WSAA Product Appraisal 1216 Issue 4



Rapid Clamps Pty Ltd

PRODUCT APPRAISAL REPORT 1216 Issue 4

Rapid Clamps CT Tapping Saddle

AS 4793: 2020 – Mechanical tapping bands for waterworks purposes

1

Issue 1 Published: 22 October 2013 Issue 2 Published: 24 February 2016 Issue 3 Published: 22 March 2017 Issue 4 Published: 21 October 2021

Document History

The following information indicates the changes made to this document.

| Date | Version |
|-------------------|-----------------------|
| 19 September 2013 | Issue 1 Client Review |
| 19 September 2013 | Issue 1 Peer Review |
| 22 October 2013 | Issue 1 Publication |
| 24 February 2016 | Issue 2 Publication |
| 22 March 2017 | Issue 3 Publication |
| 21 October 2021 | Issue 4 Client Review |
| 21 October 2021 | Issue 4 Publication |

Peer Reviewers

| Name/Title | Organisation | Date |
|--|------------------------|-------------------|
| Product Appraisal Technical Advisory Group | WSAA | 19 September 2013 |
| WSAA Expert Panel | WSAA | 19 September 2013 |
| Peter Pittard, WSAA Consultant | WSAA 19 September 2013 | |
| Carl Radford, Product Appraisal Manager | WSAA | 22 October 2013 |
| Peter Pittard, WSAA Consultant | WSAA | 20 February 2016 |
| Carl Radford, Product Appraisal Manager | WSAA | 24 February 2016 |
| Peter Pittard, WSAA Consultant | WSAA | 16 March 2017 |
| Carl Radford, Product Appraisal Manager | WSAA | 22 March 2017 |
| Peter Pittard, WSAA Consultant | WSAA | 21 October 2021 |
| Carl Radford, Product Appraisal Manager | WSAA | 21 October 2021 |

Overview of WSAA

The Water Services Association of Australia (WSAA) is the peak industry body representing the urban water industry. Our members provide water and sewerage services to over 20 million customers in Australia and New Zealand and many of Australia's largest industrial and commercial enterprises.

Based around our vision of 'customer driven, enriching life', WSAA facilitates collaboration, knowledge sharing, networking and cooperation within the urban water industry. We are proud of the collegiate attitude of our members which has led to industry-wide approaches to national water issues.

WSAA can demonstrate success in the standardisation of industry performance monitoring and benchmarking, as well as many research outcomes of national significance. The WSAA Executive retains strong links with policy makers and legislative bodies and their influencers, to monitor emerging issues of importance to the urban water industry.

WSAA was formed in 1995 as a non-profit organisation to foster the exchange of information between industry, government and the community, and to promote sustainable water resource management.

The urban water industry is committed to anchoring its services to customers' values, and to enrich communities where water services have broad economic, environmental and social values. In line with this our main activities focus on four areas:

- 1. influencing national and state policies on the provision of urban water services and sustainable water resource management
- 2. promoting debate on environmentally sustainable development and management of water resources and the community health requirements of public water supplies
- 3. improving industry performance and establishing benchmarks and industry leading practices for water service processes; and
- 4. fostering the exchange of information on education, training, research, water and wastewater management and treatment and other matters of common interest.

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1 EXECUTIVE SUMMARY

Rapid Clamps Pty Ltd is the Australian distributor of Cascade stainless steel repair clamps, tapping saddles and associated fittings. It operates a warehouse and distribution business located in Brendale Queensland.

Cascade Sales & Distribution (Pty) Ltd, located in Germiston, South Africa, is a manufacturer and supplier of stainless-steel pipe repair couplings and related fittings.

This appraisal is for a range of Rapid CT Tapping Saddles in sizes DN 100, DN 200, DN 225, DN 250 and DN 300 with tapped outlets of dn 20 ($\frac{3}{4}$ "), dn 25 (1"), dn 32 (11/4"), dn 40 (11/2") and dn 50 (2") manufactured in accordance with AS/NZS 4793:2020 *Mechanical tapping bands for waterworks purposes*.

The PN16 tapping saddles consist of two Grade 316 stainless steel segments with a fully lined nitrile rubber mat, incorporating a lip seal, joined by 2 or 4 Grade 316 stainless steel studs and nuts.

