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## Lime Kilns: Retrofit technologies and their advantages in the sugar industry

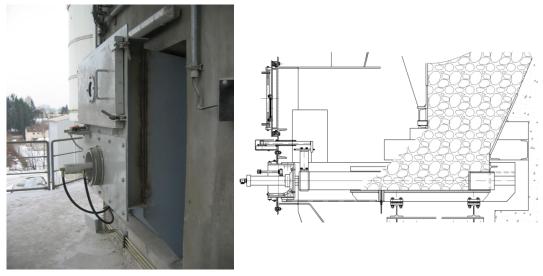
Eberhardt GmbH, located in Germany, has a 155 year long experience in design and construction of lime kiln, milk of lime plants and surrounding equipment technologies. The company is globally active in lime, PCC, soda ash and – of course – in the sugar industry.

On the occasion of the ASSBT 2017 conference Eberhardt would like to present following topics to the audience:

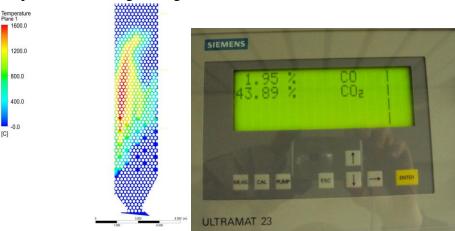
Inventions and improvements of retrofitting vertical mixed feed kilns focusing on a
wide bandwidth of limestone fractions with a maximized planarity of the filling level
by rotating or static distribution systems as well as optimized fuel distribution through
new skip charging systems.



 Mechanical design and operation capabilities of hydraulic driven discharge equipment with its volumetric material movement. Review of the advantages in production and process in shaft kilns. Successfully implemented at Michigan Sugar - Bay City in 2016.



• Optimization of the exhaust gas CO<sub>2</sub> concentration in vertical lime kilns regarding to the demands of the sugar industry. How to gain 40%+ of carbon dioxide gas purity in mixed feed kilns. As well as achieve performance improvement through gas analysis. Successfully implemented at Rogers Sugar - Taber in 2014.



• Increasing the production and health safety of skip hoist systems by retrofitting an integrated state of the art control system to existing hoisting machines with different options like automated brake tests and conversion to frequency converter drives. Successfully implemented at American Crystal Sugar - Hillsboro in 2014.



