

ISSUE 02/2021

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Important Dates/Events:

- 1. ILA H&S Award Web-Ceremony
Nov. 29, 2021
- 1. Virtual VISION ZERO Summit by ISSA
Dec. 7-8, 2021
- ILA GA 2022
Oct. 12-14, 2022

Links:

www.internationallime.org

www.issa.int

"Be Safe and be Careful"

❖ Time to say goodbye

Dear Lime-Family and Friends,

Straight out with the news:

My heart is breaking while I need to tell you that after a short time of 10 years with ILA I have to leave you. I am so thankful that I was able to join so many exciting events over the last years. So many great experiences and so many friends around the world! This is something I will never forget.

The last years changed so much in everyone's life - in mine too - so that I thought a little moment longer about the chance which came along to change myself...to develop... and going new ways. The only thing I had to do was being brave to take this step and close the ILA chapter in my life.

I am very proud of ILA and somehow it feels like leaving a 10 year old child behind. But I am sure: everything is gonna be alright!

I am so thankful for getting to know you all, working with and for you this long time and all the fantastic events we shared the last years. Wishing you all the best - also personally - stay safe and take care!



Mrs. Melanie - leaving ILA, raising her glass on you!

Paris 2.0 is waiting for you all to see each other again. And I will raise my glass on you!

I'll never forget you!

We have already found a new colleague - Susanne Kemper - who looks forward to taking on my duties. She will introduce herself in the next ILA newsletter. Paul, Kai and Frank are of course still available at any time. post.ila@kalk.de ▪

If you like - connect me via linkedIn 😊



❖ Introduction

My name is Dr. Kai Schaefer and I am 48 years old. Since 2005 I am an active part of the lime family and actually I am President and Managing Partner of the SCHAEFER KALK Group. SCHAEFER KALK is a family-owned medium-sized company with a history of more than 160 years in the production of lime and is synonymous with high-quality burnt and unburnt lime products and precipitated calcium carbonates (PCC).

Lime at its best. This describes our consistently high commitment to quality, which makes us a leading supplier of lime. Having our roots in Germany, we do operate productions in Germany, surrounding European countries and Asia (www.schaeferkalk.de).

Since 2017 I hold the position of Vice-president of the International Lime Association (ILA) and also President of the German Lime Association (Bundesverband der Deutschen Kalkindustrie e.V.).

Being a lime producer was always more than just focusing on our own activities. Since many decades it is common interest to exchange ideas, technical developments in lime production and methods and possibilities in lime applications. Since the very beginning, ILA has played a vital role in that exchange and laid the basis for becoming a real global lime family. In my opinion this role is never getting outdated. On the contrary, it has never been more important than today, as the challenges for our industry



Kai Schaefer, ILA VP

are not local or national. They are really challenges for all of us with the big aim of the decarbonation of the lime industry as such. It might still be a long way to go until we will have achieved this aim, but we have to start now. On that way we also have to accept, that such a development might take place with different speeds in different parts of the world. And most probably there will be



not the one solution fitting for all, but we can make sure, that all successful or promising solutions are being shared between the

members to avoid unnecessary work.

I am glad, that ILA has adopted this role and I can only invite and encourage everybody to participate.

For a better world, for a successful, sustainable and ecological lime industry and for the wellbeing of mankind.

---Kai Schaefer, ILA Vice President and BoD member ▀

❖ Maerz Ofenbau - Sustainable lime burning technology with shaft kilns

The climate goals and climate policy are currently challenging the lime industry and creating some uncertainty. Modern lime kilns emit around one ton of CO₂ per ton of lime, around three quarters of which come from the decomposition of limestone. By 2050, no more CO₂ may be discharged into the atmosphere,

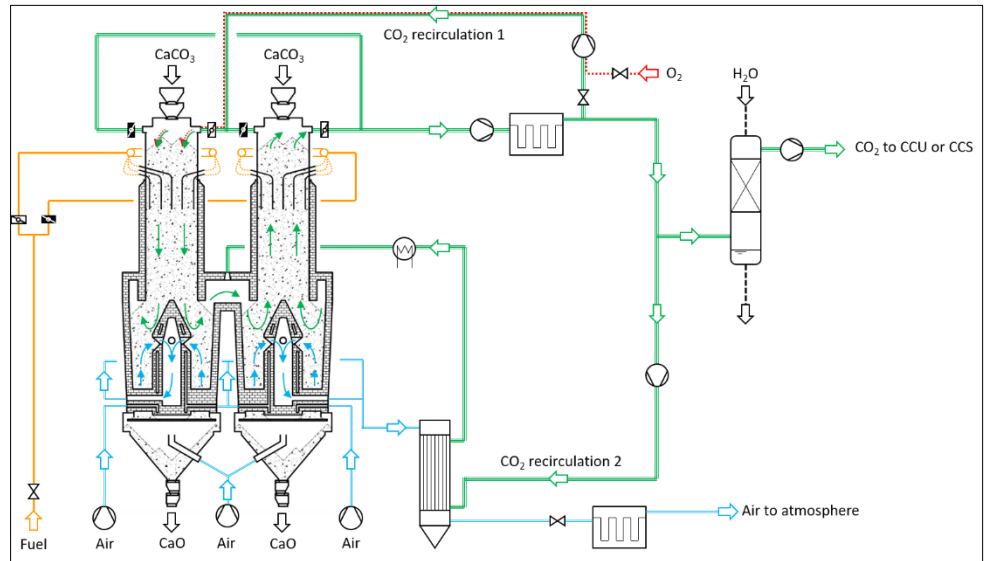
regardless of whether it comes from fuel combustion or limestone decomposition. It is very likely that CCU and CCS

technologies will also have to be used in the lime industry in the future. In order to give the lime industry the necessary flexibility for this, Maerz Ofenbau AG has developed the Maerz EcoKiln series. These lime kilns allow conventional operation, but can be switched to oxyfuel operation at any time if necessary. With the new Maerz EcoKiln series, CO₂ concentrations of 90 to 97% are achieved in the exhaust gas. This means that, if necessary, a CCU/CCS system can be connected downstream without an expensive CO₂ enrichment system; thereby completely avoiding CO₂ emissions into the atmosphere. The new Maerz EcoKiln series (patents pending) enables the production of all types of lime, can be operated flexibly and allows a seamless transition to emission-free lime kiln operation.

