ASSOCIATION OF AUSTRALIA

WSAA PRODUCT APPRAISALCERTIFICATE

Strongcast Pty Ltd

Ball Valves for Property Service Applications

This appraisal is for a range of DN 15, DN 20 and DN 25 metal-bodied meter assembly ball valves and DN 20 ball valve tapping ferrules for property service applications. The valves are manufactured in conformance with AS 4796:2016 *Water supply – Metal bodied and plastic bodied ball valves for property service connection*.

The PN16 ball valves are manufactured from dezincification resistant copper alloy and incorporate a Grade 316 stainless steel ball.

The meter assembly ball valves are operated using a tamper-proof lockable lever handle. The DN 20 ball valve tapping ferrules incorporate a ball valve shut off mechanism in lieu of a traditional tapered plastic plug.

Strongcast offers a variety of Complete Meter Assembly Kits which incorporate the ball valves included in this appraisal together with PE compatible fittings that are the subject of Product Appraisal No. 2023.

| Product Category | Ball Valves |
|-------------------------------|--|
| PA Number | PA 2024 Issue 4 |
| Supplier | Strongcast Pty Ltd |
| Brand | Strongcast |
| Standards | AS/NZS 4796:2016 – Metal bodied and plastic bodied ball valves for property service connection. |
| WSAA Product Specification | WSA PS - 274 Ball Valves for Pressure Applications – Water Supply |
| Issue date | 02 June 2022 |
| Expiry date | 12 June 2025 |
| Recommendations | It is recommended that WSAA members, subject to any specific requirements of the member, accept or authorise Strongcast DN 15, DN 20 and DN 25 metal bodied ball valves for house service applications, as detailed in this report, for use in water supply applications, provided they are installed in accordance with WSAA Codes and the manufacturer's requirements, where specified. |
| Disclaimer | The disclaimer on Page 2 explains a number of very important limits on your ability to rely on the information in this Product Appraisal Certificate and the assessment criteria used to underlie it. Please read it carefully and take into account when considering the content in this Certificate. |

Quality and Product Certification details of products are referenced in Schedule A.

1. Disclaimer

This Product Appraisal Certificate (Certificate) is issued by WSAA on the understanding that:

This Certificate applies to the product(s) as submitted in Schedule A. Any changes to the product(s) either minor or major shall void this Certificate.

To maintain the recommendations of this Certificate any such changes shall be detailed and notified to the Product Appraisal Manager for consideration and review of the Certificate including the product appraisal criteria underlying it and appropriate action. Appraisals and their recommendations will be the subject of continuous review dependent upon the satisfactory performance of products.

WSAA reserves the right to undertake random audits of product manufacture and installation. Where products fail to maintain appraised performance requirements the appraisal and its recommendations may be modified and reissued. Certificates will be reviewed and reissued at regular intervals not exceeding five (5) years.

WSAA reserves the right to withdraw this Certificate at any time in its sole and absolute discretion for any reason.

The following information explains a number of very important limits on your ability to rely on the information in this Certificate. Please read it carefully and take it into account when considering the contents of this Certificate.

Any enquiries regarding this Certificate should be directed to the Product Appraisal Manager Phone: 03 8605 7601 email carl.radford@wsaa.asn.au.

1.1. Issue of Certificate

This Certificate has been published and/or prepared by WSAA and nominated Project Manager and peer group of technical specialists (the Publishers).

The Certificate and the underlying product appraisal criteria have been prepared for use within Australia only by technical specialists that have expertise in the function of products such as those appraised in the Certificate (the Recipients).

By accepting this Certificate, the Recipient acknowledges and represents to the Publisher(s) and each person involved in the preparation of the Certificate and product appraisal criteria underlying it that the Recipient has understood and accepted the terms of this Disclaimer.

1.2. Limits on Reliance on Information and Recommendations

1.2.1. Disclaimer of liability

Neither the Publisher(s) nor any person involved in the preparation of the Certificate and product appraisal criteria underlying it accept(s) any liability for any loss or damage suffered by any person however caused (including negligence or the omission by any person to do anything) relating in any way to the Certificate or the product appraisal criteria underlying it. This includes (without limitation) any liability for any recommendation or information in the Certificate or any errors or omissions.

