



times change **copper remains**

# KEMBLA<sup>®</sup>

AIR CONDITIONING  
REFRIGERATION  
& MEDICAL GAS  
COPPER TUBE TO  
AUSTRALIAN/NZ STANDARD  
**AS/NZS 1571**

Especially produced to meet the  
requirements of the new generation  
ozone friendly refrigerants

 **KEMBLA**

## KEMBLA® AIR CONDITIONING & REFRIGERATION TUBE TO AUSTRALIAN / NEW ZEALAND STANDARD AS/NZS 1571

MM Kembla is a world-class producer and Australia's leading supplier of copper tube manufactured under the famous KEMBLA® brand name. MM Kembla manufactures a comprehensive range of copper tube products to comply with a variety of applications and International Standards.

Included in the KEMBLA® range is tube manufactured to fully conform to the Australian/New Zealand Standard for Air Conditioning, Refrigeration & Medical Gas AS/NZS 1571. Tubes are available from 6.35mm (1/4") to 104.78mm (4 1/8") diameter in various wall thicknesses.

Included in this range are products suitable for high-pressure refrigerants such as R410A, which has been selected as a replacement for R22 refrigerant that has been commonly used in light commercial and residential air-conditioning. All high pressure refrigerant tubes are protected with pink caps to designate they are high-pressure tubes and the opposite table shows the sizes available. R410A has a 60% higher operating pressure than R22 thus requiring a thicker wall copper tube and significantly stronger copper fittings. 15% silver solder is recommended when brazing tube for use with R410A or other high-pressure refrigerants.

The internal cleanliness of air conditioning, refrigeration and medical gas tube is critical in order to prevent contamination to the components in the piping system. MM Kembla has a unique manufacturing process and certified laboratory to confirm that the total residue does not exceed 0.038g/m<sup>2</sup> as specified in AS/NZS1571, ASTM B280 and EN12735-1. After cleaning, all tubes are individually end-capped to maintain their internal cleanliness. All straight tubes are manufactured in 5.8m lengths for ease of containerisation and are bundled and wrapped in plastic for maximum protection. Individual coils are also wrapped in plastic, packed into cardboard cartons and stacked on pallets ready for delivery.

Test Certificates are available for all products upon request at the time of order.

### AS/NZS1571 TUBE IDENTIFICATION

All straight lengths and coiled tube will be marked according to the AS/NZS 1571 Standard, example:



## KEMBLA® REFRIGERATION FITTINGS TO STANDARD ASME B16.22

MM KEMBLA is a leading supplier of a comprehensive range of copper fittings conforming to a variety of applications and International Standards. KEMBLA® fittings are marketed under the famous KEMBLA® and K Tick brand marks. A full range of fittings is available to suit KEMBLA® AS/NZS 1571 Air Conditioning, Refrigeration and Medical Gas tube from 6.35mm (1/4") to 104.78mm (4 1/8").

KEMBLA® refrigeration fittings are manufactured in accordance with Standard ASME B16.22 to Kembla's stringent specifications. All Kembla fittings are individually cleaned, bagged and labelled to fully comply with the cleanliness requirements of AS/NZS 1571.

