# ECOREF® -**ENERGY-SAVING REFRACTORY INSULATION CONCEPTS**





www.rath-group.com/ecoref

## **ECO**REF<sup>®</sup> -ENERGY-SAVING REFRACTORY INSULATION CONCEPTS

Companies working with industrial high-temperature processes are facing major challenges and changes, both in current and future discussions when it comes to energy and environmental issues. Energy management standards such as ISO 50001, are already very important to many companies and many customers expect to see corresponding evidence in advance. There is a need for action here.



## **ECOREF REPRESENTS CUTTING-EDGE CONSULTATION**



**ECO**REF is an analysis and concept approach that will help you find the optimal refractory lining for your application. Based on your specific technological, ecological and business objectives as well as on numerous process parameters, the appropriate lining concept is calculated for you. The concept is used to show your actual savings potentials in kW/h and as a percentage.

## **ECOREF PROVIDES A SOUND BASIS FOR DECISION-MAKING**



**ECO**REF provides you with a sound basis for decision-making by showing how much you can potentially save: In addition to achieving a positive and sustainable impact on the environment and on health, energy savings also represent a commercial factor. This is where RATH **ECO**REF® comes in - it helps companies to reduce costs by using the optimal refractory material.



The analysis result shows a concrete savings factor which you can include in your energy savings balance sheet. It provides a reliable figure that proves the impact of a particular refractory lining on your overall balance sheet.



Energy savings emerge from the interaction of many distinct factors that add up to a tangible result. RATH **ECO**REF<sup>®</sup> can help you achieve bigger savings.

Our applications engineers have the experience and knowledge to develop the optimal lining for our customers, keeping in mind technical, ecological and economic aspects.

## ECOREF IS BASED ON EXPERIENCE AND KNOW-HOW

RATH has been producing outstanding refractory linings for industrial high-temperature applications for more than 130 years. Due to our comprehensive product range, RATH customers can choose from a variety of refractory lining options. Whether it's dense bricks, concretes, insulating bricks or components made of high-temperature wool, RATH always prioritizes the concept with the greatest benefit to the customer.

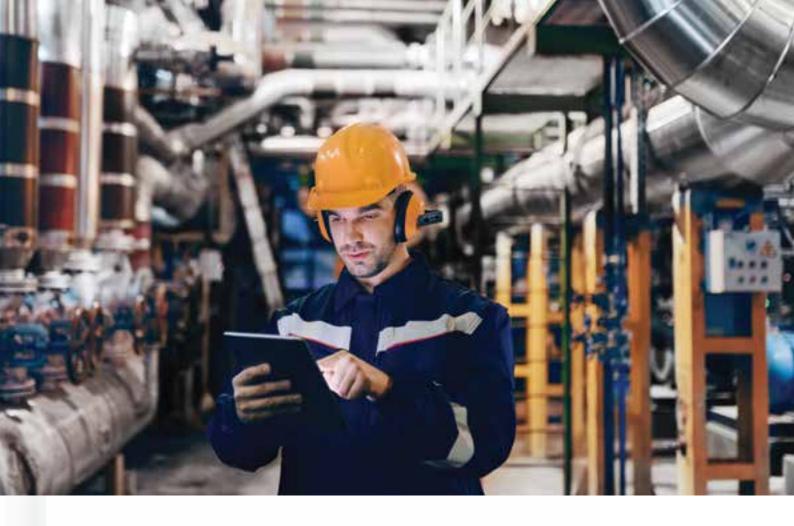
Our applications engineers have the experience and knowledge to develop the optimal lining for our customers, keeping in mind technical, ecological and economic aspects.

## THE EFFORT INVOLVED IS MINIMAL

Your personal effort will amount to about 1-2 days, during which we visit your plants with you and collect all the parameters.

Depending on your plant's location, our experienced applications engineers then take about 2-3 weeks for the analysis and conceptualization of your future-proof plant. We bear the costs for this. Based on the results you can then decide whether to just benefit from the analysis or go ahead with our proposal for the most energy-efficient lining.

You'll receive the result in writing as part of a bespoke presentation. We're also happy to provide this within the framework of a larger management meeting at your company.



## INCLUDE THE ENERGY EVALUATION IN YOUR AUDIT SCHEDULE

It'll be well worth including **ECO**REF in your audit schedule. Because even if you don't see the need today, it will likely become apparent at a later date.

