

## UNICORN 4.0 – THE NEW DIMENSION IN FACTORY PLANNING

Working out of Miami, Florida, BeerBev LLC, known for its holistic approach in handling expansion, modernization and greenfield projects in the brewing and beverage industry took factory planning to the next level by launching its UNICORN 4.0 planning solution during drinktec 2017, the world's largest fair for the brewing and beverage industry.



### UNICORN 4.0

is centered around BeerBev's comprehensive solutions for factory planning in the brewing and beverage industry which covers all phases of the factory planning process from site selection to building and layout planning. UNICORN 4.0 provides feasible, accountable and realistic planning for everyone involved. It is here where BeerBev combines holistic engineering with state-of-the-art mixed reality technology, enabling customers to engage with the digital design and virtually interact with their vision in the most natural ways possible. The mixed reality in UNICORN 4.0 brings customers, places and designs from the physical and digital worlds together. This blended environment becomes the canvas, where BeerBev LLC brings the customer's vision to reality.

#### // FULL INTEGRATION OF PROCESS DESIGN IN BUILDING LAYOUT.

BeerBev's team of engineers and architects combine their expertise in process and civil design to create a comprehensive model which identifies synergies between the process flow (from malt intake to filling/packaging) and building layout. As a result, CAPEX is reduced by:

- Creating a compact layout.
- Identifying shorter routes for pipe ways.
- Developing more efficient interfaces.
- Improving material flow and logistics.

By integrating a centralized control and communication center in the heart of the production area, operations and communications are simplified and improved.



#### // PROPER REALIZATION OF CUSTOMER'S VISION.

With UNICORN 4.0, the constraints of communicating data with 2-D process/building layouts and simple 3-D renderings are lifted.

Mixed reality allows for a more collaborative design process. Each party involved can properly visualize the design concept and provide direct feedback so the final model is the true realization of the customer's vision.

Overall, the goal is to create an all encompassing package that meets production numbers and goals, and is also in compliance with all economic, financial, social, and ecological objectives and conditions set by the client. This includes amongst other issues, environmental care, working conditions for the employees and the observance of resource and energy use.

// BeerBev LLC understands that its customers are facing quickly changing and turbulent markets. Properly preparing for the future places high demands on the planning and operation of breweries and beverage plants where technical, process, logistical and organizational requirements are constantly becoming more complex.

To accommodate continued growth and evolving consumer demands, factory planning needs to incorporate a comprehensive and future proof master plan with project phasing for possible plant expansions.



Furthermore, the planning needs to include production processes with highest flexibility to be prepared for future trends and product developments.

New technologies in virtual, augmented and mixed reality have yet to be fully utilized in the planning of breweries and beverage factories.

With BeerBev's release of UNICORN 4.0, the latest advancement in mixed reality is now fully integrated into their best in class factory planning. For the first time, customers are engulfed in an augmented world. They discover a whole new dimension of factory planning as they see their concept come to life.



## // ASSIMILATION OF REAL TIME DATA INTO PRODUCTION.

The mixed reality used in UNICORN 4.0 allows BeerBev LLC to integrate tailor made data reporting concepts and automated batch reports on the production floor. With real time tracking of KPIs, the operator is always informed that the plant is operating within its set performance indicators.



## // A MODEL DESIGNED FOR LONG-TERM SUCCESS.

By properly planning for the future and accounting for features outside of the process such as logistics, BeerBev LLC creates a holistic model to help drive the continued success of the brewery/beverage plant. In developing a forward thinking Master Plan, BeerBev LLC considers the most economic and strategic fit for current and future operations.

This includes a design with phased expansions to accommodate future growth and an implementation plan that doesn't interrupt production. In all, using UNICORN 4.0 results in optimized factory planning from phase 1 until the final capacity.

With UNICORN 4.0, BeerBev LLC provides a unique platform that enables customers to interact with their concept. By combining project centric engineering and the latest developments in mixed reality, BeerBev LLC unlocks the true potential of factory planning, allowing the customer to see their vision come to life – an experience that will set the new standard in factory planning.

Applying UNICORN 4.0 with its comprehensive project simulation during the planning and engineering stage for a new brewery or beverage plant will provide substantial risk mitigation and benefit timely and budget compliant project implementation.