# KEMBLA® AIR CONDITIONING , REFRIGERATION & MEDICAL GAS TUBE TO AS/NZS1571

| Actual Tube Size<br>Outside Wall |                                  | Weight<br>(kg/m) | Safe Working<br>Pressure (kPa)<br>up to 50° C    over 50°<br>up to 75° |       | Product Code              |                       |                         |                     |                     |
|----------------------------------|----------------------------------|------------------|--|-------|---------------------------|-----------------------|-------------------------|---------------------|---------------------|
| Diameter<br>metric (mm)          | x Thickness<br>imperial (inches) |                  |  |       | Straight<br>Length (5.8m) | Lengths<br>per bundle | Annealed<br>Coils (15m) | Coils<br>per Carton | Coils<br>per Pallet |
| 6.35 x 0.56                      | 1/4" x 24swg                     | 0.091            | 7,069  | 5,862 |                           |                       | T32453                  | 8                   | 192                 |
| 6.35 x 0.61                      | 1/4" x 23swg                     | 0.098            | 7,760  | 6,435 |                           |                       | T83535                  | 8                   | 192                 |
| 6.35 x 0.71                      | 1/4" x 22swg                     | 0.113            | 9,175  | 7,608 |                           |                       | T59423                  | 8                   | 192                 |
| 6.35 x 0.81                      | 1/4" x 21swg                     | 0.126            | 10,635   | 8,819 | T51430                    | 100                   | T74634 (30m)            | 6                   | 144                 |
| 9.52 x 0.56                      | 3/8" x 24swg                     | 0.141            | 4,584  | 3,801 |                           |                       | T55256                  | 8                   | 192                 |
| 9.52 x 0.61                      | 3/8" x 23swg                     | 0.153            | 5,018  | 4,161 |                           |                       | T86747                  | 8                   | 192                 |
| 9.52 x 0.71                      | 3/8" x 22swg                     | 0.176            | 5,900  | 4,893 | T92195                    | 100                   | T32780                  | 8                   | 192                 |
| 9.52 x 0.81                      | 3/8" x 21swg                     | 0.198            | 6,800  | 5,639 | T77111                    | 100                   | T55743 (18m)            | 8                   | 192                 |
| 12.70 x 0.56                     | 1/2" x 24swg                     | 0.191            | 3,389  | 2,810 |                           |                       | T74625                  | 6                   | 144                 |
| 12.70 x 0.61                     | 1/2" x 23swg                     | 0.207            | 3,705  | 3,072 |                           |                       | T87417                  | 6                   | 144                 |
| 12.70 x 0.71                     | 1/2" x 22swg                     | 0.239            | 4,344  | 3,603 | T16063                    | 100                   | T33007                  | 6                   | 144                 |
| 12.70 x 0.81                     | 1/2" x 21swg                     | 0.271            | 4,994  | 4,141 | T10286*                   | 100                   | T54133 (18m)            | 6                   | 144                 |
| 15.88 x 0.56                     | 5/8" x 24swg                     | 0.241            | 2,688  | 2,229 |                           |                       | T62253                  | 5                   | 60                  |
| 15.88 X 0.61                     | 5/8" x 23swg                     | 0.262            | 2,936  | 2,435 |                           |                       | T91228                  | 5                   | 60                  |
| 15.88 x 0.71                     | 5/8" x 22swg                     | 0.303            | 3,438  | 2,851 |                           |                       | T33147                  | 5                   | 60                  |
| 15.88 x 0.81                     | 5/8" x 21swg                     | 0.343            | 3,945  | 3,272 |                           |                       | T52078                  | 5                   | 60                  |
| 15.88 x 0.91                     | 5/8" x 20swg                     | 0.383            | 4,459  | 3,698 | T24938*                   | 100                   | T33092                  | 5                   | 60                  |
| 15.88 x 1.02                     | 5/8" x 19swg                     | 0.426            | 5,031  | 4,172 | T16871*                   | 100                   | T16850 (18m)            | 5                   | 60                  |
| 19.05 x 0.56                     | 3/4" x 24swg                     | 0.291            | 2,228  | 1,848 |                           |                       | T86615                  | 4                   | 48                  |
| 19.05 x 0.71                     | 3/4" x 22swg                     | 0.366            | 2,846  | 2,360 |                           |                       | T33317                  | 4                   | 48                  |
| 19.05 x 0.81                     | 3/4" x 21swg                     | 0.415            | 3,263  | 2,706 |                           |                       | T59404                  | 4                   | 48                  |
| 19.05 x 0.91                     | 3/4" x 20swg                     | 0.464            | 3,684  | 3,055 | T88073*                   | 100                   | T33296                  | 4                   | 48                  |
| 19.05 x 1.02                     | 3/4" x 19swg                     | 0.517            | 4,152  | 3,443 |                           |                       | T62987                  | 4                   | 48                  |
| 19.05 x 1.14                     | 3/4" x 0.045"                    | 0.574            | 4,668  | 3,871 | T16856                    | 100                   | T16857 (18m)            | 4                   | 48                  |
| 22.22 x 0.91                     | 7/8" x 20swg                     | 0.545            | 3,138  | 2,602 | T13864*                   | 100                   | T76200                  | 3                   | 36                  |
