

June 2017

First application for the new EIRICH D23 Mixer in the glass industry

There is barely another mixer that has been used for as long and as frequently for the preparation of glass batches than the D22 Intensive Mixer from EIRICH. Around 300 are in use in batching plants around the world, and many have been running for more than 30 years. EIRICH has now developed a successor that not only runs even better and is more economical, but one that is also easier to maintain and service. With the new mixer, a 1:1 conversion from the old system to the new one is possible. Its first application was at Crisa Libbey in Mexico.

Batch preparation is the first step on the way to consistently high glass quality. The main requirement for a mixing plant is that it produces a batch that combines extremely high homogeneity with the lowest possible tendency to demix. The requirements in terms of the mixing technology are high; agglomerates need to be optimally disintegrated, small additives need to be homogeneously blended in without premixing, and liquids such as water or soda lye need to be evenly distributed within a short space of time.

Mixing systems that were invented over 100 years ago, e.g. ring trough or turbine mixers and planetary mixers, are not fully up to this task. The further development of the planetary mixer, which was invented by EIRICH in 1906, was the EIRICH mixer, the mixing principle of which (with a rotating mixing pan) was patented in 1924. From 1960 on, these mixers were equipped with an additional rotor, and since then these so-called D-type mixers have been used all around the world, including in the glass industry.

In recent years in particular, EIRICH mixers have been used in more and more production sites. Whatever the challenge, these mixers always deliver outstanding results in terms of batch homogeneity, availability and cost effectiveness. Investigations conducted by Philips, published in 2004 in GLASS INTERNATIONAL, show that EIRICH mixers achieve significantly better batch homogeneity in far shorter times in comparison to other mixers.

June 2017

And now there is a successor to the legendary EIRICH mixer in the form of the type DE22 (1500 liters) and type DEV22 (2250 liters). Just like all EIRICH mixers, the mixer type D23 developed in 2015 with an effective capacity of 1500, 2250 and 3000 liters uses a rotating mixing pan to feed material to the mixing tools. This separation of the two tasks 'material transport' and 'mixing process' offers a significant degree of freedom and advantages for the design of the mixing process. This results in much better homogeneity of the batch. With the new D23, the tried-and-tested mixing principle of the D-type mixer has now been further optimized: the fast-running rotor has been significantly enlarged and now performs the lion's share of the mixing work, while the paddles of the rotating mixing star have been reduced in size accordingly and now only play a lesser role. The result: with the new D23, another increase in batch homogeneity has been achieved.

Crisa Libbey focuses 100% on quality and cost-effectiveness, so it made complete sense to invest in more effective, up-to-date and inexpensive mixing technology and to replace the mixer of type DEV22, which was installed in 1975, with a new D23 machine. The replacement of old for new was a 1:1 process, so there was no need for conversions to the existing plant infrastructure since the dimensions of the new mixer match those of the old one exactly. It was taken into operation at the end of 2016. Crisa Libbey is now well equipped to meet all the challenges of the future.

More information: In the USA, Mexico & Canada, Contact: cclark@eirichusa.com
Contact: Harald Eirich, e-mail: harald.eirich@eirich.de

The EIRICH Group, with Maschinenfabrik Gustav Eirich as its strategic center in Hardheim, is a supplier of industrial mixing, granulating/pelletizing, drying and fine grinding machinery, systems and services. EIRICH has core expertise in processes and techniques used for the preparation of free-flowing materials, slurry and sludge. The main applications for these processes are in the ceramics, refractory, foundry, construction materials, plaster, rechargeable battery, battery compound, fertilizer, glass and ore dressing industries. Close co-operation between our own test centers around the world and collaboration with the research and academic community enables the "hidden champion" to provide solutions for

Press release



Hardheim, June 2017

innovative, cost-efficient products and processes. The family-managed company was founded in 1863 and operates from twelve locations on five continents.