The tapping saddles are designated Type R for use with rigid pipes including ductile iron, grey cast iron, asbestos cement, steel or copper. Type R tapping bands are not full circle design and are therefore not suitable for use on plastic pipes.

Cascade Sales & Distribution (Pty) Ltd holds an ISO 9001:2015 Quality Management System Licence.

The Rapid CT tapping saddles are covered by ISO Type 5 ApprovalMark product certification to AS 4793:2020 *Mechanical tapping bands for waterworks purposes*.

This Appraisal has determined that Rapid Type R CT tapping saddles, as detailed in this report, meet the requirements of WSA PS 310 *Tapping Bands – Mechanical for Pressure Applications – Water Supply* and are considered as 'fit-for-purpose'.

1.1 Recommendation

It is recommended that WSAA members and associates accept/authorise Rapid Clamps CT Type R tapping saddles for sizes DN 100, DN 200, DN 225, DN 250 and DN 300 as detailed in this report, for use in water supply pipelines, provided installation, acceptance testing and commissioning are in accordance with relevant standards, WSAA Codes and the manufacturer's requirements, where specified.

2 THE APPLICANT

The Applicant is Rapid Clamps Pty Ltd.

2.1 The Supplier

Rapid Clamps Pty Ltd is the Australian distributor of Cascade stainless steel repair clamps, tapping saddles and associated fittings. It operates a warehouse and distribution business located in Brendale Queensland.

2.2 The Manufacturer

Cascade Sales & Distribution (Pty) Ltd has been distributing stainless steel pipe repair couplings and related fittings since 1984. Full manufacturing facilities were introduced in 1986. The company distributes its stainless-steel pipe repair clamps throughout South Africa and also services UK, Middle East, Malaysia and Australia.

Cascade manufactures the range of Rapid CT tapping bands at its Germiston factory in South Africa.

3 THE PRODUCT

This appraisal is for a range of Rapid CT Tapping Saddles in sizes DN 100, DN 200, DN 225, DN 250 and DN 300 with tapped outlets of dn 20 ($\frac{3}{4}$ "), dn 25 (1"), dn 32 (1 $\frac{1}{4}$ "), dn 40

(1½") and dn 50 (2") manufactured in accordance with AS/NZS 4793:2020 *Mechanical tapping bands for waterworks purposes*.

Tapping saddles provide a means for the connection of property services to reticulated network pipelines.

The PN16 tapping saddles consist of two Grade 316 stainless steel segments with a fully lined nitrile rubber mat, incorporating a lip seal, joined by 2 or 4 Grade 316 stainless steel studs and nuts. The stainless-steel studs are welded to the bottom section and are supplied with polytetrafluoroethylene coated threads to prevent galling during installation.

The inner surface of the tapping band is fully lined with a nitrile rubber mat to provide insulation protection against galvanic corrosion. A combination static and dynamic lip seal provides a watertight connection. A patented internal stainless steel retaining disc is also incorporated into the sealing mechanism to prevent the mat and seal from extruding out under pressure. The specially designed seal mechanism allows the tapping bands to be utilised on a wide range of pipe outside diameters.

The nitrile rubber components are compliant with AS 1646 and provide resistance to contaminants such as oils, diesel and other hydrocarbons.

The tapping saddles are designated Type R for use with rigid pipes including ductile iron, grey cast iron, asbestos cement, steel or copper. Type R tapping bands are not full circle design and are therefore not suitable for use on plastic pipes.

4 SCOPE OF THE APPRAISAL

The scope of this appraisal applies to Rapid CT tapping saddles in sizes DN 100, DN 200 DN 225, DN 250 and DN 300 with 20 mm, 25 mm, 32 mm, 40 mm and 50 mm female threaded BSP off takes.

Other size tapping bands are also available from Rapid Clamps and included on the product certification licence, however this report includes only those sizes that have been type tested.

