



BECKENBACH ANNULAR SHAFT KILN®

800 TPD

.... Since 1897



TERRUZZI
FERCALX
GROUP

www.terruzzifercalxgroup.com

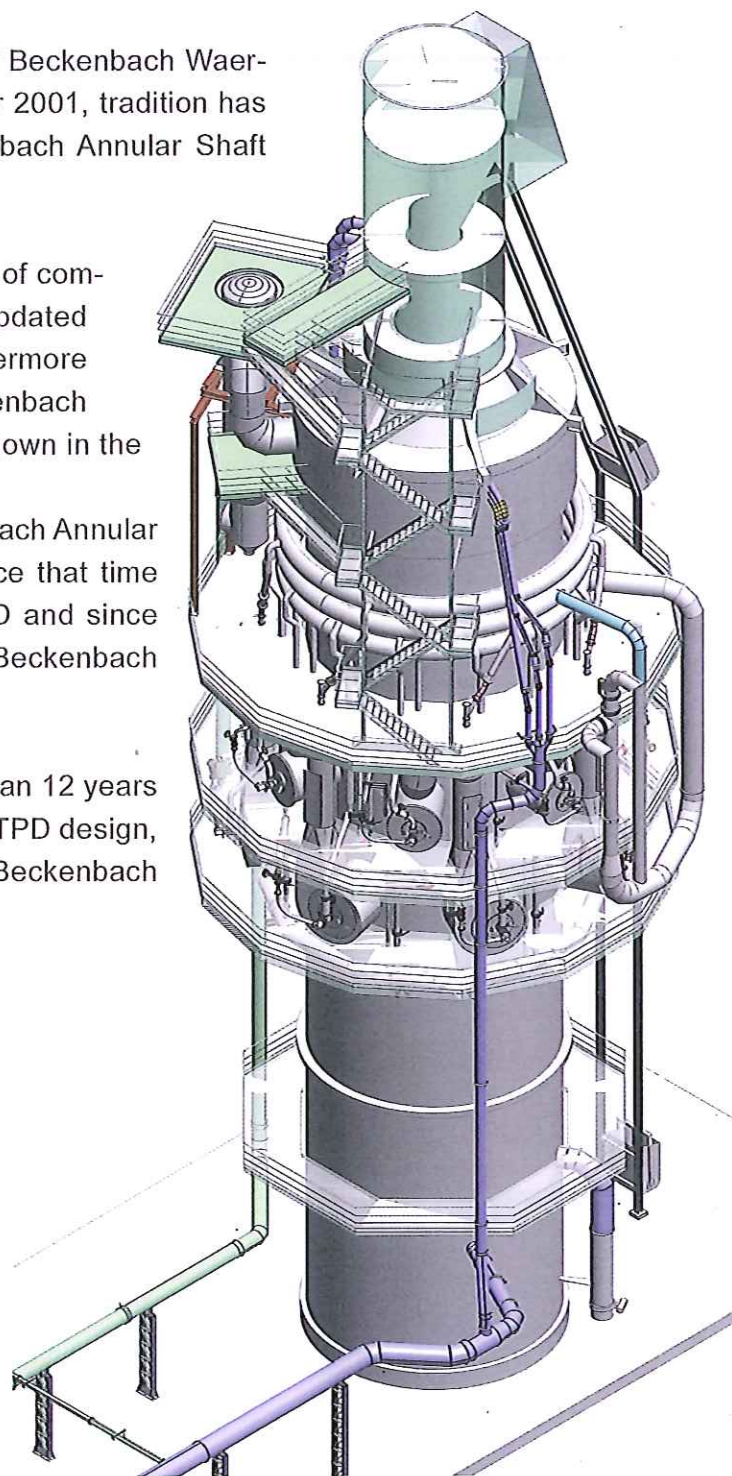
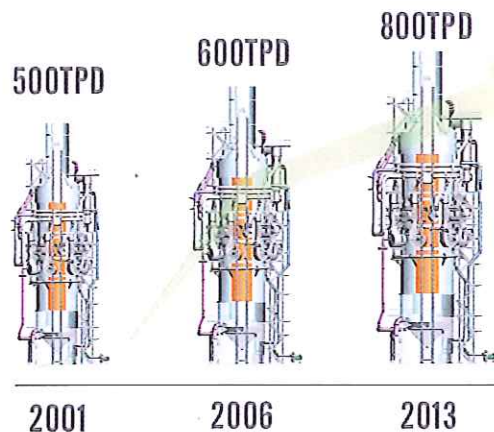
BECKENBACH ANNULAR SHAFT KILN® 800 TPD

