

Kitemark™ Certificate

This is to certify that:

Nungwon Metal Ind. Co., Ltd. (NWM)
314-1 Doha-ri
Eunhyeon-myeon
Yangju-si
Geonggi-Do
482-860
Republic of Korea

Holds Certificate Number:

KM 599670

In respect of:

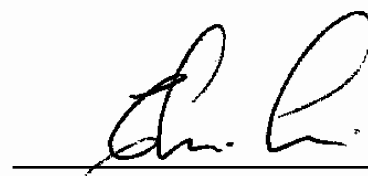
BS EN 1057

Copper and copper alloys. Seamless, round copper tubes for water and gas in sanitary and heating applications

This issues the right and licence to use the Kitemark in accordance with the Kitemark Terms and Conditions governing the use of the Kitemark, as may be updated from time to time by BSI Assurance UK Ltd (the "Conditions"). All defined terms in this Certificate shall have the same meaning as in the Conditions.

The use of the Kitemark is authorized in respect of the Product(s) detailed on this Certificate provided at or from the above address.

For and on behalf of BSI:



Chris Lewis - Certification Director, Product Certification

First Issued: 2014-05-06

Latest Issue: 2017-12-22

Effective Date: 2017-12-22

Expiry Date: 2020-12-21



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...making excellence a habit.™

Kitemark™ Certificate

No. KM 599670

BS EN 1057:2006+A1:2010 - Copper and copper alloys. Seamless, round copper tubes for water and gas in sanitary and heating applications

| Temper | Diameter (mm) | Wall (mm) |
|----------------------------|----------------------|-------------------------|
| Annealed (R220) | 6 | 0.6 , 0.8, 1.0 |
| | 8 | 0.6, 0.8, 1.0 |
| | 10 | 0.6, 0.7, 0.8, 1.0 |
| | 12 | 0.6, 0.7, 0.8, 1.0 |
| | 14 | 0.8, 1.0 |
| | 15 | 0.7, 0.8, 1.0 |
| | 16 | 1.0 |
| | 18 | 0.8, 1.0 |
| | 22 | 0.9, 1.0, 1.1, 1.2, 1.5 |
| | 28 | 0.9, 1.0, 1.2, 1.5 |
| | 35 | 1.0, 1.2, 1.5 |
| | 40 | 1.0 |
| | 42 | 1.0, 1.2, 1.5 |
| | 54 | 1.0, 1.2, 1.5, 2.0 |

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To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A member of BSI Group of Companies.

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| Temper | Diameter (mm) | Wall (mm) |
|---------------------|---------------|-------------------------|
| Half-hard (R250) | 6 | 0.6, 0.8, 1.0 |
| | 8 | 0.6, 0.8, 1.0 |
| | 10 | 0.6, 0.7, 0.8, 1.0 |
| | 12 | 0.6, 0.7, 0.8, 1.0 |
| | 14 | 0.8, 1.0 |
| | 15 | 0.7, 0.8, 1.0 |
| | 16 | 1.0 |
| | 18 | 0.8, 1.0 |
| | 22 | 0.9, 1.0, 1.1, 1.2, 1.5 |
| | 28 | 0.9, 1.0, 1.2, 1.5 |
| | 35 | 1.0, 1.2, 1.5 |
| | 40 | 1.0 |
| | 42 | 1.0, 1.2, 1.5 |
| | 54 | 1.0, 1.2, 1.5, 2.0 |
| | 64 | 2.0 |
| | 66.7 | 1.2, 2.0 |
| | 76.1 | 1.5, 2.0 |
| | 88.9 | 2.0 |
| | 108 | 1.5, 2.5 |
| | 133 | 1.5, 3.0 |
| 159 | 2.0, 3.0 | |

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| Temper | Diameter (mm) | Wall (mm) |
|----------------|---------------|-------------------------|
| Hard (R290) | 6 | 0.6, 0.8, 1.0 |
| | 8 | 0.6, 0.8, 1.0 |
| | 10 | 0.6, 0.7, 0.8, 1.0 |
| | 12 | 0.6, 0.7, 0.8, 1.0 |
| | 14 | 0.8, 1.0 |
| | 15 | 0.7, 0.8, 1.0 |
| | 16 | 1.0 |
| | 18 | 0.8, 1.0 |
| | 22 | 0.9, 1.0, 1.1, 1.2, 1.5 |
| | 28 | 0.9, 1.0, 1.2, 1.5 |
| | 35 | 1.0, 1.2, 1.5 |
| | 40 | 1.0 |
| | 42 | 1.0, 1.2, 1.5 |
| | 54 | 1.0, 1.2, 1.5, 2.0 |
| | 64 | 2.0 |
| | 66.7 | 1.2, 2.0 |
| | 76.1 | 1.5, 2.0 |
| | 88.9 | 2.0 |
| | 108 | 1.5, 2.5 |
| | 133 | 1.5, 3.0 |
| 159 | 2.0, 3.0 | |
| 219 | 3.0 | |
| 267 | 3.0 | |

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Tubes will be marked as follows:

BS EN 1057 ♡ Nungwon MONTH AND YEAR OD X WALL R220 (ANNEALED)

BS EN 1057 ♡ Nungwon MONTH AND YEAR OD X WALL HH R250 (HALF HARD)

BS EN 1057 ♡ Nungwon MONTH AND YEAR OD X WALL R290 (HARD)

Crane Copper Tube ♡ BS EN 1057 HH OD X WALL TYPE YEAR QTR

Crane Copper Tube ♡ BS EN 1057 HD R290 OD X WALL TYPE YEAR QTR

Crane Copper Tube ♡ BS EN 1057 R220 OD X WALL TYPE YEAR QTR

NWM ♡ BS EN 1057 HH R250 OD X WALL TYPE YEAR QTR

NWM ♡ BS EN 1057 HD R290 OD X WALL TYPE YEAR QTR

NWM ♡ BS EN 1057 R220 OD X WALL TYPE YEAR QTR

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