Refer to Table 1 for the range of Rapid Clamps CT tapping saddles

| Nominal Size DN | Outlet Size | Pipe OD Range | Width | No of Studs |
|-----------------|-------------|---------------|-------|-------------|
| 100 | 20, 25 | 110-135 | 130 | 2 |
| 100 | 32, 40, 50 | 110-135 | 150 | 2 |
| 200 | 20, 25 | 040.040 | 130 | 2 |
| | 32, 40, 50 | 210-240 | 150 | 4 |
| 225 | 20, 25 | 240.270 | 130 | 4 |
| 220 | 32, 40, 50 | 240-270 | 150 | 4 |
| 250 | 20, 25 | 270 200 | 130 | 4 |
| 250 | 32, 40, 50 | 270-300 | 150 | 4 |
| 200 | 20, 25 130 | 130 | 4 | |
| 300 | 32, 40, 50 | 330-360 | 150 | 4 |

5 APPRAISAL CRITERIA

5.1 Quality Assurance Requirements

The WSAA Product Appraisal Technical Advisory Group accepts tapping bands manufactured in compliance with AS/NZS 4793:2020 – *Mechanical tapping bands for waterworks purposes* and duly certified by means of an ISO Type 5 product certification scheme undertaken by a JAS-ANZ accredited Conformity Assessment Body (CAB) or by an international accreditation system recognised by JAS-ANZ.

The manufacturer is generally expected to have a production management and control system that has been duly accredited in accordance with AS/NZS ISO 9001 as a prerequisite to undergoing a product certification audit.

The ISO Type 5 Product Certification Scheme shall meet the criteria described in WSA TN-08.

5.2 **Performance Requirements**

Rapid CT tapping saddles have been appraised for compliance with AS/NZS 4793:2020 – *Mechanical tapping bands for waterworks purposes.*

Appraisal criteria are also determined by the WSAA Product Appraisal Technical Advisory Group and regularly reviewed to ensure that the criteria reflect the requirements of WSAA members.

The following Product Specification is also relevant to this application:

WSA PS 310 Tapping Bands – Mechanical for Pressure Applications – Water Supply

A copy of the Product Specification is available at the following link:

https://www.wsaa.asn.au/shop/product/35716

6 COMPLIANCE WITH APPRAISAL CRITERIA

6.1 Compliance with Quality Assurance Requirements

Rapid Clamps has submitted the following quality certificates:

- ISO 9001:2015 Certificate of Registration No. ZA17/209998 issued to Cascade Sales & Distribution (Pty) Ltd by SGS.
- AS 3952:2020 ISO Type 5 ApprovalMark product certification Licence No. AMI 74603 issued to Cascade Sales & Distribution (Pty) Ltd by ApprovalMark International

Copies of the Quality Assurance and Product Certification licences have been included in Appendix B and are also available from WSAA.

Copies of Quality Assurance certificates have also been supplied for the component suppliers.

6.2 Compliance with Performance Requirements

6.2.1 Type Testing

Rapid Clamps has provided type test reports from Australian Pipe and Fittings Testing Centre to verify the performance requirements on DN 100, DN 200, DN 225, DN 250 and DN 300 sizes with 50mm tapped outlets. AS/NZS 4793:2020 requires each size tapping saddle to be tested. Tests have not been reported for DN 150 tapping saddles and have therefore not been included in the Scope of this Appraisal

Tests were conducted in accordance with the following requirements of AS/NZS 4793:2020:

- Leak tightness test during application of a bending moment to the connecting pipe
- Joint Infiltration Test

- Short term hydrostatic leak tightness test
- Bi-metallic couple

All tests indicated compliance with the criteria.

6.2.2 Materials

6.2.2.1 Body components

The body of the tapping bands are manufactured from Grade 316 stainless steel and fully passivated after welding.

6.2.2.2 *Nuts, bolts and washers*

The M16 studs, nuts and washers utilised on the Rapid CT tapping saddles are Grade 316 stainless steel.

6.2.2.3 Elastomeric seals

The Nitrile HT4627 gasket and seal components are supplied by Hultec and manufactured by Thai Duong Joint Stock Company in Vietnam under cover of an ISO Type 5 ApprovalMark product certification to AS1646:2007. A copy of the certificate is held on file by WSAA.

6.2.3 Effect on water

The design of the Rapid Clamps CT tapping bands means that only the nitrile rubber components are exposed to the drinking water. Test report No AAL22382 dated 14th August 2020 prepared by Eurofins ams is held on file by WSAA and confirms that the Nitrile HT4627 complies with AS/NZS 4020:2018.