| 22.22 x 1.14                     | 7/8" x 0.045"                    | 0.675            | 3,970  | 3,292 | T21091                    | 100                   |                         |                     |                     |
| 22.22 x 1.40                     | 7/8" x 0.055"                    | 0.819            | 4,929  | 4,088 | T16861                    | 100                   |                         |                     |                     |
| 25.40 x 0.91                     | 1" x 20swg                       | 0.626            | 2,732  | 2,266 | T60659                    | 100                   |                         |                     |                     |
| 25.40 x 1.63                     | 1" x 16swg                       | 1.089            | 5,026  | 4,168 | T79846                    | 100                   |                         |                     |                     |
| 28.58 x 0.91                     | 1 1/8" x 20swg                   | 0.708            | 2,419  | 2,006 | T73973                    | 100                   |                         |                     |                     |
| 28.58 x 1.22                     | 1 1/8" x 18swg                   | 0.938            | 3,276  | 2,717 | T91963                    | 100                   |                         |                     |                     |
| 28.58 x 1.83                     | 1 1/8" x 15swg                   | 1.376            | 5,014  | 4,158 | T14570                    | 100                   |                         |                     |                     |
| 31.75 x 0.91                     | 1 1/4" x 20swg                   | 0.789            | 2,171  | 1,801 | T22040                    | 50                    |                         |                     |                     |
| 34.92 x 0.91                     | 1 3/8" x 20swg                   | 0.870            | 1,969  | 1,633 | T15239                    | 50                    |                         |                     |                     |
| 34.92 x 1.22                     | 1 3/8" x 18swg                   | 1.155            | 2,662  | 2,208 | T91989                    | 50                    |                         |                     |                     |
| 34.92 x 1.40                     | 1 3/8" x 0.055"                  | 1.319            | 3,070  | 2,545 | T81876                    | 50                    |                         |                     |                     |
| 34.92 x 1.63                     | 1 3/8" x 16swg                   | 1.525            | 3,596  | 2,982 | T75974                    | 50                    |                         |                     |                     |
| 34.92 x 2.03                     | 1 3/8" x 14swg                   | 1.876            | 4,527  | 3,754 | T75981                    | 50                    |                         |                     |                     |
| 38.10 x 1.22                     | 1 1/2" x 18swg                   | 1.264            | 2,433  | 2,018 | T91996                    | 50                    |                         |                     |                     |
| 41.28 x 0.91                     | 1 5/8" x 20swg                   | 1.032            | 1,660  | 1,376 | T32923                    | 50                    |                         |                     |                     |
| 41.28 x 1.22                     | 1 5/8" x 18swg                   | 1.373            | 2,241  | 1,858 | T91793                    | 50                    |                         |                     |                     |
| 41.28 x 2.41                     | 1 5/8" x 15swg                   | 2.632            | 4,548  | 3,771 | T16866                    | 50                    |                         |                     |                     |
| 53.98 x 0.91                     | 2 1/8" x 20swg                   | 1.357            | 1,263  | 1,048 | T78167                    | 30                    |                         |                     |                     |
| 53.98 x 1.22                     | 2 1/8" x 18swg                   | 1.809            | 1,703  | 1,412 | T94961                    | 30                    |                         |                     |                     |
| 53.98 x 1.63                     | 2 1/8" x 16swg                   | 2.398            | 2,291  | 1,900 | T94950                    | 30                    |                         |                     |                     |
| 53.98 x 1.78                     | 2 1/8" x 16swg                   | 2.611            | 2,508  | 2,080 | T76032                    | 30                    |                         |                     |                     |
| 53.98 x 2.64                     | 2 1/8" x 12swg                   | 3.809            | 3,776  | 3,131 | T61585                    | 30                    |                         |                     |                     |
| 66.68 x 1.22                     | 2 5/8" x 18swg                   | 2.244            | 1,373  | 1,138 | T31978                    | 30                    |                         |                     |                     |
| 66.68 x 1.63                     | 2 5/8" x 16swg                   | 2.979            | 1,845  | 1,530 | T75568                    | 30                    |                         |                     |                     |
| 66.68 x 2.03                     | 2 5/8" x 14swg                   | 3.688            | 2,310  | 1,916 | T68985                    | 30                    |                         |                     |                     |
| 79.38 x 2.29                     | 3 1/8" x 0.090"                  | 4.961            | 2,186  | 1,813 | T20811                    | 10                    |                         |                     |                     |
| 101.60 x 1.63                    | 4" x 16swg                       | 4.579            | 1,201  | 996   | T20924                    | 10                    |                         |                     |                     |
| 104.78 x 2.79                    | 4 1/8" x 0.110"                  | 7.996            | 2,013  | 1,670 | T31309                    | 10                    |                         |                     |                     |