1.2.2. Intellectual Property and other rights

WSAA does not undertake any assessment of whether the importation, manufacture, sale or use of the Product the subject of this Certificate infringes the intellectual property rights or proprietary rights of any person. Recipients of the Certificate should undertake their own assessment of whether (as relevant) the importation, manufacture, sale or use of the relevant Products infringe the intellectual property rights or other proprietary rights of any person. If the Product infringes intellectual property rights or other proprietary rights there is potential for the supply of the Products to be interrupted.

From time to time WSAA and the other Publishers may receive notice of allegations that the importation, manufacture, sale or use of the Product infringes intellectual property rights or other proprietary rights. WSAA's policy is to not refer to such allegations in its Certificate or take any other steps to put Recipients on notice of such allegations. If, however, WSAA becomes aware that the allegations have been admitted or proved in Court, then WSAA may, at its discretion, take such steps as it considers appropriate. As such, Recipients acknowledge, agree and accept that WSAA may have information in its possession about intellectual property rights infringement allegations or other infringement allegations in relation to the Product which are not referred to or disclosed in this Certificate and which are not otherwise communicated to Recipients.

1.2.3. Need for independent assessment

The information and any recommendation contained (expressly or by implication) in this Certificate are provided in good faith (and subject to the limitations noted in this Certificate). However, you should treat the information as indicative only. You should not rely on that information or any such recommendation except to the extent that you reach an agreement to the contrary with the Publisher(s).

This Certificate does not contain all information that a person might require for the purposes of assessing any product discussed or appraised within it. The product appraisal criteria used in preparing this Certificate may not address all relevant aspects of the Product.

Recipients should seek independent evidence of any matter which is material to their decisions in connection with an assessment of the Product and consult their own advisers for any technical information required. Any decision to use the Product should take into account the reliability of that independent evidence obtained by the Recipient regarding the Product. Recipients should also independently verify and assess the appropriateness of any recommendation in the Certificate, especially given that any recommendation will not take into account a Recipient's particular needs or circumstances.

WSAA has not evaluated the extent of the product liability and professional indemnify insurance that the provider of the product maintains. Recipients should ensure that they evaluate the allocation of liability for product defects and any professional advice obtained in relation to the product or its specification including the requirements for product liability and professional indemnity insurance.

1.3. No Updating

Neither the Publisher(s) nor any person involved in the preparation of this Certificate or the product appraisal criteria underlying it [has] [have] any obligation to notify you of any change in the information contained in this Certificate or of any new information concerning the Publisher(s) or the Product or any other matter.

1.4. No Warranty

The Publisher(s) do[es] not, in any way, warrant that steps have been taken to verify or audit the accuracy or completeness of the information in this Certificate, or the accuracy, completeness or reasonableness of any recommendation in this Certificate.



SCHEDULE A

QUALITY AND PRODUCT CERTIFICATIONS

Copies of the following Quality and Product Certification Certificates are available from WSAA.

SCHEDULE A1 STRONGCAST PTY LTD – MANAGEMENT SYSTEMS

| 17/1440 New Cleveland Road Chandler Queensland | | | |
|--|-----------------------------|--|--|
| Quality Systems Standard | ISO 9001:2015 | | |
| Certification Licence No. | 99152334453Q | | |
| Certifying Agency | Best Practice Certification | | |
| First Date of Certification | 18 July 2019 | | |
| Current Date of Certification | 15 April 2020 | | |
| Expiry Date of Certification | 17 July 2022 | | |

SCHEDULE A2 STRONGCAST PTY LTD – PRODUCT CERTIFICATION

| 17/1440 New Cleveland Road Chandler Queensland | | | |
|--|----------------------------|--|--|
| Product Standard/Spec. | AS 4796:2016 | | |
| Certificate No. | AMI 74823 | | |
| Issuing Certification Body | ApprovalMark International | | |
| First Date of Certification | 6 May 2020 | | |
| Current Date of Certification | 11 May 2022 | | |
| Expiry Date of Certification | 6 May 2023 | | |

SCHEDULE A3 STRONGCAST PTY LTD – PRODUCT CERTIFICATION

| 17/1440 New Cleveland Road Chandler Queensland | | | |
|--|----------------------------|--|--|
| Product Standard/Spec. | AS 3718:2021 | | |
| Certificate No. | AMI 74938 | | |
| Issuing Certification Body | ApprovalMark International | | |
| First Date of Certification | 14 February 2022 | | |
| Current Date of Certification | 14 February 2022 | | |
| Expiry Date of Certification | 14 February 2024 | | |



