

# Calculation of Heater-Tube Thickness in Petroleum Refineries

API STANDARD 530 FIFTH EDITION, JANUARY 2003  
ISO 13704: 2001 (E), PETROLEUM AND NATURAL GAS  
INDUSTRIES—CALCULATION OF HEATER TUBE THICK-  
NESS IN PETROLEUM REFINERIES

ERRATA 1, MARCH 1, 2004  
ISO 13704: 2001 TECHNICAL CORRIGENDUM 1



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Calculation of Heater Tube Thickness in Petroleum Refineries

## ERRATA

*See attached pages, ISO 13704:2001, Petroleum and Natural Gas Industries—Calculation of Heater-tube Thickness in Petroleum Refineries, Technical Corrigendum 1*



**INTERNATIONAL STANDARD ISO 13704:2001**  
**TECHNICAL CORRIGENDUM 1**

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**Petroleum and natural gas industries — Calculation of heater-tube thickness in petroleum refineries**

**TECHNICAL CORRIGENDUM 1**

*Industries du pétrole et du gaz naturel — Calcul de l'épaisseur des tubes de fours de raffineries du pétrole*

*RECTIFICATIF TECHNIQUE 1*

Technical Corrigendum 1 to ISO 13704:2001 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*.

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*Cover page*

Correct the second element of the French title to read:

*“Calcul de l'épaisseur des tubes de fours de raffineries du pétrole”*

*Page 13*

Subclause 4.9, Equation (10)

Replace

$$N_i = \frac{4 \frac{r_{cl}}{D_o} - 2}{4 \frac{r_{cl}}{D_o} - 1} \quad (10)$$

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**ICS 75.180.20**

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with the corrected equation

$$N_i = \frac{4 \frac{r_{cl}}{D_o} - 2}{4 \frac{r_{cl}}{D_o} - 1} \quad (10)$$

Page 13

Subclause 4.9, Equation (12)

Replace

$$N_o = \frac{4 \frac{r_{cl}}{D_o} + 2}{4 \frac{r_{cl}}{D_o} + 1} \quad (12)$$

with the corrected equation

$$N_o = \frac{4 \frac{r_{cl}}{D_o} + 2}{4 \frac{r_{cl}}{D_o} + 1} \quad (12)$$