  Suitable for R410A and other high pressure refrigerants  
 \* Straight lengths supplied in half hard temper, otherwise hard drawn  
 Other sizes available on request



times change copper remains



1920



2010

MM Kembla was established in 1916 at Port Kembla, south of Sydney, in the state of New South Wales, Australia. It was from this location that the famous **KEMBLA**® brand originated. The company has been manufacturing copper products on the site since 1918 and first made copper tube there in 1920.

The factory is certified as a Quality Endorsed facility to ISO9001 by SAI Global, as shown by the Certificate of Registration below. MM Kembla also has a variety of third party accreditations to Australian, British/European and American Standards for many of its product ranges.

**CERTIFICATE OF REGISTRATION**  
**MM Kembla**  
 Gloucester Boulevard, PORT KEMBLA, NSW 2506, AUSTRALIA  
 Operates a **QUALITY MANAGEMENT SYSTEM** which complies with the requirements of **ISO 9001:2008** for the following scope:  
 The registration covers the Quality Management System for the development and manufacture of tube and sheet/plate copper and copper alloy seamless tubes, round copper rods, copper wire and copper alloy shaped conductors.  
 Certificate No: QEC000281  
 Issued: 22 September 2010  
 Expires: 22 September 2013  
 Originally Certified: 20 November 1992  
 Current Certification: 16 September 2012

**CERTIFICATE OF CONFORMITY**  
 SAI Global hereby grants: **MM Kembla**  
 Gloucester Boulevard, PORT KEMBLA, NSW 2506, Australia  
 Watermark Certificate of Conformity - Level 1  
 Evaluated to: **AS 1332-2004 - Copper tubes for plumbing, gasfitting and drainage applications**  
 The Watermark Licensee's right to use the Watermark is subject to the conditions of the Watermark Licensee's agreement with the Watermark Licensee. The Watermark Licensee's agreement is available on the Watermark Licensee's website. The Watermark Licensee's agreement is subject to the terms and conditions of the Watermark Licensee's agreement. The Watermark Licensee's agreement is subject to the terms and conditions of the Watermark Licensee's agreement.  
 Issued: 19 January 2010  
 Expires: 1 April 2015  
 Originally Certified: 2 April 1992  
 Current Certification: 2 April 2009

**BSI Management Systems**  
**TYPE TESTING APPROVAL**  
**MM Kembla**  
 A Division of Metal Manufactures Ltd  
 486-12 762 641  
 Gloucester Boulevard, Port Kembla, NSW, AUSTRALIA 2505  
 AS/NZS 4020:2005 Testing of products for use in contact with drinking water  
 Issued: 28 September 2009  
 Expires: 27 September 2014  
 Originally Certified: 28 September 2009  
 Current Certification: 28 September 2009

**STANDARDSMARK LICENCE**  
 SAI Global hereby grants: **MM Kembla**  
 Gloucester Boulevard, PORT KEMBLA, NSW 2506, Australia  
 StandardsMark Licence  
 Manufactured to: **ASTM B88-03 - Standard Specification for Seamless Copper Water Tube**  
 The StandardsMark Licensee's right to use the StandardsMark Licensee's name is subject to the conditions of the StandardsMark Licensee's agreement with the StandardsMark Licensee. The StandardsMark Licensee's agreement is available on the StandardsMark Licensee's website. The StandardsMark Licensee's agreement is subject to the terms and conditions of the StandardsMark Licensee's agreement.  
 Issued: 28 September 2009  
 Expires: 27 September 2014  
 Originally Certified: 28 September 2009  
 Current Certification: 28 September 2009