SCHEDULE C

PRODUCT LITERATURE

STRONGCAST METER ASSEMBLY BALL VALVES (STRAIGHT)

| Product Code | DN | End Connections | Available with Sleeve |
|-----------------|----|---|-----------------------|
| C9745 | 15 | 1" BSP Male - ¾" BSP female nut | 1 |
| C7093 | 15 | DN 25 PE compression joint - 3/* BSP female nut | ~ |
| QC9746 | 20 | 1° BSP Male – 1° female nut to suit DN 20 standard domestic water meter | ~ |
| NC9746 | 20 | 1° BSP Male – 1° female nut to suit DN 20 NSW domestic water meter | ~ |
| ZC9746 | 20 | 1" BSP Male – 1" BSP female nut for DN 20 domestic water meter for non-drinking water | ~ |
| QC7094 | 20 | DN 25 PE compression joint - 1" female nut to suit DN 20 standard domestic water meter | ~ |
| NC7094 | 20 | DN 25 PE compression joint - 1" female nut to suit DN 20 NSW domestic water meter | ~ |
| ZC7094 | 20 | DN 25 PE compression joint - 1" BSP female nut for DN 20 domestic water meter for non-drinking water | ~ |
| C8422 | 20 | DN 25 PE compression joint – $\%^{\circ}$ female thread | |
| C8423 | 20 | DN 25 PE compression joint - ¾" male thread | |
| QC7095 | 20 | DN 32 PE compression joint - 1" female nut to suit DN 20 standard domestic water meter | |
| NC7095 | 20 | DN 32 PE compression joint - 1" female nut to suit DN 20 NSW domestic water meter | |
| ZC7095 | 20 | DN 32 PE compression joint - 1" BSP female nut for DN 20 domestic water meter for non-drinking water | |
| C2532 | 20 | DN 32 PE compression joint - DN 25 PE compression joint | |
| QC9747 | 25 | 1" BSP Male – 1" female nut to suit DN 20 standard domestic water meter | |
| NC9747 | 25 | 1° BSP Male – 1° female nut to suit DN 20 NSW domestic water meter | |
| ZC9747 | 25 | 1" BSP Male – 1" BSP female nut for DN 20 domestic water meter for non-drinking water | |
| C8424 | 25 | 1" BSP Male - 1" BSP Male | |
| C8425 | 25 | 1" BSP Male - ¾" BSP Male | |



Example of ball valve with sleeve to allow incorporation of Dual Check Valve



SCHEDULE C

STRONGCAST METER ASSEMBLY BALL VALVES (RIGHT ANGLE)

| Product Code | DN | End Connections | Available with Sleeve |
|--------------|----|---|-----------------------|
| R9745 | 15 | 1" BSP Male - ¼" BSP female nut | 1 |
| R7093 | 15 | DN 25 PE compression joint - 34" BSP female nut | 1 |
| QR9746 | 20 | 1° BSP Male – 1° female nut to suit DN 20 standard domestic water meter | ~ |
| NR9746 | 20 | 1" BSP Male - 1" female nut to suit DN 20 NSW domestic water meter | |
| ZR9746 | 20 | 1" BSP Male – 1" BSP female nut for DN 20 domestic water meter for non-drinking water | ~ |
| QR7094 | 20 | DN 25 PE compression joint - 1° female nut to suit DN 20 standard domestic water meter | ~ |
| NR7094 | 20 | DN 25 PE compression joint - 1" female nut to suit DN 20 NSW domestic water meter | |
| ZR7094 | 20 | DN 25 PE compression joint - 1" BSP female nut for DN 20 domestic water meter for non-drinking water | - |



STRONGCAST BALL VALVE TAPPING FERRULES

| Product Code | DN | End Connections |
|--------------|----|---|
| TCB20 | 20 | 3/4" BSP male - combination 1" BSP Male / 3/4" female with jumper valve |
| CB20 | 20 | ¾" BSP male - combination 1" BSP Male / ¾" female with cap |
| TCB25PE | 20 | ¾" BSP male - DN 25 PE compression joint with jumper valve |
| CB25PE | 20 | ¾" BSP male - DN 25 PE compression joint with cap |







TCB25PE



CB25PE



SCHEDULE C

EXAMPLE OF METER ASSEMBLIES





SCHEDULE D

SUPPLIER CONTACTS

Strongcast Pty Ltd

17/1440 New Cleveland Road Chandler Queensland 4155 Phone: 0423 715 901 Email: john@strongcast.com.au

Web: www.strongcast.com.au