6.2.4 Design

6.2.4.1 *Outlet threads*

The CT Tapping Bands incorporate a weld on boss with a parallel thread conforming to ISO 7.1:2008 *Pipe threads where pressure-tight joints are made on the threads - Dimensions, tolerances and designation.* Machined threads are gauged with a calibrated go/no-go gauge to ensure that specifications are maintained.

7 FITTING INSTRUCTIONS, TRAINING AND INSTALLATION

A copy of the installation instructions is included in Appendix A.

8 PRODUCT MARKING

The Rapid CT tapping saddles have the following marking printed on the bottom segment, which meets the requirements of AS 4793.

- Manufacturer's name: Rapid Clamps
- Nominal diameter: e.g., DN 100
- Product Code: e.g., CT2 110 135 x 50mm BSP
- Pipe OD Compatibility: e.g., OD 110 135 mm
- Outlet tapping size and type: e.g., 50mm BSP "Rp"
- Type: Type R DI, CI, AC pipe
- Standard: AS 4793
- Licence Number: AMI 74603

9 PACKAGING AND TRANSPORTATION

Rapid CT tapping saddles are packed in double-wall cartons measuring 430 mm x 430 mm with various heights to accommodate all sizes of the saddles in fixed numbers per size.

Standard pallets are used to fit nine cartons per layer. The number of layers on a pallet is determined by the mix of carton heights and numbers, and any resultant space is filled with dummy material to ensure a squared off pallet load. The pallet pack is strapped with steel strapping with corner protection, and fully wrapped with cling-wrap plastic foil. Pallet packs are assembled in line with standard shipping modes and machinery used by international carriers.

Local distributors in Australia have discretion for individual deliveries.

10 PRODUCT WARRANTY

The products are covered by the normal commercial and legal requirements of the *Competition and Consumer Act 2010 (Cth)*, which covers manufacture to the relevant standard, and details of Rapid Clamp's warranty is included in their terms and conditions of sale.

11 WATER AGENCY EXPERIENCE WITH THE PRODUCT OR FIELD TESTING REPORT

The Rapid CT tapping saddles have been utilised in Australia for many years.

A field trial was conducted by City West Water in 2013 to support the original appraisal of this product. A copy of the report is available from WSAA.

12 FUTURE WORKS

No future works have been identified.

13 DISCLAIMER

This Product Appraisal Report (Report) is issued by the Water Services Association of Australia Limited on the understanding that:

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

To maintain the recommendations of this Report any such changes shall be detailed and notified to the Product Appraisal Manager for consideration and review of the Report 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. Appraisal reports will be reviewed and reissued at regular intervals not exceeding five (5) years.

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

Any enquiries regarding this report should be directed to the Program Manager, Carl Radford, Phone: 03 8605 7601 email carl.radford@wsaa.asn.au.

13.1 Issue of Report

This Report has been published and/or prepared by the Water Services Association of Australia Limited and nominated Project Manager and peer group of technical specialists (the Publishers).

The Report has been prepared for use within Australia only by technical specialists that have expertise in the function of products such as those appraised in the Report (the Recipients).

By accepting this Report, the Recipient acknowledges and represents to the Publisher(s) and each person involved in the preparation of the Report that the Recipient has understood and accepted the terms of this Disclaimer.

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This Report does not contain all information that a person might require for the purposes of assessing any product discussed or appraised within it (Product). The product appraisal criteria used in preparing this Report 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 Report, 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.

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

13.4 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 Report, or the accuracy, completeness or reasonableness of any recommendation in this Report.

APPENDIX A - PRODUCT LITERATURE



CT TAPPING SADDLES STANDARD RANGE







AS/NZS 4793 & 4129 LIC. AM 174603* WM 74732* WSAA Product Appraisal 12/16+

CT Tapping Saddles are suitable for Ductile Iron, Cast Iron, Hobas, Steel, Copper, Asbestos Cement, PVC, PE, Concrete, VC, FRC, and other types of pipes, which require a permanent BSP tapping off take.

They eliminate the need to "cut in" an off take, as the saddle can be installed around the pipe without disrupting the internal flow and Tapped Under Pressure.

They are designed to fit a range of pipe ODs in one saddle, and they adapt to the pipe ovality and irregularities.

