Strategic Product Specification

SPS 152
Stainless Steel Repair Clamps for Waterworks Pipes

VERSION 0
REVISION 5
SEPTEMBER 2018
FOREWORD

Each Strategic Product Specification has been prepared to inform Water Corporation staff, consultants, contractors and land developers of the requirements for selecting and acquiring a manufactured product to be used in strategic Corporation infrastructure. The definition of ‘Product’ includes items that comprise assembled components, equipment or plant for mechanical, electrical and civil infrastructure applications.

The objective of a Strategic Product Specification is to specify fit-for-purpose Product which will contribute to the provision of effective water services at least whole-of-life cost and with least risk to service standards and safety. A Strategic Product Specification also provides uniform standards for compatibility of new water infrastructure with existing water assets.

Many Strategic Product Specifications have drawn on the design, asset management and operational experience of Product performance in live service gained by the Corporation over time. Some Strategic Product Specifications have drawn on the experience of the water industry nationally by referencing Australian or WSAA standards.

Strategic Product Specifications are intended for reference and use in the following typical procurement scenarios:

- Capital funded infrastructure design and construction work;
- Private developer funded subdivision infrastructure for takeover by the Corporation;
- Operationally funded infrastructure design and construction work;
- Corporation period contracts for Product purchases;
- Product purchases for stock or for miscellaneous minor work.

A published Strategic Product Specification will, in some cases, comprise technical content that is typical of a range of products of the same type (type specification) but may exclude specific requirements that should apply to a particular project or application. In such cases, the project designer is required to document the supplementary project specific requirements in the appropriate Clause of the ‘Project Specific Requirements’ Appendix of the Specification.

The text of a published Specification should not be directly modified. In the event that a text variation is considered necessary to accommodate the needs of a particular project or application, the text modification should be documented in the appropriate Clause of a ‘Project Specific Requirements’ Appendix.

Enquiries relating to the technical content of this Specification should be directed to the Senior Principal Engineer Water Standards, Advisory, Engineering, as appropriate to the application and to the particular enquiry. Future Specification changes, if any, will be issued to registered Specification users as and when published.

Head of Engineering

This document is prepared without the assumption of a duty of care by the Water Corporation. The document is not intended to be nor should it be relied on as a substitute for professional engineering design expertise or any other professional advice.

It is the responsibility of the user to ensure they are using the current version of this document.

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**REVISION STATUS**

The revision status of this specification is shown section by section below. It is important to note that revisions including additions, deletions and changes to this version of the standard are also identified by use of a vertical line in the left hand margin, adjacent to the revised section.

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Strategic Product Specification
SPS 152
Stainless Steel Repair Clamps for Waterworks Pipes

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1 SCOPE AND GENERAL

1.1 Scope

This Specification sets out requirements for the manufacture, supply, handling and delivery of stainless steel clamps for the repair of pipelines for cold water, drainage and sewerage applications. It is not intended for applications that involve gas, steam, oil, strong acids or fluids having a temperature in excess of 50°C. It also details acceptance criteria for pipe repair clamps intended for use in Corporation infrastructure and the means of demonstrating compliance with the Specification.

1.2 Referenced Documents

The following documents are referenced in this Specification:

AS
1646 Elastomeric seals for waterworks purposes
(Performance requirements in AS 681 Parts 1 to 4)
681.1 Material requirements for pipe joint seals used in water and drainage applications - Vulcanized rubber
681.2 Material requirements for pipe joint seals used in water and drainage applications - Thermoplastic elastomers
681.3 Material requirements for pipe joint seals used in water and drainage - Cellular materials of vulcanized rubber
681.4 Material requirements for pipe joint seals used in water and drainage applications - Cast polyurethane sealing elements
4181 Stainless steel clamps for waterworks purposes

AS/NZS
4020 Products for use in contact with drinking water

AS/NZS ISO
9001 Quality management systems - requirements

SAA
HB18.28 Conformity assessment - Guidance on a third-party certification system for products (ISO/IEC Guide 28)

1.3 Definitions and Notation

The following definitions are intended to clarify the terminology used in this Specification.

1.3.1 Australian Standards®

Standards that are developed, published and maintained by Standards Australia

1.3.2 Certificate

A formal certificate issued by a Certification Body in accordance with the third party product certification system described in HB 18.28, including associated Product licence schedules.
1.3.3 Certification Body
An independent (or third party) organisation duly accredited by the Joint Accreditation System of
Australia and New Zealand (JAS-ANZ) to operate Certification Schemes and more commonly known
over recent years as a Conformity Assessment Body (CAB).

1.3.4 Certification Mark
A proprietary mark of product conformity issued in accordance with HB 18.23.

1.3.5 Certification Scheme
A third party product certification system operated in accordance with HB 18.28.
NOTE: The effect of this is to require maintenance by the manufacturer of effective production control planning in
addition to full type testing from independently sampled production and subsequent verification of conformity with
specified standards.

