



Container Glass for Ethiopia

The largest container glass production facility in Ethiopia is nearing completion.

EME GmbH, together with its South African partner Makeway, is building a turnkey batch house with a capacity of 420 tons per day for Juniper Glass Industries PLC near Addis Ababa.

High quality batch for a range of glass colours can be produced in this EME batch plant. Specific attention has been paid to the reliability and ease of maintenance of the equipment, thus the design of the equipment and its material composition was carefully considered.

The glass melting furnace and the feeders were designed by Nikolaus Sorg and are being built by company SKS.

The batch plant has been seamlessly integrated with the furnace, thus another project is being successfully realized through the support and experience of the Sorg Group.

Once again it has been proven that excellent cooperation between all parties involved is the key to a successful project.

SORG GROUP NEWS GLASSTEC 2018

NEWS TOPICS

Container Glass for Ethiopia.....	01	Beer Bottles	03
Next Foreearth Generation: SORG® 340S+	02	Quality Counts	04
EME-NEND® Batch Charger: The New Type R.....	02	EME - Active in the Glass Recycling and Sorting Market	04
SORG Know-How: 3D Laser Scanning	03		
Virtual Reality - A Walk Through the Melting Furnace	03		



Next Forehearth Generation: SORG® 340S+

In order to keep up with the higher requirements customers have regarding glass conditioning, SORG has now improved on the 340S® forehearth. Its successor is the new SORG® 340S+.

The design of the new one-piece superstructure shortens construction time and makes heating-up of the forehearth easier. This special design also allows a separated left/right heating of all forehearth zones.

The largest modification regards the cooling air supply. In new 340S+ forehearths, the complete cooling air for all forehearth and working end zones including possible bottom cooling will be served by only one fan. Thus, less space is needed and the amount of maintenance is reduced.

Moreover, the 340S+ offers the possibility to add equipment like the new forehearth top electrodes and the CONTI-DRAIN® system to cover special demands.

EME-NEND® Batch Charger: The New Type R

The EME-NEND® series of batch charging machines has been expanded through the addition of another variant. During the development of this series of batch chargers - as can already be seen in the name of the batch charger EME-N(NO) E(EMISSION) N(NO) D(DUST)® - special attention was paid to a low-dust feeding system with a sealed doghouse in order to eliminate the dusting around the furnace and to eliminate the introduction of false air into the furnace.

Of course, an improvement in the batch distribution in comparison to other conventional batch chargers was another very important development target. It has been found that many small batch piles, evenly distributed

over the melting surface, have a positive effect on the melting behaviour of the batch, due to a larger surface area available for reaction and thus better heat transfer can be achieved. In conjunction with the glass level control and the exhaust gas control, an optimal batch pattern can be achieved.

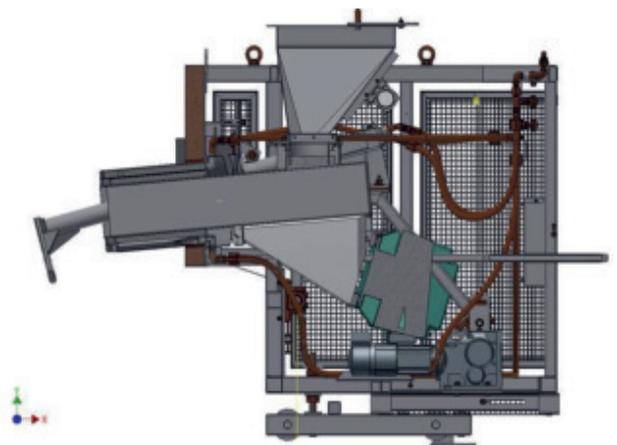
The throughput of the integrated feeding device can be accurately controlled and with the aid of the pusher the size of the batch piles can be adjusted for optimal batch charger performance. Different versions of the batch chargers are available for different requirements:

- EME-NEND® 2 and EME-NEND® 3
- EME-NEND® S1, EME-NEND® S2 and EME-NEND® S3
- EME-NEND® VL and EME-NEND® VR
- EME-NEND® R1 and EME-NEND® R2

What characterizes this new version and in what way does it differ from the other batch chargers in this series?

- Batch delivery through enclosed vibratory feeders with rectangular cross-sections, capacity control via thyristors
- Vibratory feeder with a rear maintenance door
- Separate water-cooled heat protection covers at the vibratory feeder outlet
- Elliptical pusher movement, motor driven, frequency controlled
- Heat shield in lightweight construction
- Larger operating range
- Maintenance friendly
- Reduced footprint (size and weight)

If we have sparked an interest, then ask us for more details. We are happy to help you to find the optimal EME-NEND® batch charger for your furnace.