CT Tapping Saddles are constructed from 316 Stainless Steel and have a fully line rubber mat designed to insulate the pipe

and protect it from galvanic corrosion. The Tapping Saddle seal is specially designed. It incorporates a static seal and a dynamic lip seal. Also incorporated into the seal is an internal stainless steel retaining disc#, which prevents the seal and mat from extruding out, under extreme internal pressure. The specially designed seal allows for pipe outside diameter changes, caused by pressurizing and depressurizing of the pipe.

MATERIAL SPECIFICATION & STANDARDS

CT Tapping Saddles, are designed and manufactured under Quality Management System, certificate to ISO9001:1994. *AS/NZS 4129 & *AS/NZS 4793 & WSAA 12/16 for DN80 to DN300 with 20mm to 50mm BSP only.

Body 316 Stainless Steel ASTM A240M

Sealing Gasket# Nitrile AS1646, AS/NZS 4020

Bolts, Nuts and Washers 316 Stainless Steel ASTM A240M **BSP Tapping and Flange Offtakes**

316 Stainless Steel ATSM A312M BSP to AS1722.1, Flanges to AS/NZS 4087 (DN80 and 100)

Working Pressure: = 1.6MPa Working Temperature: 0 to 60 Degrees C

| DN Pipe | Pipe OD Range (mm) | Code | BSP Tapping and Flanges X (mm)* |
|---------|--------------------|-----------------|------------------------------------|
| 80- | 75-90 | CT2-75/90 x X | 20 & 25 |
| 80- | 88-104 | CT2-88/104 x X | 20, 25, 32, 40, & 50 |
| 100- | 100-118 | CT2-100/118 x X | 20, 25, 32, 40, & 50 |
| 100- | 110-135 | CT2-110/135 x X | 20, 25, 32, 40, 50, & 65 |
| 125- | 135-160 | CT2-135/160 x X | 20, 25, 32, 40, 50, 65, & 80 |
| 150- | 160-190 | CT2-160/190 x X | 20, 25, 32, 40, 50, 65, & 80 |
| 175- | 190-220 | CT2-190/220 x X | 20, 25, 32, 40, 50, 65, 80, & 100 |
| 200- | 210-240 | CT2-210/240 x X | 20, 25, 32, 40, 50, 65, 80, & 100 |
| 225. | 240-270 | CT2-240/270 x X | 20, 25, 32, 40, 50, 65, 80, & 100 |
| 250- | 270-300 | CT2-270/300 x X | 20, 25, 32, 40, 50, 65, 80, & 100 |
| 275- | 300-330 | CT2-300/330 x X | 20, 25, 32, 40, 50, 65, 80, & 100 |
| 300- | 330-360 | CT2-330/360 x X | 20, 25, 32, 40, 50, 65, 80, & 100 |
| 350 | 360-390 | CT2-360/390 x X | 20, 25, 32, 40, 50, 65, 80, & 100 |
| 375 | 390-420 | CT2-390/420 x X | 20, 25, 32, 40, 50, 65, 80, & 100 |
| 400 | 420-450 | CT2-420/450 x X | 20, 25, 32, 40, 50, 65, 80, & 100 |
| 400/450 | 440-470 | CT2-440/470 x X | 20, 25, 32, 40, 50, 65, 80, & 100 |
| 400/450 | 470/500 | CT2-470/500 x X | 20, 25, 32, 40, 50, 65, 80, & 100 |
| 450 | 490-520 | CT2-490/520 x X | 20, 25, 32, 40, 50, 65, 80, & 100 |
| 500 | 520-550 | CT2-520/550 x X | 20, 25, 32, 40, 50, 65, 80, & 100 |
| 525 | 550/580 | CT2-550/580 x X | 20, 25, 32, 40, 50, 65, 80, & 100 |
| 600 | 590/620 | CT2-590/620 x X | 20, 25, 32, 40, 50, 65, 80, & 100 |
| 600 | 620/650 | CT2-620/650 x X | 20, 25, 32, 40, 50, 65, 80, & 100 |
| 600 | 650/680 | CT2-650/680 x X | 20, 25, 32, 40, 50, 65, 80, & 100 |

Larger pipe OD sizes are available. filmovation Patent 2011100263

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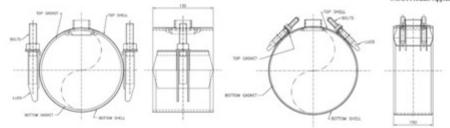
SPECIFICATIONS for Rapid 316 CT Tapping Saddles







AS/NZS 4793 & 4129 LIC. AM 174603** WM 74732** WSAA Product Appraisal 12/16**



Grade of stainless steel, Type 316. Fully passivized after welding, to restore the original passive state of the 316 stainless steel.

