

# **unilime**Corporate Presentation

#### Outline

## Corporate Presentation



Company Profile
Production Process
Our Plant
Product Range
End-using Industries
Customer List



#### History and main figures

## Company Profile

#### \$10 Million

Total investment to make the lime calcination plant

#### June 2020

Unilime plant started operation in 6<sup>th</sup> of October City, Egypt

#### Swiss Technology

As an agreement was made with Switzerland's Maerz Group

#### 52,000 tons/year

Production capacity for Quicklime and Dololime



#### Strategic objectives

## Company Profile

Unilime is studying increasing its current capacity by



adding a new line to achieve the increasing demand



Unilime is studying addition of solar panels to the plant as a more sustainable solution for energy generation

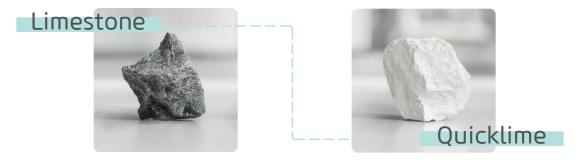
Unilime is also currently exploring exporting its products globally

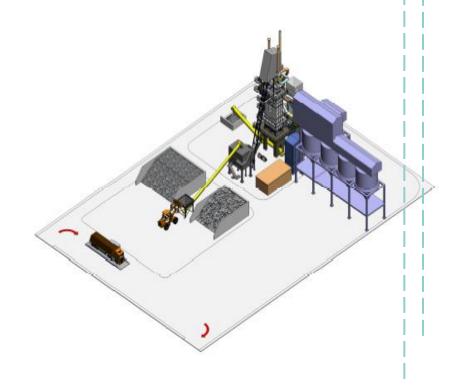


#### **Production Process**

Calcination of Carbonates

$$CaCO_3 + Heat \rightarrow CaO + CO_2$$

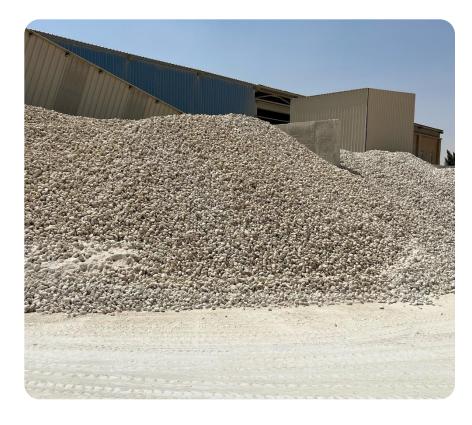




Our lime calcination plant consists of a double shaft kiln with 10 burner lances each.

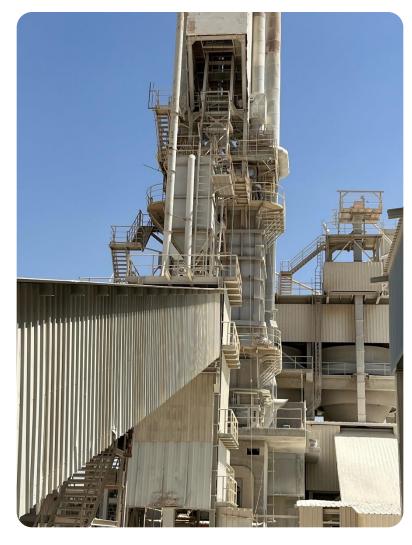


## Our Plant



Raw Material

#### Raw Material Feeding





### Our Plant

Double Shaft Kiln – Preheating – Burning – Cooling







## Our Plant

Final Product Screening





Quicklime Different Sizes





# Quicklime and Dololime Product Range

Unilime is able to produce Quicklime, and Dololime.

The Dololime size is from 0 – 50 mm.

The Quicklime can be provided in several size ranges based on the applications to achieve our customers requirements.





#### Quicklime specifications

## Product Range

| Chemical Analysis        | Percent % |
|--------------------------|-----------|
| Total CaO                | 90-95     |
| MgO                      | ≤ 1       |
| $SiO_2$                  | ≤ 1       |
| $Al_2O_3$                | 0.9       |
| $Fe_2O_3$                | 0.1       |
| Residual CO <sub>2</sub> | < 2.5     |





#### Quicklime specifications

## **Product Range**

#### Quicklime Size 3-20 mm





Quicklime Size 20-50 mm



#### Dololime specifications

## Product Range

| Chemical Analysis | Percent % |
|-------------------|-----------|
| Total CaO         | 54-58     |
| MgO               | 36-40     |
| $SiO_2$           | ≤ 1.5     |
| $Al_2O_3$         | 0.3       |
| $Fe_2O_3$         | ≤ 1       |





#### Hydrated Lime specifications (CALCIUM HYDROXYDE – Ca(OH)<sub>2</sub>)

## Product Range

| Chemical Analysis<br>(mean values on dry) | Percent % |
|---|-----------|
| Ca(OH) <sub>2</sub> total                 | 96.60%    |
| Ca(OH) <sub>2</sub> available             | 95.00%    |
| $H_2O$                                    | 1.0%      |
| $CO_2$                                    | 0.90%     |
| MgO                                       | 0.50%     |
| $SiO_2$                                   | 0.10%     |
| $Al_2O_3$                                 | 0.34%     |
| $Fe_2O_3$                                 | 0.24%     |
| $Mn_3O_4$                                 | 0.01%     |
| S   | 0.02%     |
| Insoluble HCI                             | 0.10%     |
| CaO equivalent                            | 72.50%    |

Properties

Molecular weight 74.09 g/mol

Solubility (25°C) 1.64g/l

**Aspect** white powder



## QUALITY

is our

## COMPETITIVE ADVANTAGE

Unilime produces high calcium quicklime with low residual CO2 to enable our customers to use less quantities in their process, and to achieve the best efficiency.

Our quicklime has high reactivity, which is desired in most of the quicklime applications.



## End-using Industries



Iron and Steel



**Building Materials** 



Water Purification



Chemical Industry



Glass Industry



Soil Stabilization



Gold Mining



Aluminum & bauxite



Flue-gas Sulphur Removal



Pulp and Paper



Sewage treatment



Asphalt Paving



#### Sample from different industries

#### **Customer List**



















## unilime

Thank you