



# INNOVATION CENTER

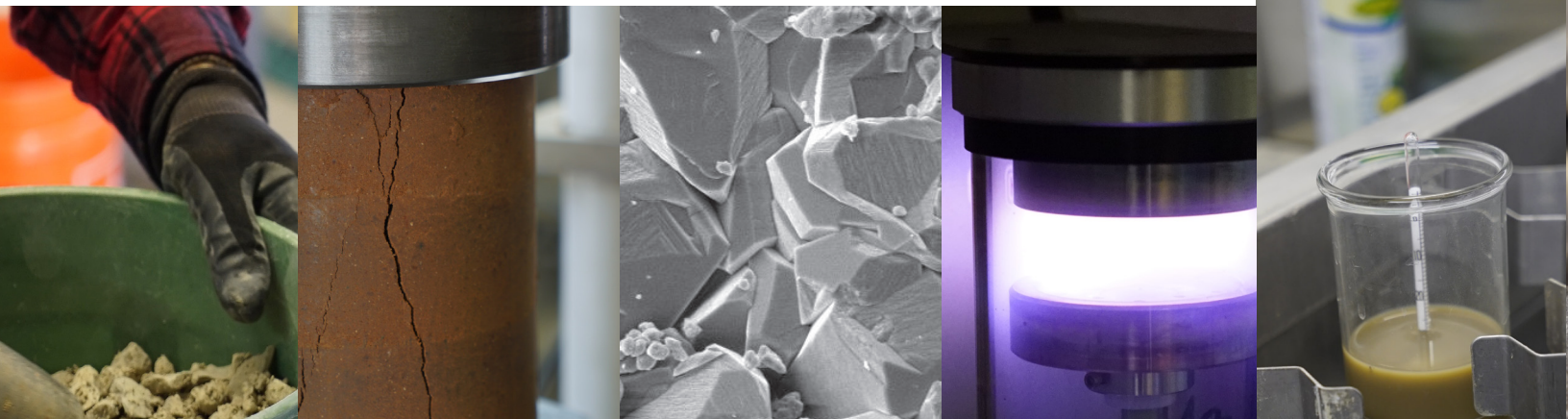
*WHERE IDEAS COME TO LIFE*



## DEDICATED RESEARCH & LABORATORY TESTING

The Innovation Center partners with our customers by utilizing our scientific expertise to ensure the most effective use of lime and limestone products in their applications. With state-of-the-art technology, a vast knowledge base, and decades of experience, the Innovation Center can act as your own expert R&D department to solve any problem you may encounter when it comes to the use of lime and lime-related products. With a long track record of successful collaborations with customers and potential customers, the Innovation Center has shown a commitment to helping answer tough questions.

[ **IMPACTING** EVERYDAY LIFE ]



## HOW WE DRIVE INNOVATION

Innovation is what adds value to an organization and keeps it relevant. Our Innovation Center, with its people, services, and tools, are ready to partner with you, to optimize the use of lime in your application. Our services include:

### INNOVATIVE SERVICES AND PRODUCT DEVELOPMENT

Our network of skilled associates believes that the simplest path to developing a new, innovative idea is through collaboration with customers. When engaged in a customer development effort, we think holistically about how we apply our product knowledge to enhance the products you are currently manufacturing and how the result would better serve your needs. We can provide ideas to improve performance of lime or limestone materials in your process, collaboratively develop new product offerings to meet application needs, and more.

### PRODUCT AND INTEGRATED SOLUTION TRIALS

We have a diverse team of experts dedicated to developing, managing, and implementing customer focused trials. Whether at your site, or at one of our facilities, we can work with you to evaluate a solution and validate a proof-of-concept that helps you to achieve your goals.

### EXTENSIVE TESTING CAPABILITIES

Our customers benefit from our comprehensive expertise and the capabilities of our facility, which includes our research development and testing laboratories. Each lab is uniquely equipped to validate the quality and performance of our product offerings across various applications.

### INNOVATION CENTER LAB FACILITIES

The Laboratories within the Innovation Center are where innovation comes to life. By providing access to our experts and facilities, we are able to bring previously unrealized ideas to life. Historically, research that has been conducted at the Innovation Center has brought about change in many industries such as agriculture and flue gas desulfurization.