LOCKING WASHER PLATE: SS316 Locks into position for easy tightening of nuts. LUGS: SS316 MIG-welded to receiver bar and fully passivized after welding. Leading edge is rounded to prevent them from catching bolt bars during installation. SHELL: SS316 2B finish.

BOLTS: SS316 Thread-rolled for strength and coated to prevent galling. Bolts are MIG-welded to the receiver bar and fully passivized after welding.

NUTS/WASHERS: SS316. RECEIVER BARS: SS316 TIG-welded to shell to form a strong fusion, and fully passivized after

welding.

GASKET:. Nitrile, to AS1646 and AS4020. The gasket is specially designed with a static seal and a dynamic lip seal. Also incorporated into the seal is an internal stainless steel retaining disc#, which prevents the seal and mat from extruding out, under extreme internal pressure. The specially designed seal allows for pipe outside diameter changes, caused by pressurizing and depressurizing of the pipe.

TAPPINGS: SS316 stainless steel, DN 15mm to DN100mm BSP Rp parallel threaded socket. Flanges SS316, standard AS4087 PN16, drilled to Table D (DN80 & 100). Other configurations avail.

General Information:

Offtake tapping DN15mm, DN20mm, and DN25mm, saddle width = 130mm. Offtake tapping DN32mm, DN40mm, and DN50mm, saddle width = 150mm. Offtake tapping DN65mm and DN80mm, saddle width = 200mm. Offtake tapping DN100mm, saddle width = 300mm.

Working Pressure Ratings:

(a) Tapping saddle to suit pipes OD75mm up to OD680mm = 1.6 MPa.*
(b) Tapping saddle to suit pipes OD680mm up to OD980mm nominal size = 1.2 MPa.*

The amount of pressure that the tapping saddles will contain is proportionate to the diameter of the pipe. Smaller diameter tapping saddles will contain more pressure than larger diameter tapping saddles.

Suitable anchorage must be provided where pipe movement may occur. Suitable mechanical support should be used to support the off-take fittings *Pressure ratings may vary due to pipe condition and type. ** Sizes DN80 to DN300mm with 20mm to 50mm BSP only. Max. Temperature 0 - 60 degrees C. Re-tension saddle at Max. operating temp. #Innovation Patent 2011100263 . Specifications are subject to change without notice.

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INSTALLATION GUIDE CASCADE/RAPID CLAMPS CT Tapping Saddles Permanent Connection Made Quick and Easy



The CT Tapping Saddle is made from 316 Stainless Steel and is design for permanent tapping off take connections, on pressure (DI, CI, AC, MS) and non-pressure pipe systems. Host pipe sizes from DN80mm upwards, that require a permanent BSP tapping, 15mm, 20mm, 25mm, 32mm, 40mm or 50mm sizes available.

- 1 Clean and remove any debris around the host pipe where the tapping saddle will be placed. Check for any pipe damage, if present relocate the saddle.
- 2 Disassemble the tapping saddle and install around the host pipe. Hand-tighten the nuts and position BSP tapping as required.
- 3 Tension the nuts, evenly, uniformly, and keep gaps between segments equal. Do not fully tension one nut at a time, slowly tension nuts, moving from one nut to another, until 80Nm is applied to all the nuts. Recheck the tension on all the nuts 10 minutes later, or when max. operating temperature is reach.
- 4 It may be necessary to mechanically support the off take fittings separately to the tapping saddle.
- 5 It is recommended to pressure test the tapping saddle and fittings before drilling into the pipe.