After the acquisition of the Technology and Patents of Beckenbach Waermestelle GmbH – Germany, that took place in the year 2001, tradition has been continued by Terruzzi Fercalx with the Beckenbach Annular Shaft Kiln®.

Furthermore, automatic operations, refined controlling of combustion system, implemented refractory design and updated engineering applied by Terruzzi Fercalx have furthermore improved the quality of the performances of the Beckenbach Annular Shaft Kiln®, a lime kiln system already well known in the market.

In 2006 Terruzzi Fercalx designed the first the Beckenbach Annular Shaft Kiln® with a capacity of 600 tons per day. Since that time Terruzzi Fercalx has made 31 sets of BASK 600 TPD and since 2001 Terruzzi Fercalx erected more than 50 sets of Beckenbach Annular Shaft Kiln®.

Now after gained long-standing experience for more than 12 years and with a successful track record given by BASK 600 TPD design, Terruzzi Fercalx is ready to offer to the market the Beckenbach Annular Shaft Kiln® 800 TPD version.



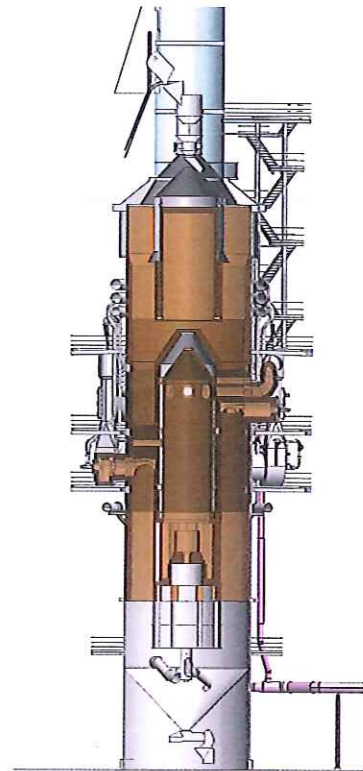
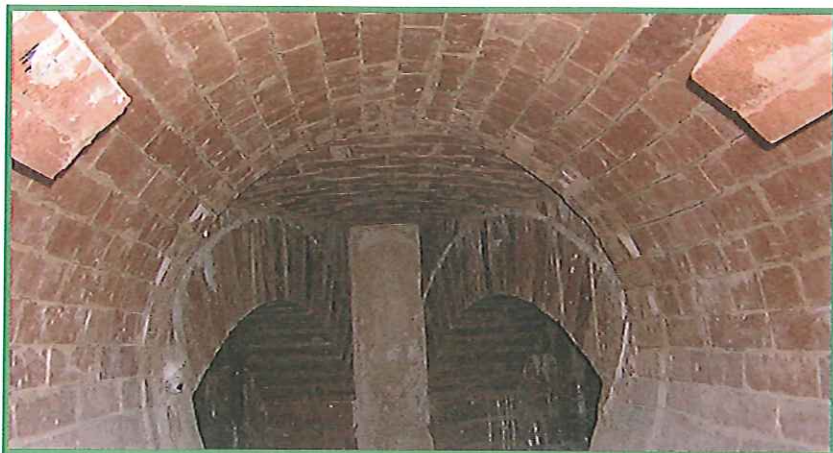
TECHNICAL DATA

Fuel Consumption:	≤ 900 Kcal/kg of lime
Electric power consumption:	≤ 25 Kwh/Ton of lime
Limestone size:	from 15 mm to 150 mm
Residual CO ₂ in the Lime:	< 1 %
Range from:	Soft burnt lime ($T_{60} \leq 30$ seconds) to Hard burnt lime ($T_{60} \leq 6$ minutes)
Lime & Dolomitic lime	
Fuels:	natural gas, lean gas, liquid/oil, pulverized solid (i.e. lignite, coal, coke etc.)
Fully Automatic Operation	

REFRACTORY

Innovative design has been applied in order to extend furthermore the service life of the refractory and to eliminate the requirement of special bricks.

