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## **RESEARCH ON TESTS CARRIED OUT ON EXPLOSION PROOF CABLE ENTRIES**

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### **Abstract**

The purpose of this paper is to present the tests carried out on cable entries with a flameproof enclosure protection type used in potentially explosive atmospheres.

Assessment of explosion-protected electrical equipment is accomplished through tests carried out in accordance with the standard SR EN 60079-0, which includes all general requirements for explosion-protected electrical equipment. The requirements of this standard are supplemented with those for each type of protection in separate standards.

To elaborate this paper, the requirements in force were studied. It resulted that a stand for sealing test of cable glands with flameproof enclosure protection type is required. This test is essential in the process of certification of the equipment used in explosive areas.

In the first stage of the project, the test stand was conceived, whose design has been considered taking into account the specifications of the reference standard for electrical equipment used in potentially explosive atmospheres.

The paper also presents the stand for sealing test of cable glands (with type of protection flameproof enclosure). This stand was developed this year at National Institute for Research and Development in Mine Safety and Protection to Explosion-INSEMEX Petroşani.

*Key words:* cable entries, certification, explosive atmosphere, flameproof enclosure, increased safety

*Received: September, 2018; Revised final: January, 2019; Accepted: April, 2019; Published in final edited form: April, 2019*

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