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APPENDIX B - QUALTY CERTIFICATIONS

Copies of the following Quality Certification Certificates are also available from WSAA

TABLE B1

CASCADE SALES & DISTRIBUTION (PTY) LTD – MANAGEMENT SYSTEMS

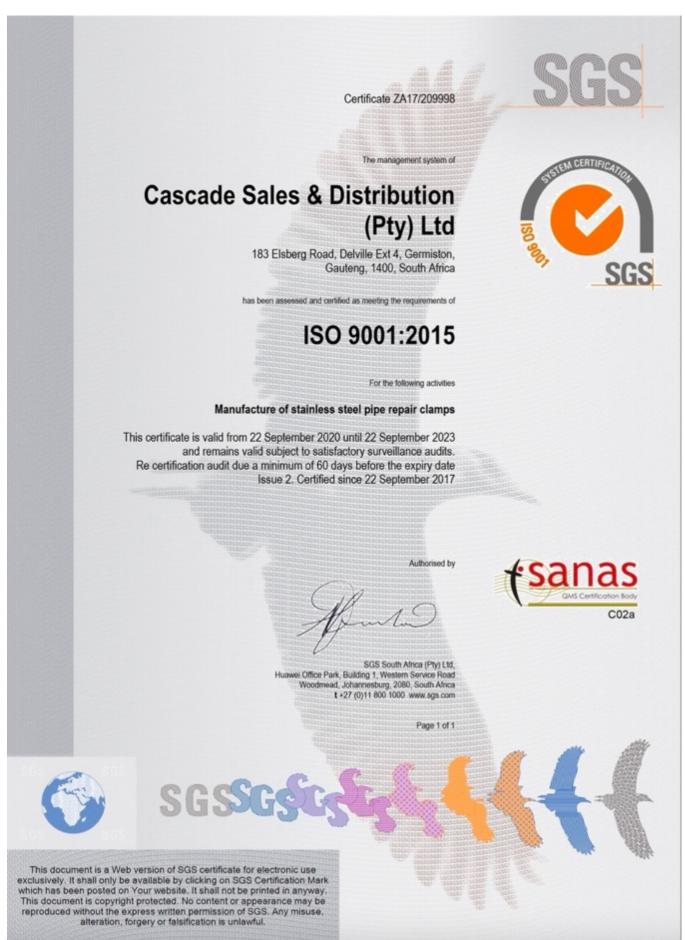
| 183 Elsburg Road De | Ilville Ext 4 Germiston South Africa 1401South Africa |
|-------------------------------|---|
| Quality Systems Standard | ISO 9001:2015 |
| Certification Licence No. | ZA17/209998 |
| Certifying Agency | SGS |
| First Date of Certification | 22 September 2017 |
| Current Date of Certification | 22 September 2020 |
| Expiry Date of Certification | 22 September 2023 |

TABLE B2

CASCADE SALES & DISTRIBUTION (PTY) LTD - PRODUCT CERTIFICATION

| 183 Elsburg Road De | Ilville Ext 4 Germiston South Africa 1401South Africa |
|-------------------------------|---|
| Product Standard/Spec. | AS/NZS 4793:2020 |
| Certificate No. | AMI 74603 |
| Issuing Certification Body | ApprovalMark International |
| First Date of Certification | 20 April 2025 |
| Current Date of Certification | 21 May 2021 |
| Expiry Date of Certification | 20 October 2025 |

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CERTIFICATE OF CONFORMITY



ApprovalMark International hereby grants:

Cascade Sales and Distribution (Pty) T/A Rapid Clamps

183 Elsburg Road, Delville Ext 4 Germiston, 1401 SOUTH AFRICA

ISO Type 5 Certificate of Conformity

Evaluated to:

AS/NZS 4793:2020 – Mechanical tapping bands for waterworks purposes

The ISO Type 5 License shall comply with all the terms and conditions as stipulated by the governance of the operating rules of the ISO Type 5 Scheme and shall comply with the standard requirements at all times including when the standard is amended. The ISO Type 5 License only covers the product which is identified in the attached product schedule.

Original Issue: 20th April 2015

Certificate No. AMI 74603

Issued: 21st May 2021 Expires: 20th October 2025

John PRASAD Director ApprovalMark International Pty Ltd 20/33 Holbeche Road, Arndell Park 2148, Australia



www.approvalmark.com



Registered by: ApprovalMark International Pty Ltd (ABN 69 143 259 974) Unit 20, 33 Holbeche Road, Arndell Park NSW 2148 Australia. The assessment was carried with appropriate skill and assessment by ApprovalMark International Pty Ltd; however it will only accept its responsibility for proven negligence. The certificate remains the property of ApprovalMark International Pty Ltd.





