

Höhr-Grenzhausen, 23.06.2026

Interlaboratory Tests (ILS) for Refractory Products – Pilot Project with Cold Crushing Strength (CCS) as the First Test Method

Our Offer: Independent Interlaboratory Studies for the Refractory Industry, committed suppliers, customers or independent testing laboratories/research institutions

Interlaboratory Studies (ILS) are anonymous proficiency tests for laboratories that enable an objective assessment of the precision, accuracy, and comparability of test methods. Their purpose is to validate laboratory results, support accreditations (e.g., according to ISO/IEC 17025), and contribute to the development of standards.

The refractory industry faces the challenge that test results between laboratories are often not comparable. To date, there are no globally standardized interlaboratory studies (ILS) for refractory products that allow an objective assessment of laboratory performance. The Forschungsgemeinschaft Feuerfest e.V. (FGF) addresses this gap with an innovative, tiered model ranging from non-accredited pilot tests to accredited interlaboratory studies in accordance with EN ISO/IEC 17043. The FGF is starting with interlaboratory studies for the Cold Crushing Strength (CCS) test method. This is the first step toward establishing industry-wide standardized comparability of test data for refractory products. In the future, additional test methods (e.g., cold modulus of rupture, hot modulus of rupture, permanent linear change) will follow. The ILS should be held on a regular basis so that participating laboratories can measure their performance over the years and compare it internally.

The Benefits of Interlaboratory Studies for Laboratories, Manufacturers, and Users

For testing laboratories, interlaboratory studies offer the advantage of internally verifying their own quality and optimizing processes if necessary. Participation also serves as proof of competence to customers, suppliers, and accreditation bodies. Furthermore, participation in interlaboratory studies reduces discussions with suppliers or customers about the reliability of the measured values in data sheets. Manufacturers and users benefit from higher reliability and comparability of test data, leading to improved product quality and process safety. For the entire industry, this creates a common database that promotes the further development of international standards.

Expertise and Independence: FGF as a Provider of Interlaboratory Studies

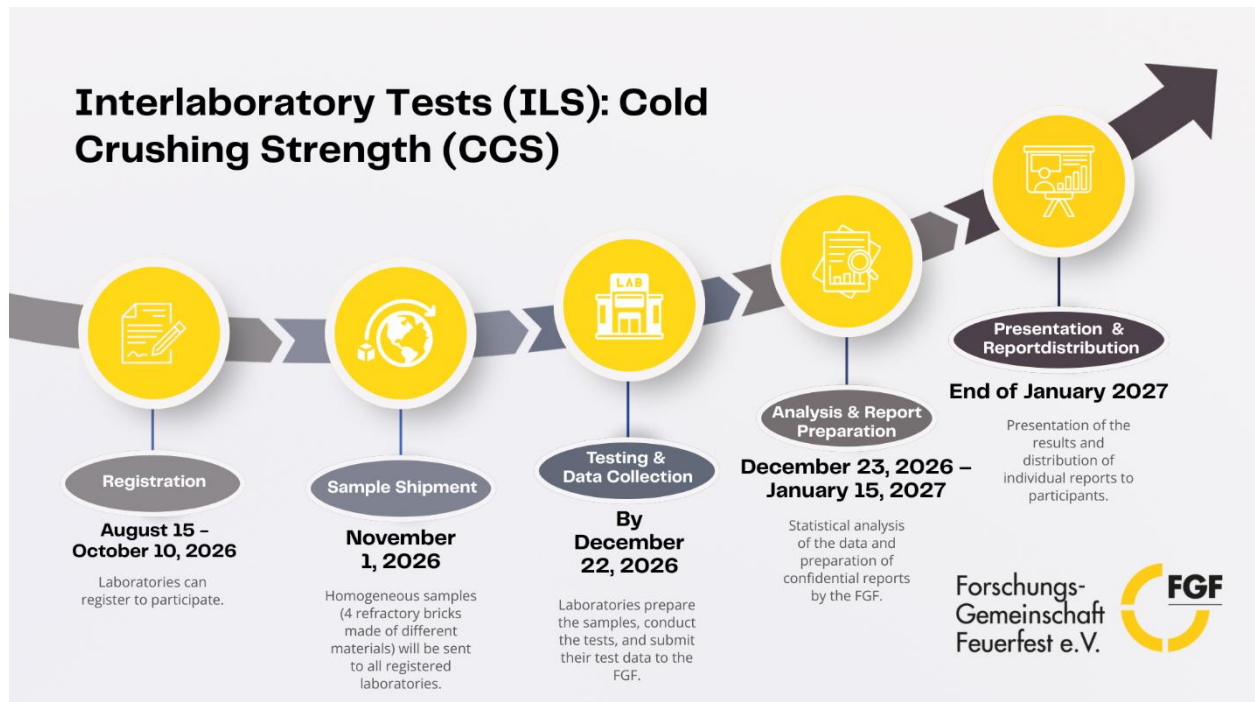
The Forschungsgemeinschaft Feuerfest e.V. (FGF) is the ideal provider for interlaboratory studies, as it acts as a neutral body without any economic interest in the test results. It brings extensive experience from European research projects such as RestaR, where interlaboratory studies have already been conducted. Additionally, the FGF is supported by Gerhard Urbanek (formerly RHI Magnesita, Chair of the ISTF (*International Standardization Task Force*) of the WRA), an expert with many years of practical experience in conducting in-house interlaboratory studies. As a

developer of test methods for the refractory industry, the FGF combines in-depth industry knowledge with the necessary independence.

Process

Registration will take place from August 15 to October 10, 2026, during which laboratories can register to participate. On November 1, 2026, homogeneous samples, one refractory brick per material, a total of four bricks made of different materials (such as fireclay), with different strengths (40–150 MPa) will be sent to all registered laboratories. By December 22, 2026, laboratories will prepare the samples, conduct the tests (CCS), and submit their test data to the Forschungsgemeinschaft Feuerfest e.V. (FGF). The statistical analysis of the data and the preparation of confidential reports by the FGF will take place from December 23, 2026, to January 15, 2027. The process will conclude with the presentation of the results and the distribution of individual reports to participants at the end of January 2027.

Interested parties can already send their email address with the subject "ILS" to ILS@fg-feuerfest.de to receive current information about the interlaboratory studies. You will automatically be notified when registration for the interlaboratory test (CCS) is opened.



Costs

The cost for participating in the Interlaboratory Studies (ILS) for refractory products with the Cold Crushing Strength (CCS) test is 1,600 € plus VAT per laboratory. Additionally, a shipping fee applies, which varies depending on the destination.

For any questions, the team of Forschungsgemeinschaft Feuerfest e.V. is available at any time at ILS@fg-feuerfest.de.

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