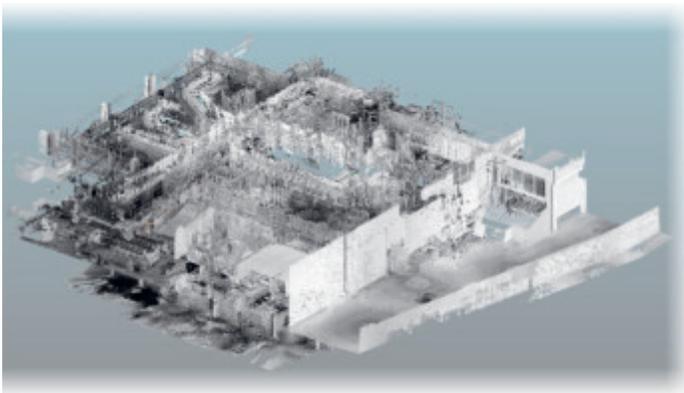
SORG Know-How: 3D Laser Scanning

The handling of so-called Brown Field projects is getting increasingly complex and existing structures are to be reused to a larger and larger degree. The integration of new stages and plant components into existing systems and the positioning of new and reusable equipment requires a higher degree of coordination effort with the client than was necessary just a few years ago.

3D laser scanning is a modern method, which allows customers to capture and digitalize existing structures and equipment layouts quickly and accurately. The data can be used for further planning, so that the accuracy is increased and possible collisions are already identifiable at the beginning of the planning phase.

SORG has extensive experience utilizing 3D laser scanning in the glass industry. We have the equipment and the team of experts to carry out the inventory in short time, tailored to the costumers' needs and the task. The SORG laser scanning team is able to capture 1,000,000 points per second - for the best insights into your facility. Therefore, the system is scanned at 400 or more installation sites of the laser scanner across all floors.

Subsequently, the entire system with all its details is calculated as a 3D point cloud and available to the user. In this point cloud, which of course can also be available in color, a simple measurement of the existing and required structures is possible.



Virtual Reality - A Walk Through the Melting Furnace

A furnace inspection can be exciting but also very loud and hot. At glasstec 2018 we offer you the opportunity to explore a melting furnace in a new way - 360 degrees without any heat. Enjoy a relaxed virtual tour through

the glass melting plant and take a look at selected furnace equipment. Do not miss this experience and visit us at our booth B39 in hall 15.



Beer Bottles

In 2014 EME built a batch plant that has reliably supplied Furnace 1 and Furnace 2 at the Piedras Negras site of our customer IVC in Mexico with high-quality batch for the production of beer bottles.

The plant was designed with a capacity of 870 tonnes per day. In addition to the batch plant, EME also supplied the cullet recycling systems for both of these furnaces. All of these systems are running to the full satisfaction of our customer.

As a result, we are particularly pleased to announce that INDUSTRIA VIDRIERA DE COAHUILA has awarded EME the contract for their latest batch plant and the cullet return system, feeding their new furnaces, Furnace 5 and Furnace 6.



Quality Counts

The production of display glass requires stable and reproducible processes with precise observance of all process parameters in order to meet the high quality demands of this product.

Accurate weighing of recipes with homogeneous mixing, which must by no means be contaminated by impurities like metal wear, is one of these crucial parameters.

EME is proud that the Caihong Group has decided on a further partnership with EME GmbH for their current project and has placed an order for the planning and delivery of a batch plant, a premix plant, a plant for processing the production cullet as well as the batch charging system for the melting furnace.

Our long-standing and successful partnership is continued with this contract. With the current order, we are now delivering the tenth plant for the production of TFT glass in close cooperation with our customer Caihong Group.



EME - Active in the Glass Recycling and Sorting Market

EME is again very active in glass recycling and sorting projects as a result of increasing demands and requests from our key customers to be involved as a strategic partner. EME incorporates its expert knowledge and

experience of batch and cullet processes and conditions into the cullet recycling concepts with special attention on reliable quality management as well as minimizing the environmental impact of spillage and dust emissions.

EME offers equipment for all of the steps involved in the cullet treatment process, including

- cullet preparation (handpicking, crushing, screening, drying)
- contamination removal (organic separators, ferrous separators, non-ferrous separators, CSP-sorters, heat-resistant and lead glass sorters)
- color sorting (flint-green-amber-other)
- fines processing through cullet pulverization technology

All projects are designed and engineered in accordance with individual customer needs. In addition to standard off-site solutions, EME has specialized concepts for inline glass recycling plants that are integrated into the batch house process.

These inline solutions have various advantages, primarily a higher quality can be achieved due to the elimination of additional contamination from external sources as well as reduced fines generation due to reduced cullet handling.

Additionally, with direct integration and connection into the batch house and its control system, savings can be generated through shared operators, combined maintenance and cleaning routines and common spare parts.

EME is your perfect partner for tailor-made solutions for your glass recycling and sorting project.



Glass is our Passion