**STANDARDSMARK LICENCE**  
 SAI Global hereby grants: **MM Kembla**  
 Gloucester Boulevard, PORT KEMBLA, NSW 2506, Australia  
 StandardsMark Licence  
 Manufactured to: **BS EN 1057:2006 - Copper and copper alloys. Seamless, round copper tubes for water and gas in sanitary and heating applications**  
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 Issued: 25 March 2009  
 Expires: 5 March 2015  
 Originally Certified: 6 March 2008  
 Current Certification: 6 March 2009

**STANDARDSMARK LICENCE**  
 SAI Global hereby grants: **MM Kembla**  
 Gloucester Boulevard, PORT KEMBLA, NSW 2506, Australia  
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 Manufactured to: **BS EN 13348:2001 - Copper and copper alloys. Seamless, round copper tubes for medical gases or vacuum**  
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 Issued: 6 March 2008  
 Expires: 5 March 2015  
 Originally Certified: 6 March 2008  
 Current Certification: 6 March 2008

**STANDARDSMARK LICENCE**  
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 Gloucester Boulevard, PORT KEMBLA, NSW 2506, Australia  
 StandardsMark Licence  
 Manufactured to: **ASTM B819-06(2006) - Standard Specification for Seamless Copper Tube for Air Systems**  
 The StandardsMark Licensee's right to use the StandardsMark Licensee's name is subject to the conditions of the StandardsMark Licensee's agreement with the StandardsMark Licensee. The StandardsMark Licensee's agreement is available on the StandardsMark Licensee's website. The StandardsMark Licensee's agreement is subject to the terms and conditions of the StandardsMark Licensee's agreement.  
 Issued: 21 October 2008  
 Expires: 4 September 2013  
 Originally Certified: 5 September 2006  
 Current Certification: 5 September 2006

**CERTIFICATE OF CONFORMITY**  
 Product Listing Scheme™ - Class 2  
 This Certificate is issued to:  
 H. Rogers Trading (S) Pte Ltd  
 No. 1, Jalan Pagar  
 Tower Block 805-10  
 Singapore 309500  
 FOR:  
 Product: Copper Tubes  
 Brand: KEMBLA  
 Model: Class X & Y  
 Country of Origin: Australia  
 Product Details: Nominal diameter (half hard): 15, 22, 28, 36 & 54mm  
 Nominal diameter (hard): 32, 42, 54, 68, 76, 1, 108 & 159mm  
 which has complied with the requirements of the scheme and based on the following:  
 Standard(s):  
 BS EN 1057: 2006  
 AS/NZS 4020: 1999  
 Test Report(s):  
 PSB no. G11233Y1EMK, G11233Z1CES,  
 G11233Y1H681, 25000175M1EMK,  
 25000176M1YH681, 25000176M1CES,  
 TUV SUD PSB no. 50507186CVW &  
 Austwater water quality centre no. 402782784  
 Issued: 13/06/2001  
 Date of Original Issue: 13/06/2001  
 Date of Last Renewal: 28/09/2009  
 Date of Expiry: 30/06/2012

**LESEN PENSIJILAN BARANGAN**  
 Product Certification Licence  
 MS  
 SIKEM GAS International Sdn. Bhd. dengan ini mengesahkan kepada  
 SIKEM GAS International Sdn. Bhd. dengan ini mengesahkan kepada  
 NO. 1, JALAN PAGAR  
 PANGKONG GARDEN  
 4230 PETALING JAYA  
 SELANGOR DARUL EHSAN  
 Lesen untuk mengesahkan Terbit Perizinan di atas barangan  
 SANITARY AND HEATING APPLICATIONS  
 Please refer to detail in the SCHEDULE  
 subject to the inspection  
 as complying with  
 BS EN 1057:2006



[www.kembla.com.au](http://www.kembla.com.au)

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