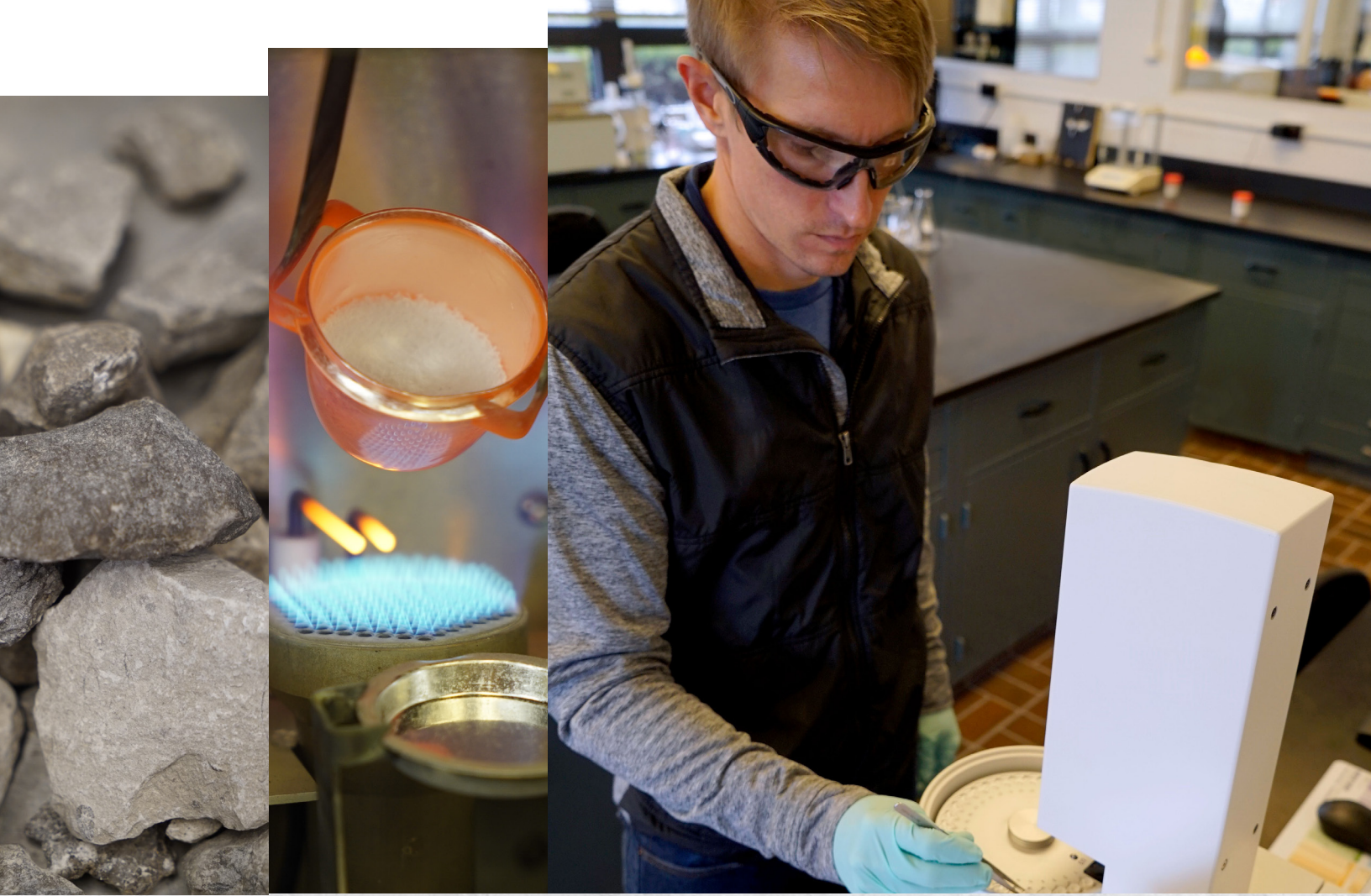
AND

## EXPERT TECHNICAL ADVICE



ACROSS ALL THE APPLICATIONS AND MARKETS WE SERVE





## OUR LAB FACILITIES

### CHEMISTRY LAB

The chemistry lab has state-of-the-art equipment for performing analytical work on both dry and wet chemistry. From lime and aggregate chemical analysis to lime slaking water characteristics, this lab can detect parts per million with precision and accuracy following strict ASTM standards. Our highly trained onsite staff of chemists stay current with ASTM methodology and push innovation to meet customer needs.

### MICROSCOPE LAB

The microscope lab has an array of microscopes to help assist in determining particle size distributions, pore/surface areas and particle shapes. This includes light microscopes magnifying several times to a scanning electron microscope with the ability to magnify an object 100,000 times. The ability to visualize the shape, size and composition of a particle allows our staff to assist with customer's needs.

### PILOT LAB

A large footprint gives the pilot lab the ability to perform physical testing, crushing and sample preparation along with bench scale and pilot scale testing. Ideas are put to the test in the pilot lab with the ability to build and create small scale pilot plants to prove the effectiveness of concepts to show real world capabilities. The pilot lab allows customers to ensure the validity of ideas prior to making a large-scale investment. From product testing to bench scale flue gas desulfurization, the pilot lab can showcase a wide range of small-scale testing capabilities.

### SOIL LAB

The soil lab continues to push innovative ways to use lime and limestone in soil stabilization and building materials. Rigorous testing of soil to lime ratios, mortar and concrete strengths giving the customer the knowledge they need to ensure successful application of our products.

## WE'RE HERE TO HELP

Current and future customers of Carmeuse will have access to and support from leading lime and limestone experts. This support extends after the sale so you can be confident that if a problem arises, we are here to help you get back up and running. The Carmeuse Innovation Center staff has over 110 years of combined industry experience and are driven by a spirit of innovation and desire to help you fully realize the high-performance, cost-effective, and environmental benefits from using lime and limestone.

The Innovation Center is an integral part of the Carmeuse commitment to our customer's success. Whether in our lab, at the jobsite or within your facility, we offer services tailored to your needs. Contact us to learn more about the solutions we can provide for you.



**THE TEAM AT CARMEUSE IS AVAILABLE TO DISCUSS YOUR NEEDS. PLEASE CONTACT US:**



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