The TF Consol Technology has been applied, in order to allow the easy maintenance of the refractory walls by section, upon necessity.



TF DMS - DATA MANAGEMENT SYSTEM

Innovative Data Management System software designed by Terruzzi Fercalx for process data, procedures, applications and interfaces collection to support the lime plant operation.

Mainly features:

- Retrieve Process Data
- Trace Events and Alarms
- Remote Administration
- Traceability
- Scheduled Maintenance
- Quality and performance control

+ PLANT



PLANT PLCs

+ TOP MANAGEMENT



ERP Integration
• Production Scheduling
• Performances Monitor
• Energy Costs
• ...

+ PRODUCTION MANAGEMENT

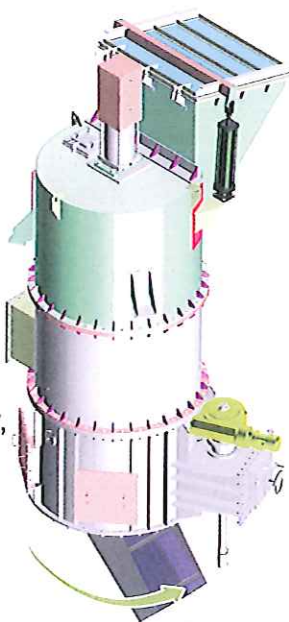


Data Management System
• Recipes & Configurations Manager
• Production Data Analysis
• Alarms & Events Reporting
• ...

Operator HMI

CHARGING SYSTEM

A new rotary tight charging system has been designed in order to distribute uniformly the limestone in the kiln annular cross section. The new charging system avoids any false air intake, and this is a great advantage in case of exhaust gas kiln recovery, because the CO₂ concentration in exhaust gas is maximized.



NEW GENERATION WEIGHT SCALES

The lime is discharged at the bottom of the kiln by a hydraulic push rod system via volumetric tables that feeds the lime into the weight scales at pre-set time intervals. When a pre-set weight is reached in the scale the lime is dumped into the lime kiln silo located below the kiln discharge.

The new generation weight scale assures a continuous control of the actual weight, and consequently an automatic regulation of the kiln parameters.

The lime discharge rate of each table is automatically controlled by the PLC according to the kiln production rate, giving to the DMS on-line and accurate information on the lime quality.

WORLD WIDE PRESENCE



*Areas of the Globe where Beckenbach Annular Shaft Kilns
are installed.*

More than 192 Kilns/Plants are installed worldwide.



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TERRUZZI FERCALX SPA

HEADQUARTERS

Viale Lombardia, 7 – Zona Industriale 2,
24050 Spirano - Italy

Tel. +39 03 54 87 98 11

Fax +39 03 54 87 98 00

E-mail: info@terruzzifercalxgroup.com

VULCAN ENGINEERS LTD

HEADQUARTERS

Trade Centre Office No 104, 105 & 106, Wing C, First Floor,
North Main Road, Koregaon Park
Pune 411001 Maharashtra – India.

Tel. +91 20 66 45 08 00

Fax +91 20 66 45 08 01

E-mail: info.vel@vulcanengineers.com

Website: www.vulcanengineers.com

TERRUZZI FERCALX ENGINEERING PVT LTD

HEADQUARTERS

953/A, 2nd Floor, 2nd Main Road, 4th Block, Rajajinagar,
560010 Bangalore - India.

Tel. +91 80 23 40 33 20

Fax +91 80 23 40 33 19

E-mail: info.tfe@terruzzifercalxgroup.com