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Affected Publication: API Specification 7-2, Threading and Gauging of Rotary Shouldered

Connections, Second Edition, January 2017

Errata 1

Section 1.1, third paragraph:

The third paragraph should read as follows:

This standard is applicable to preferred rotary shouldered connection designs. These are traceable to an internationally supported system of gauges and calibration that can be described as number (NC) style, regular (REG) style, or full-hole (FH) style.

Section 4.1, first paragraph:

The first paragraph should read as follows:

In this standard, data are expressed in both the International System (SI) of units and the U.S. customary (USC) system of units. Annex B and Annex C contain tables with the values in SI and USC units, respectively, and shall be followed as referenced herein. For a specific order item, it is intended that only one system of units be used, without combining data expressed in the other system.

Section 6.3.2:

The section should read as follows:

An internal taper as shown in Key 1 of Figure 10 may be used on the end of pin connections (pin ends) unless otherwise specified, to ease the passage of service tools and reduce flow discontinuities. In this case, the internal diameter at the end of the pin shall be as listed in Table B.5 and shall be concentric to the axis of the connection. The taper angle shall be 10° to 30°. The diameter is based solely on historical practice. When this feature is not used there shall be a bevel at the end of the pin ID, with dimensions to be determined by the producer.

Section 6.6, first paragraph:

The first paragraph should read as follows:

If so specified, or at the producer's option the roots of threads may be cold rolled after gauging. A connection shall be considered to conform to this specification if it meets the requirements of this standard before cold rolling. In such event, the connection shall also be stamped with a circle enclosing CW (an old symbol) to indicate cold rolling after gauging. A pin connection (pin end) shall be marked on the end of the pin. A box connection (box end) shall be marked in the box counterbore.

Section 7.1.2.2:

The section should read as follows:

The instruments described herein are precision instruments and shall be handled in a careful and intelligent manner, commensurate with the maintenance of the high accuracy and precision required for inspection under the requirements of this gauging practice (see Annexes G, H, and I for guidance). If any instrument is damaged, for instance inadvertently dropped or severely shocked, it shall not be used for inspection purposes until its accuracy has been reestablished.

Section 7.2.2:

The section should read as follows:

The manufacturer shall have available Working gauges, as defined in Section 8 of this standard, to gauge product threads and shall maintain all Working gauges in such condition as to ensure that product threads, gauged as required herein, are acceptable (see Annex G for guidance on the care and use of Working gauges). The Working gauges shall comply with all the stipulations on calibration and retest as specified in Section 9. The use of Reference Master gauges in checking product threads should be minimized. Such use should be confined to cases of dispute that cannot be settled by rechecking the Working gauges against the Reference Master. Good care should be exercised when the Reference Master gauge is assembled on a product thread. The purchaser of Reference Master gauges shall comply with all the stipulations on calibration and retest as given in Section 9.

Section 7.5.2:

• The section should read as follows:

The taper of threads shall be measured with an instrument having a precision of 0.025 mm (0.001 in.) or higher within the measurement range used.

Section 7.6, second paragraph:

The second paragraph should read as follows:

A standard template as shown in Figure 16 shall be used for standardizing the height gauge. The standard templates shall be constructed to compensate for the error in measuring height normal to the taper cone instead of normal to the thread axis. For the U-groove on standard templates, the depth of the groove shall conform to the dimensions $h_{\rm cn}$ shown in Table B.7 (column 6) within a tolerance of ± 0.005 mm (± 0.0002 in.).

Section 8.1, second paragraph:

The second paragraph should read as follows:

The standoff value, S_0 , of certified Reference Master gauges (Figure 17a) shall be measured at 20 °C ± 1 °C (68 °F ± 1.8 °F). Verifications of Working gauges (Figures 17b to 17d) may be at any temperature as long as both the master and Working gauges have normalized to the same temperature.

Figure 19, key and note section:

- Item 12 in the key should read as follows:
 - torque hammer hole diameter, 15.9 mm +0.4/0 mm (0.63 in. +0.016/0 in.); for gauges with pitch diameter < 50 mm (2.0 in.), the hole diameter shall be 9.53 mm +0.25/0 mm (0.38 in. +0.01/0 in.).</p>
- The note section at the bottom of the figure should read as follows:

NOTE See Tables B.9 and B.10 (C.9 and C.10) for dimensions.

Figure 20, key and note section:

- Item 12 in the key should read as follows:
 - torque hammer hole diameter, 15.9 mm +0.4/0 mm (0.63 in. +0.016/0 in.); for gauges with pitch diameter < 50 mm (2.0 in.), the hole diameter shall be 9.53 mm +0.25/0 mm (0.38 in. +0.01/0 in.).</p>
- The note section at the bottom of the figure should read as follows:

NOTE See Tables B.9 and B.10 (C.9 and C.10) for dimensions.

Section 9.1, third paragraph:

The third paragraph should read as follows:

All instruments shall be exposed to the same temperature conditions as the gauge to be inspected, for a time sufficient to eliminate any temperature difference. All measurements of gauges shall be made at 20 °C \pm 1°C (68 °F \pm 1.8 °F).

Section 9.3.1.3, first paragraph:

• The first paragraph should read as follows:

The pair shall be mated hand tight without spinning into place and a complete final engagement shall be accomplished with the torque hammer specified for each size (see Figure 21). Torque-hammer masses are as follows.

Annex B. header and title:

The header and title should read as follows:

Annex B (normative)

Tables in SI Units

Table B.2:

The fourth row should read as follows:

taper	T, mm/mm	1/6	1/4	1/4	1/6	1/4	1/8
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Annex C, header and title:

• The header and title should read as follows:

Annex C (normative)

Tables in USC Units

Section E.4.4.4, Equation 19:

The equation should read as follows:

BD3 =
$$(D_{CB}^2 + 4A_2/\pi)^{0.5}$$

Annex G, header and title:

• The header and title should read as follows:

Annex G (informative)

Care and Use of Working Gauges