Maerz EcoKiln for larger capacities

Figure 1 shows the Maerz PFR EcoKiln with oxyfuel combustion, cooling air extraction and double flue gas recirculation. In this mode of operation, CO₂ concentrations of more than 90 vol-% can be achieved in the kiln exhaust gas. A CCU/CCS system for processing the kiln exhaust gas can be retrofitted without an expensive CO₂ enrichment system such as amine scrubbing or another CO₂ enrichment technology.

The major advantage of the Maerz PFR EcoKiln is its flexibility in terms of the operating mode. As long as it is not economical to feed the CO₂ contained in the



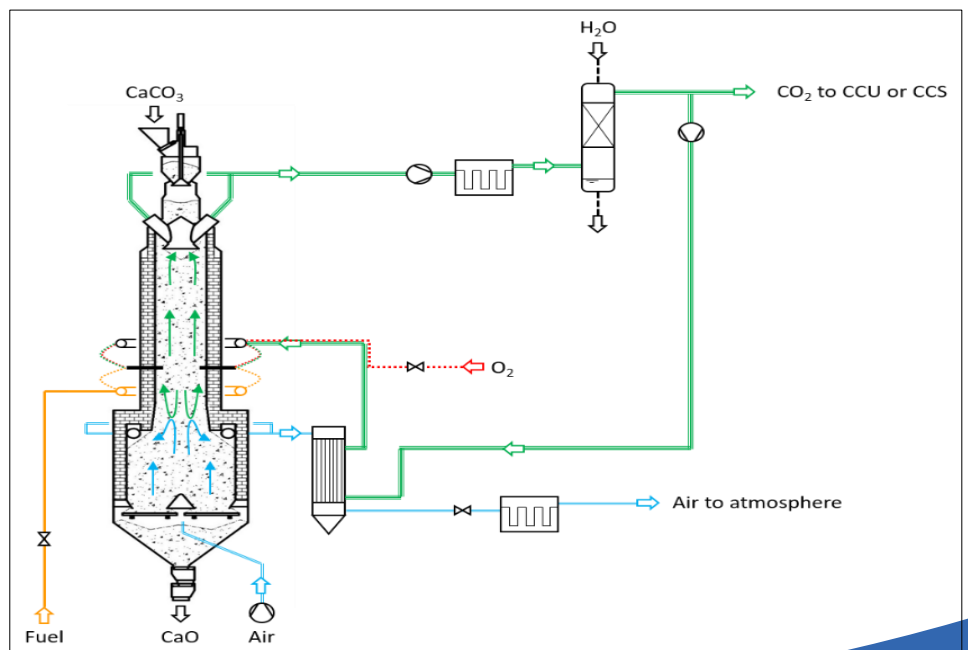
1 Maerz PFR-EcoKiln in oxyfuel combustion mode

exhaust gas to a CCS system, the lime kiln can be operated conventionally with air instead of oxygen. A more detailed description can be found in the given reference. The Maerz PFR EcoKiln can be built for a production of 300 to 800 t/d and, just like the well-known Maerz PFR kiln, can be fired with all common fuels. When using hydrogen, the Maerz PFR EcoKiln has the advantage that the combustion temperature in the

kiln can easily be adjusted with the help of the exhaust gas recirculation.

Maerz EcoKiln for smaller capacities

For smaller capacities, Maerz applied the HPS lime kiln concept to the EcoKiln. Again, for full operational flexibility, these EcoKilns can be operated in the conventional and the oxyfuel mode.



2 Maerz HPS-EcoKiln in oxyfuel combustion mode



Figure 2 shows the Maerz HPS EcoKiln with oxyfuel combustion, cooling air extraction and flue gas recirculation. In this mode of operation, CO₂ concentrations of up to 97 vol-% can be achieved in the kiln exhaust gas.

Reference: Sustainable lime burning technology with shaft kilns, ZKG 6-2021, page 34 to page 41.

https://www.zkg.de/en/artikel/zkg_Sustainable_lime_burning_technology_with_shaft_kilns_3683556.html

- Hannes Piringer, Patrick Bucher, Roger Wallimann, Maerz Ofenbau AG, Zurich/Switzerland, ▪

❖ New ILA Member - PrJSC “Ternopil’sky karyer”

We like to take the chance to announce our newest ILA member PrJSC “Ternopil’sky karyer”- a company member from the Ukraine. The General Assembly voted in favor for adoption. **Congratulations!!!** - we - as ILA and lime family - are very much looking forward to a fruitful collaboration.

The former Ukrainian Lime Industry Association (ULIA) is at the same time not a member anymore.

Furthermore, we have an interesting application from Russia. You will be informed via circular letter how the voting procedure will be operated. ▪

❖ General Assembly 2021

This years GA was held in writing again. A summary of the voting results is available at the ILAnet (Minutes). Please log on with your user/member details. www.internationallime.org ▪

❖ ILA H&S Award 2021

We are very proud to announce that on November 29, 2021 the first ILA Health & Safety Award in cooperation with VISION ZERO and ISSA Mining will be awarded. We are looking forward to the event and announcing the winners within our next newsletter. ▪

Thank you, see you next year!