An assessment by VERTECH' on the place of AI within the glass industry

What role does artificial intelligence play within the glass industry? Presently, that question invokes a multitude of variables. Already some experts are making dire forecasts, positing that AI could precipitate the global elimination of millions of jobs. Others take it a step further: suggesting it might gain dominion over humanity. Conversely, some view AI as a great opportunity that's capable of catalyzing economic growth through technological innovation across various sectors. What's certain is that AI stands at the vanguard of technology - akin to other innovations that have thrived throughout history.

AI AND GLASS

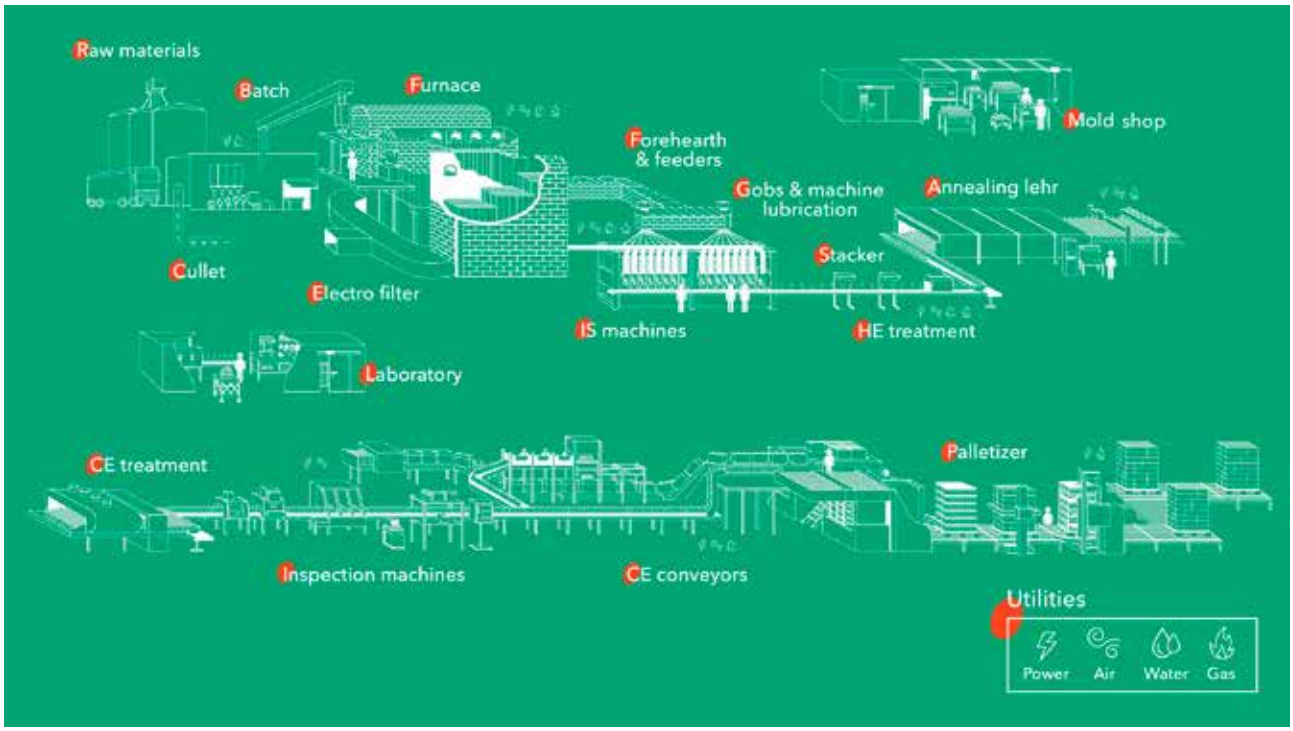
Glass manufacturers are currently facing a gamut of economic, technical and ecological challenges. All strive to devise solutions that can satisfy ecological imperatives while optimizing production processes. A shared objective is that of cost reduction as well as the elevation of both product quality and longevity. Much like their counterparts in other industries, companies specialized in Manufacturing Execution Systems (MES) are exploring the feasibility of integrat-

As glass manufacturers navigate data quality hurdles whilst embracing AI, practical implementation continues to remain uncertain. Clearly the success of such technologies demands precise information that can be fully blended with human expertise. Here, in emphasizing the importance of refining and integrating AI with our human potential, VERTECH' evaluates how AI might best benefit the industry.

ing AI into their product designs - all to offer more powerful tools to streamline production processes. In parallel, experts within the glass sector increasingly scrutinize the benefits and hazards associated with AI adoption. All said, this revolutionary tool remains somewhat under-utilized within the sector at this juncture. Incontrovertible too is that this fledgeling technology not only possesses the potential to replicate human cognitive functions. It can also outperform them. Indeed the potential of AI within the glass industry could transcend those of conventional data analysis systems - which, for example, can already work out equipment maintenance requirements. The incorporation of AI into the glass sector necessitates the assimilation of colossal volumes of data which must be of a quality that's comprehensive but also impeccable. Any inaccuracy of foundational data could compromise the integrity of both analyses and predictions - potentially culminating in catastrophic consequences owing to erroneous decision-making. As such, the constructive employment of AI hinges upon what it's initially 'fed' by way of precise and pertinent data - all coupled with continuous vigilance and stringent verification. Of course, this cutting-edge technology holds the potential to optimize manufacturing processes under such conditions.

