



Physical Technical Testing Institute, Ostrava-Radvanice  
National testing authority No 210, authorized entity

Ostrava - Radvanice, phone: +420 596 232 715

fax: 596 232 672

## Standpoint of National testing Authority

Number:

**No. 08/0085**

Assessment subject: Assessment of the deformation pressure gauge for application in explosive atmosphere of flammable gases, vapours and combustible dusts – products of PREMATLAK

Applicant: **PREMATLAK, nám. Dr. A. Schweitzera 194, 916 01 Stará Turá**

Documentation: Design drawings of pressure gauges and measuring mechanisms

Catalogue list

Date of application: 10.10. 2008

Date of issue: 20.10. 2008

For assessment were used:

ATEX Guidelines to European Council directive 94/9/EC (ATEX)

EN 13463-1 Non-electrical apparatus for potentially explosive atmospheres - Part 1: Basic method and requirements

### Flammable material in apparatus:

Inside of device can't be any flammable substance, the pressure gauges are installed on apparatus, that contains flammable substance of various type (gases, liquid, vapours). Only interface of the device (diaphragm, flexible tube etc.) can be in contact with flammable substance.

Annexes: -



Page: 1/2

## Apparatus description:


The deformation pressure gauges are intended for pressure measurement of various media within range 0 – 100 MPA. They are diaphragm pressure gauges, with box diaphragm, KM, SP, and BP mechanism, with flexible tube, with flexible „S“ spring, NG 100 spring and encapsulated spring system.

## Evaluation:


According to the Guide to Directive 94/9/EC – ATEX (in Czech Republic Government Order No. 23/2003 Coll.) the above mentioned devices are considered as simple apparatus (<http://ec.europa.eu/enterprise/atex/guide>), i.e., that comply requirements for simple mechanical products, as they do not have their own source of ignition (i.e. hand tools, clockwork time pieces, ladders, hand operated etc.), and so, do not fall under the scope of Directive 94/9/EC and the EC declaration of conformity according to this Directive can't be issued (see chapter 3.7.2 and 5.2.1 of the Guide).

Apparatus intended to be used in hazardous area, even if above mentioned Directive doesn't cover them, must comply the requirements of EN 13463-1 Non-electrical apparatus for potentially explosive atmospheres - Part 1: Basic method and requirements. For above mentioned deformation pressure gauges is valid chapter 7 – non-metallic (plastic) parts and chapter 8 – apparatus containing light alloy. The requirements apply for external parts of deformation pressure gauges housing, and because these parts are not made of plastics of aluminium alloys (housing – stainless steel or steel with surface treatment, sight glass - glass) the deformation pressure gauges comply requirements of this standard for categories 1, 2 and 3.

**Conclusion:** The above mentioned deformation pressure gauges do not fall under the scope of Directive 94/9/EC – ATEX (in Czech Republic – Government Order No. 23/2003 Coll.), comply requirements of EN 13463-1 for categories 1, 2 and 3 and can be safely used in hazardous area with flammable gases or vapours classified in zone 0, 1 and 2 and in hazardous area with combustible dusts classified in zone 20, 21 and 22.

Responsible person:   
Ing. Šindler Jaroslav  
Head of certification body



Prepared by:   
Ing. Jan Pohludka  
Technical expert

Annexes: -

Page: 2/2