VVUU
TESTING

Combustible dust testing laboratory

VVUU
RISK ANALYSIS
TESTING
CERTIFICATION

testing.vvuu.cz/en

Combustible dust testing laboratory

VVUÚ, a.s. is a European leader in the testing of combustible dust. The testing laboratory is comprehensively equipped for testing flammable dusts. **VVUÚ, a.s. is testing laboratory no. 1025, accredited under ČSN EN ISO/IEC 17025:2018.**

L 1025

Our offer

Determination of the fire-technical characteristics according Directive 2014/34/EU of the European Parliament and of the Council (ATEX)

Accredited examinations

EN 933-1	determination of granularity by sieve analysis (medium grain size)
ISO 562 **ISO 1171** **ISO 579**	basic chemical analysis (determining the content of water, ash and volatile combustibles)
EN ISO/IEC 80079-20-2	determination of flammability of dust or combustible flyings (screening test; GO/No Go test)
EN ISO/IEC 80079-20-2	determination of the minimum ignition temperature of settled dust.
EN ISO/IEC 80079-20-2	determination of the minimum ignition temperature of dust clouds.
EN 14034-3+A1	determination of the lower explosive limit of dust clouds
EN 14034-1+A1 **EN 14034-2+A1**	determination of the explosion characteristics of dust clouds (p_{max}, $(dp/dt)_{max}$ VA-20L
EN 14034-4+A1	determination of the oxygen content limit
EN 13821 **EN ISO/IEC 80079-20-2**	determination of the minimum initiation energy of ignition of dust clouds
ISO 567 **ISO 1013**	determination of bulk density gravimetrically
EN 1237	determination of powder density gravimetrically
EN 15188 ADR/RID 2.2.42-Class 4.2-Pyrophoric substances	determination of susceptibility to spontaneous ignition by the isothermal method
EN 17077	classification of dust layers into flammability classes according to their combustion behavior
EN ISO/IEC 80079-20-2	determination of the volumetric resistance of dust

Fire-technical characteristics

Technical measurements and safety parameters are obtained. These parameters provide input information for safety data sheets for assessing risks in technologies.

The testing standards used are harmonised according to Directive 2014/34/EU of the European Parliament and of the Council (ATEX).

VA-20L explosion autoclave (manufacturer Kühner AG)
The testing laboratory has two VA-20L explosion autoclaves, which are fully compliant with the European standards of the EN 14034+A1 series.

MIKE 3 (manufacturer Kühner AG)
As an additional test vessel, a modified Hartman tube with a volume of 1.2 l and MIKE 3 designation, is used and is fully compliant with the European standard EN 13821.

Other activities of our testing laboratory

Determination of the susceptibility of dust to spontaneous combustion using the Olpinský method

Determination of the lower explosive limit of gases,

Determination of gas explosion indicators

Expert opinions on explosiveness

Conducting risk analysis tests

Conducting research on explosive materials

Accredited protocol

The laboratory provides expert opinions and interpretations of test results.
The output of the measurement is an accredited test report and the issuance of fire-technical characteristics.

Seminars and educational activities

Our work in the field includes the organization of regular seminars that focus on the danger of explosion of flammable gases, flammable liquid vapors and combustible dust, and on eliminating the risk of explosion in industrial plants.

As part of these seminars, we conduct demonstrations of the burning and explosion of combustible dust. We are ready to offer you our professional experience and will be glad to show you what combustible dust can do.

VVUU RISK ANALYSIS

Engineering, analysis and assessments in operational and process safety. Comprehensive services and solutions in explosion prevention and protecting industrial operations. Our team of risk analysis experts is ready to consult and address your needs and requirements in the explosion protection document, external influence identification protocols, and in undertaking a risk analysis of electrical and non-electrical equipment.

VVUU CERTIFICATION

VVUÚ is the Notified Body 1019 engaged in assessing the conformity of personal protective equipment against falls from height and slips, protective systems for use in explosive atmospheres (ATEX), explosives for civil use, and selected types of machinery for use underground.

The certification body VVUÚ is also accredited to certify protective and rescue equipment for working at heights, conveyor belts and flexible medium volume bags for non-hazardous materials.

VVUÚ has been assessing and defining fire and explosion risks for more than 70 years. VVUU, a.s. is a market leader, a company with modern and complex laboratory, testing and development facilities.

Ensuring industry safety is the clearly defined direction of the company's core activity. VVUÚ offers its services to all companies at risk of industrial accidents, explosions or fires.

VVUU
RISK ANALYSIS
TESTING
CERTIFICATION

VVUÚ, a.s.
Pikartská 1337/7
Ostrava – Radvanice
716 00
Czech Republic

Phone: +420 596 252 111
E-mail: vvuu@vvuu.cz
Web: www.vvuu.cz

© VVUU TESTING-2 2022.09.CZ