THAT INDISPENSABLE HUMAN OPERATOR

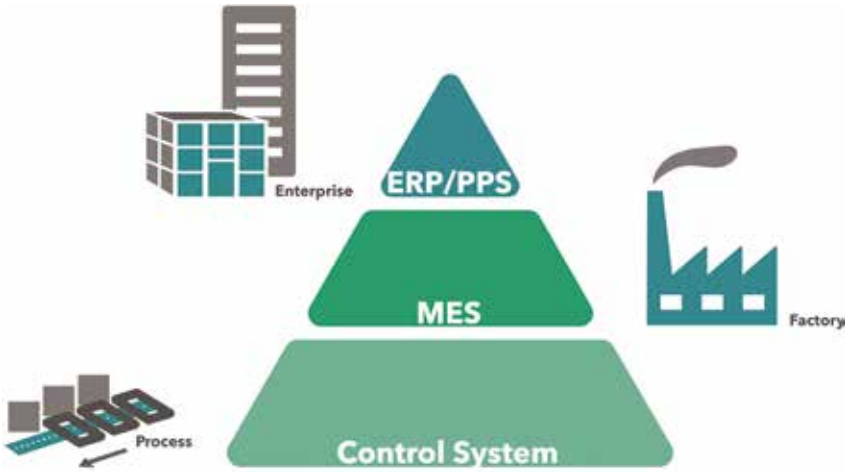
Till now no technology exists that's capable of crafting the perfect formula for glass bottle production. Here there are a myriad of factors to consider, some of which are variable and even unpredictable, such as external temperature



and atmospheric pressure. Glass container production is a labour-intensive and intricate endeavour that necessitates examination of an extensive array of data comprising composition and temperature among other variables. Compared to other industries, that of glass retains a somewhat artisanal quality, with the expertise of seasoned operators who serve as coveted linchpins for preserving the precision and excellence of the glass production process. Needless to say, prior to contemplating the involvement of AI in the quest for some flawless formula, a more advanced digitization of the factory -replete with highly precise and controlled data- becomes a necessary prerequisite. On the other hand, the utilization of this new technology should not have free reign in entirely supplanting the human factor. Operators should not become excessively reliant upon AI, as this could erode their capacity for swift decision-making and responsiveness. Instead, a harmonious blend of human expertise and AI would offer a useful solution for optimizing production processes. Also, leveraging the proficiency of qualified operators in conjunction with the capabilities of revolutionary AI systems would predictably yield superior results.

LEVERAGING AI RESPONSIBLY

All things considered, AI could substantially assist in the development of intricate data schemas - essentially bolstering preventive maintenance efforts while enhancing production processes. It oughtn't be perceived solely as a repository for triggering alerts but rather as a cognitive resource that's capable of swiftly identifying vulnerabilities and proposing improvements. Here, the potential of AI warrants consideration not only in terms of predictability but also in terms of fostering creativity and innovation. The application of artificial intelligence (AI) within the glass industry



holds immense promise - potentially heralding substantial benefits for glass manufacturers. However, it is essential to recognize that practical AI implications for improving glass production remain shrouded in uncertainty, which is why the integration of AI into the glass industry presents both challenges and opportunities that require meticulous consideration.

VERTECH'S TAKE ON AI

Vertech' acknowledges the ever-evolving landscape of AI technology. On that score the company is proactively assessing how its expertise coupled with the extensive repository of glass-related data it has amassed all align with current outcomes of AI integration. Here the company's commitment to being a vanguard of technological advancement remains unwavering. It nonetheless acknowledges at this juncture that realizing any tangible AI impact within the glass industry appears to be somewhat distant still. Indeed while AI has made significant strides in various domains, effectively adapting it to the intricacies of glass manufacturing would necessitate a more mature, refined approach which is not simply a matter of adopting AI solutions but rather ensuring their seamless integration with existing systems and processes - particularly within the realm of glass Manufacturing Execution Systems (MES). In order to harness the true potential of AI in glass production, Vertech' considers it important to prioritize further refinement of these technologies, which necessarily involves enhancing AI algorithms, augmenting data analytics capabilities and crafting specialized applications that are tailored to the unique challenges of the glass industry. Moreover, achieving a synchronized and integrated approach to AI and MES systems remains no less imperative. This synergy will not only enhance the efficiency and quality of glass production. It will also unlock innovative possibilities for both product development and process optimization. In essence, while the promise of AI in the glass industry remains undeniable, the path to realizing its full potential remains a journey that nonetheless requires patience. Here Vertech' remains steadfast along this journey - continuously exploring how AI can transform the glass manufacturing landscape. As such the company remains confident that, with perseverance and innovation, the glass industry will eventually reap the substantial benefits that AI has to offer. ■

VERTECH'
Campus Saone Or
11, rue Alfred Kastler
71100 Chalon-sur-Saône, France
Tel : +33 385 981 919
vertechsales@vertech.fr
https://vertech.eu

Glass Industry

Directory 2023

- Supplier Profiles
- Yellow Pages
- Sales Netw
- contacts
- Associations

OVER 1,600 CONTACTS

PUBLISHED BY

Poste Italiane Spa - Spedizione in abbonamento postale - 70% - LO/MI • € 2 - Copia omaggio