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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • MEXCHAPOCHAR OPPAHU3ALUN FIO CTAHCAPTU3ALUN • ORGANISATION INTERNATIONALE DE NORMALISATION

## Petroleum, petrochemical and natural gas industries — Pressure-relieving and depressuring systems

TECHNICAL CORRIGENDUM 1

Industries du pétrole, de la pétrochimie et du gaz naturel — Systèmes de dépressurisation et de protection contre les surpressions

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to ISO 23251:2006 was prepared by Technical Committee ISO/TC 67, *Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries*, Subcommittee SC 6, *Processing equipment and systems.* 

Page 38, Figure 1:

Replace Key item "Y" with the following:

Y plate temperature, averaged over 2,3 m<sup>2</sup> (24 ft<sup>2</sup>), expressed in degrees Celsius (degrees Fahrenheit)

Page 42, 5.15.2.2.2:

Replace the definitions for  $A, A', p_1$  below Equation (8) with the following:

- *A* is the effective discharge area of the valve, expressed in square inches;
- A' is the exposed surface area of the vessel, expressed in square feet;
- $p_1$  is the upstream relieving absolute pressure, expressed in psi;

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Page 42, 5.15.2.2.2:

Replace the definitions for  $T_w$  and  $T_1$  below Equation (9) with the following:

- $T_w$  is the recommended maximum wall temperature of vessel material, expressed in °R;
- $T_1$  is the gas absolute temperature, at the upstream relieving pressure, determined from Equation (11), expressed in °R.

Page 42:

Delete footnote 2) at the bottom of page.

Page 42, 5.15.2.2.2:

Replace the definition for g below Equation (10) with the following:

g is the gravitational constant, expressed in ft-lb/lbf-s<sup>2</sup>.

## Page 43, 5.15.2.2.2:

Replace the definitions for  $p_n$  and  $T_n$  below Equation (11) with the following:

- $p_n$  is the normal operating gas absolute pressure, expressed in psi;
- $T_{n}$  is the normal operating gas absolute temperature, expressed in °R.

Page 106, 7.3.1.3.4:

Replace "perf" with "per" in the definition of  $G_{Ci}$ .

Page 110, 7.3.1.3.4:

Replace list item e) with the following:

e) Calculate G, in kilograms per second per square metre (pounds per second per square foot);

Page 117, 7.3.2.1.2: Replace Equations (38) and (39) with the following:

In SI units:

$$C(Re)^{2} = \frac{0.13 \times 10^{8} \rho_{v} D^{3} (\rho_{l} - \rho_{v})}{\mu^{2}}$$
(38)

In USC units:

$$C(Re)^{2} = \frac{0.95 \times 10^{8} \rho_{v} D^{3} (\rho_{l} - \rho_{v})}{\mu^{2}}$$
(39)

Page 136, 7.3.4.3.3:

Replace first sentence with the following:

The noise level at 100 ft from the point of discharge to the atmosphere can be calculated in USC units as follows:

Page 145, Figure A.1:

Replace Key items "Z2" and "Z3" with the following:

- Z2 relative molecular mass
- Z3 latent heat of vaporization, expressed in kilojoules per kilogram