1.3.6 Compliant Product
Product that has been assessed, by means of Product Appraisal, as conforming with standards and
specifications that are specified by the Corporation.

1.3.7 Corporation
The Water Corporation of Western Australia.

1.3.8 Manufacturer
An entity or combination of entities that are responsible for selection, processing and control of
Product constituent materials or compounds and for the processing equipment that collectively result
in the manufactured product.

1.3.9 Notation
Statements governed by use of the word ‘shall’ are mandatory or ‘normative’ requirements of the
Specification. Statements expressed by use of the words ‘should’ or ‘may’ are ‘informative’ but not
mandatory and are provided for information and guidance. Notes in Specification text are informative.
Notes that form part of Specification Tables are normative. An Appendix to the Specification that is
designated ‘normative’ contains mandatory requirements. An Appendix that is designated
‘informative’ is provided for information and guidance only. The term ‘specified’ includes
requirements of the Specification and requirements stated or referenced in other project
documentation.

1.3.10 Officer
A duly authorised representative or appointed agent of the Corporation.

1.3.11 Product
A single unit or multiple units of manufactured end product or an assembly of manufactured
component products, materials or equipment. This Specification and accompanying Purchasing
Schedule define the engineering and operational performance requirements of Product to be supplied.
NOTE 1: An end product is most commonly an output of manufacturing processes that result in finished end products
having the same features and characteristics and can be the result of a single or multiple production batches.
NOTE 2: Manufactured equipment and assemblies of Product components or materials are commonly procured for
mechanical, electrical and civil infrastructure applications.

1.3.12 Product Appraisal
A formal process whereby Product, including product design, is subjected to systematic engineering
assessment to determine Product fitness for prescribed end uses and to evaluate conformity of its
production systems with specified standards and requirements. Product Appraisal includes verification
of the extent of compliance in accordance with the requirements of a relevant ‘Technical Compliance Schedule’.

1.3.13 **Product Assessor**
An organization, Officer or other person who, having demonstrated specialist product knowledge and competence acceptable to the Corporation, is appointed to evaluate Product, appraises the Product and issues one or more Product Verification Reports.

1.3.14 **Product Certification**
A formal process whereby the production and management systems for the manufacture of Product, are assessed by a Certification Body to evaluate compliance of these systems with specified product standards and tests, in accordance with Certification Scheme rules.

1.3.15 **Product Verification Report**
A formal report wherein a Product Assessor evaluates the extent of Product compliance with the specified product standards and specifications.

**NOTE:** Verification may be on a project-by-project basis or at agreed intervals, as appropriate to the scope of a Purchasing Schedule and Product end use, subject to determination by the Corporation.

1.3.16 **Product Warranty**
A formal express undertaking by a Supplier that indemnifies the Corporation against the consequences of supplied Product failure to comply with specified fitness for application and in-service life expectancy performance requirements.

1.3.17 **Purchasing Schedule**
A Corporation purchase order, tender, schedule of prices, bill of quantities, or specification that details the nature, quantity and other characteristics of Product to be supplied, purchased or installed.

1.3.18 **Quality System**
A management system that establishes, documents, implements and maintains organizational structures, resources, responsibilities, processes and procedures for the manufacture of Product and provision of Product related services in accordance with the requirements of AS/NZS ISO 9001.

1.3.19 **Standards Australia**
The peak non-government standards development body in Australia which develops Australian Standards®.

1.3.20 **Strategic Product**
An essential infrastructure component whose performance is critical to the elimination of risk to the safe and effective provision of water services, which are functions of the Corporation under the Water Corporation Act as licensed under the Water Services Coordination Act.

**NOTE** Strategic product is a component of permanent Corporation infrastructure. Ancillary operational and safety equipment that does not form part of permanent infrastructure but offers exceptional enhancements in operational performance or personnel safety may also be deemed strategic.

1.3.21 **Strategic Product Appraisal Process**
The process whereby manufactured products and equipment are evaluated and, where they comply with specified requirements, authorised for use in Corporation infrastructure and duly registered in the Strategic Products Register.

1.3.22 **Supplier**
An entity or combination of entities that is responsible for the supply of Product.
NOTE: A Supplier may be a Manufacturer, owner, producer, distributor, vendor, agent, tenderer or contractor for supply of Product or Product related service.

1.3.23 Testing

The determination of Product characteristics by inspection and by the application of specified test procedures.
2 Design, Handling and Storage Requirements

2.1 Clamp Materials and Design
Clamp bodies, seals, fasteners and washers shall comply with the requirements of AS 4181 Table 2.1 and shall be rated for an allowable operating pressure, as defined in AS 4181, not less than 1.6 MPa. Allowable (steady state) clamp operating pressures, maximum allowable (dynamic – including operational surge) pressures and allowable site test pressures shall be in accordance with AS 4181 Table 1.1. All clamps shall comply with AS/NZS 4020, using a scaling factor of 0.05.

