressure failure - glass forming defect.

In addition, it turns out that humans have up to 70% influence on the production process - today in the industry people refer to this as the 'human factor'.

"Unfortunately, the 'human factor' mostly has a 'negative sound' if we talk about industrial processes, we expect people to work like robots. But, humans are not robots, they have a limited reserve of memory and different level of attitude towards work. However, the human potential is underestimated" - said Rajko Machold, the founder of the service company APEGG.

GCFDA SYSTEM

Mr. Machold is talking about using the human potential by giving the people access to a digital solution called GCFDA System.

The aim of the system is to provide machine operators with easy step-by-step instructions in case of forming defects. By using the system, one can quickly identify the defect and get an appropriate solution. This shortens the time during which a defect is produced and reduces the number of defected containers. Moreover, this method has some educational value - the more instructions an operator receives the better one becomes at doing their job. Now there is no more need to invite specialists from outside of the plant to fix forming defects and newly hired and untrained people can do the job with the system as good as an experienced person without the system could. Web access allows plants to get and share solutions from all over the world and for production engineers to manage the process from any part of the globe. One GCFDA System in tandem with the working team can make so much more than machinery alone. ■

THE APP PUBLISHER:
APEGG Ltd, United Kingdom
tel: +44 113 815 30 75
email: info@apegg.com
web: www.apegg.com