Product Schedule

P

Cascade Sales and Distribution (Pty) T/A Rapid Clamps 183 Elsburg Road, Delville Ext 4 Germiston, 1401

SOUTH AFRICA

ISO Type 5 Certificate of Conformity

Evaluated to:

AS/NZS 4793:2020 - Mechanical tapping bands for waterworks purposes

| Model Id | Model Name | Brand Name | Product Description | Endorsement Date |
|------------------------|----------------------|---------------|---|---------------------------|
| CT2-110-135 x 20BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 110 to 135 x 20mm BSP Type R | 21 st May 2021 |
| CT2-110-135 x 25BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 110 to 135 x 25mm BSP Type R | 21 st May 2021 |
| CT2-110-135 x 32BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 110 to 135 x 32mm BSP Type R | 21 st May 2021 |
| CT2-110-135 x 40BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 110 to 135 x 40mm BSP Type R | 21st May 2021 |
| CT2-110-135 x 50BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 110 to 135 x 50mm BSP Type R | 21 st May 2021 |
| CT2-160-190 x 20BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 160 to 190 x 20mm BSP Type R | 21 st May 2021 |
| CT2-160-190 x 25BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 160 to 190 x 25mm BSP Type R | 21 st May 2021 |
| CT2-160-190 x 32BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 160 to 190 x 32mm BSP Type R | 21 st May 2021 |
| CT2-160-190 x 40BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 160 to 190 x 40mm BSP Type R | 21 st May 2021 |
| CT2-160-190 x 50BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 160 to 190 x 50mm BSP Type R | 21 st May 2021 |
| 20BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 210 to 240 x 20mm BSP Type R | 21 st May 2021 |
| CT2-210-240 x 25BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 210 to 240 x 25mm BSP Type R | 21 st May 2021 |
| CT2-210-240 x 32BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 210 to 240 x 32mm BSP Type R | 21 st May 2021 |
| CT2-210-240 x 40BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 210 to 240 x 40mm BSP Type R | 21 st May 2021 |
| CT2-210-240 x 50BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 210 to 240 x 50mm BSP Type R | 21 st May 2021 |
| CT2-240-270 x 20BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 240 to 270 x 20mm BSP Type R | 21 st May 2021 |





Product Schedule

| Model Id | Model Name | Brand Name | Product Description | Endorsement Date |
|------------------------|----------------------|---------------|---|---------------------------|
| CT2-240-270 x 25BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 240 to 270 x 25mm BSP Type R | 21 st May 2021 |
| CT2-240-270 x 32BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 240 to 270 x 32mm BSP Type R | 21 st May 2021 |
| CT2-240-270 x 40BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 240 to 270 x 40mm BSP Type R | 21 st May 2021 |
| CT2-240-270 x 50BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 240 to 270 x 50mm BSP Type R | 21st May 2021 |
| CT2-270-300 x 20BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 270 to 300 x 20mm BSP Type R | 21 st May 2021 |
| CT2-270-300 x 25BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 270 to 300 x 25mm BSP Type R | 21 st May 2021 |
| CT2-270-300 x 32BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 270 to 300 x 32mm BSP Type R | 21 st May 2021 |
| CT2-270-300 x 40BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 270 to 300 x 40mm BSP Type R | 21 st May 2021 |
| CT2-270-300 x 50BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 270 to 300 x 50mm BSP Type R | 21 st May 2021 |
| CT2-330-360 x 20BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 330 to 360 x 20mm BSP Type R | 21 st May 2021 |
| CT2-330-360 x 25BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 330 to 360 x 25mm BSP Type R | 21 st May 2021 |
| CT2-330-360 x 32BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 330 to 360 x 32mm BSP Type R | 21 st May 2021 |
| CT2-330-360 x 40BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 330 to 360 x 40mm BSP Type R | 21st May 2021 |
| CT2-330-360 x 50BSP | CT Tapping Saddle | Rapid | CT Tapping Saddle SS316 330 to 360 x 50mm BSP Type R | 21 st May 2021 |

---- End of record

Certificate No. AMI 74603

The models identified above in the schedule are endorsed for ISO Type 5 application only.

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APPENDIX C - SUPPLIER CONTACTS

Rapid Clamps Pty Ltd

55/193 Southpine Road Brendale QLD 4500 Phone:07 3889 6262 Email: sales@rapidclamps.com



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