You can of course have the **ECO**REF evaluation done at any time, regardless of the current state of your facility. It's always good to know where you stand.

We're here to support you!

You can decide whether to just benefit from the analysis or go ahead with our proposal for the optimal lining.

## ECOREF IN 5 SIMPLE STEPS:



## 1 - Clarifying your requirements

It makes a difference whether you intend to build a new plant, completely or partially renovate an existing one, or just want a refurbish. Your choice forms the essential basis for our approach.



## 2 - Determining your objectives

Cost reduction is a driving factor for many businesses, but environmental issues and technological objectives also come into play. We can help you determine possible and realistic objectives. The important thing is to establish and pursue a common goal.



## 3 - Analyzing your plant and operating parameters

Periodic or continuous operation, dimensions, operating temperature, temperature curve, and how frequently you use your plant are just a few of the parameters we use for our analysis. The operating process carried out with your system, the materials you heat and the atmosphere in which you heat them all constitute economic, as well as technological factors. We take all of these into account.



## 4 - Calculating energy efficiency

All the relevant parameters are compared in our analysis. There are complementary as well as antagonistic parameters. We therefore develop scenarios that evaluate the effects of different lining concepts. Then it's time to crunch the numbers and create the optimal result by adapting some of the factors.



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## 5 - Proposing the optimal lining for your plant

You'll now be aware of the optimal technical lining for your plant and your percentage savings potential in kW/h. In addition, you will receive a business assessment of how to adapt your plant, along with our advice on how this can best be achieved. This will give you all the facts to make an informed decision on how to future-proof your high-temperature plant.

## WHY NOT GET THE INFO TODAY?

If you still have any questions about **ECO**REF, please don't hesitate to contact us.

Phone us at +49 3521 4645 4124 or send an email to ecoref@rath-group.com.

More information about ECOREF at www.rath-group.com/ecoref



## RATH GROUP Our Sales Offices

#### AUSTRIA

RATH AG Walfischgasse 14 A-1015 Vienna T: +43 (1) 513 44 27-2110 F: +43 (1) 513 44 27-2187

## RATH BUSINESS SERVICE GMBH

**Walfischgasse 14 A-1015 Vienna** T +49 (3521) 46 45-10

#### AUG. RATH JUN. GMBH

Hafnerstrasse 3 A-3375 Krummnussbaum T: +43 (2757) 2401-0 F: +43 (2757) 2401-2286

#### HUNGARY

**RATH HUNGARIA KFT. Porcelán utca 1 H-1106 Budapest** T: +36 (1) 433 00 40 F: +36 (1) 261 90 52

#### POLAND

#### RATH POLSKA SP. Z 0.0.

ul. Budowlanych 11 PL-41 303 Dąbrowa Górnicza T: +48 (32) 268 47-01 F: +48 (32) 268 47-02

### GERMANY

**Rath Sales GmbH & Co KG Ossietzkystrasse 37/38 D-01662 Meissen** T +49 (3521) 46-45 41-0 F +49 (3521) 46-45 41-86

**Krefelder Strasse 680-682 D-41066 Mönchengladbach** T: +49 (2161) 96 92 42-0 F: +49 (2161) 96 92 42-61

Leulitzer Strasse 6D D-04828 Bennewitz T: +49 (3425) 89 48 43-0 F: +49 (3425) 89 48 43-13

#### CZECH REPUBLIC

 CZ-544 01 Dvůr Králové n. L.

 T: +420 (499) 32 15 77

 F: +420 (499) 32 10 03

#### MEXICO

## RATH GROUP S. DE RL. DE C.V.

Poniente 1, 206 64103, Monterrey Nuevo Leon, Mexico T: +52 (1) 81 26760477 USA

### RATH USA INC. 290 Industrial Park Drive Milledgeville, GA 31061, USA T: +1(478) 452 0015 F: +1(478) 452 0070

RATH USA INC. 100 Commerce Drive, Suite 303, Newark, DE 19713, USA T: +1 (302) 294 44 46 F: +1 (302) 294 44 51

## RATH USA LLC

**405 Peach Ave Owensville, MO 65066, USA** T: +1 (573) 437 21 32 F: +1 (573) 437 31 46

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