2.2 Clamp Elastomeric Gaskets
Clamp elastomeric lining gaskets shall be continuously and uniformly bonded to the inner stainless steel clamp surface and shall be designed to provide a continuous circumferential seal over the entire pipe surface encompassed by the clamp.

2.3 Clamp Dimensions
Clamp length and outside diameter (OD) range shall comply with the designated dimensional requirements of Table 1 below. Clamp lengths nominated in Table 1 are minimum lengths. Repair clamps shall not be used to join pipeline ends as they are designed for the sole purpose of restoring pipe hydraulic integrity where its structural strength and pressure capacity is not otherwise impaired.

2.4 Clamp Construction
Clamps shall be designed to have the least number of wrap-around clamping body segments to accommodate the pipe to be repaired. Single segment clamp styles shall be preferred for use on pipe DN ≤300 and to double part clamps or pipe DN >300 and DN ≤ 600. Repair clamps shall be designed for optimal ease of fastening and installation and for least installation time.

2.5 Clamp Selection
Table 1 sets out some guidelines on nominal clamp sizes, dimensions, dimensional tolerances and inventory ‘part’ numbers (MMRs) for the selection and use of stainless steel clamps for repair of Corporation pipelines. Material Master Records (MMR) descriptions are provided in Appendix A.

2.6 Handling and Storage

2.6.1 General
Repair clamps shall be handled and stored so as to prevent damage by impact, rough handling, crushing, piercing by sharp objects, contact with aggressive chemicals, or exposure to high temperatures. Repair clamps shall not be lifted by hooking at ends or by dropping off elevated vehicle platforms or sites.

2.6.2 Packaging
Repair clamps shall be packaged so as to prevent damage by chafing, scoring, or other incidental damage during transportation, handling and storage operations. Packaged clamps shall include clamp installation instructions and sufficient anti-seize lubricants for all clamp fasteners.

2.6.3 Preservation of Product in Storage
Repair clamps shall be stored in original product packaging, prior to installation and in accordance with the published requirements of the clamp manufacturer. Elastomeric clamp gaskets shall be stored (including protection from extended exposure to direct sunlight, high temperatures) in accordance with the storage recommendations of AS 1646/AS 681.
### 2.6.4 Table 1: Guidelines for Pipe Repair Clamp Selection (DN 50 - 900)

<table>
<thead>
<tr>
<th>Pipe Material</th>
<th>Asbestos Cement</th>
<th>Gray and Cast Iron</th>
<th>Ductile Iron</th>
<th>Steel</th>
<th>Reinforced Concrete</th>
<th>PVC Type</th>
<th>PVC Type</th>
<th>GRP</th>
<th>Copper</th>
<th>Silicon, Clay</th>
<th>Gray/Cast Iron</th>
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#### Pipe OD Tolerance (mm)

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<th>OD Tolerance (mm)</th>
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<td>50</td>
<td>250 to 1269</td>
<td>305 to 1300</td>
<td>7.5</td>
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<td>75</td>
<td>300 to 1815</td>
<td>375 to 2200</td>
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<td>150</td>
<td>400 to 3500</td>
<td>500 to 4000</td>
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#### Pipe OD Tolerance (mm)

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#### Pressure Pipe Nominal Sizes and Outside Diameters

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<th>Lower OD Range (mm)</th>
<th>Upper OD Range (mm)</th>
<th>OD Tolerance (mm)</th>
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#### Non-pressure Pipe Nominal Sizes and Outside Diameters

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### Table 6: Stainless Steel Repair Clamps for Waterworks Pipes

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<th>Pipe Material</th>
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<th>Ductile Iron</th>
<th>Steel</th>
<th>Reinforced Concrete</th>
<th>PVC Blue</th>
<th>PVC White</th>
<th>Copper</th>
<th>PVC</th>
<th>Asbestos Cement</th>
<th>Vitreous Clay</th>
<th>Grey/Cast Iron</th>
<th>GRP</th>
<th>FRC</th>
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<td>Pipe Class/Type</td>
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<td>C/O ID C &amp; D</td>
<td>B</td>
<td>C/O ID C &amp; D</td>
<td>Standard Drawings</td>
<td>C/OD K8/12</td>
<td>G/W</td>
<td>Imperial</td>
<td>Metric</td>
<td>Maximum Pressure</td>
<td>C/OD</td>
<td>Metric Series 2</td>
<td>C/OD</td>
<td>SH, SEH, SN, SN16</td>
</tr>
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#### Pipe OD Tolerance (mm):  
- +1.8 mm  
- +2 mm  
- +2.6 mm  
- +2.8 mm  
- +1.8 to +2 mm  
- +2.6 to +2.8 mm  
- +1.8 to +2.6 mm  
- +2 to +2.6 mm  
- +2.6 to +3.2 mm  
- +1.8 to +3.2 mm

#### Pipe OD Tolerance (mm):  
- +2 mm  
- +2.6 mm  
- +2.8 mm  
- +1.8 to +2 mm  
- +2.6 to +2.8 mm  
- +1.8 to +2.6 mm  
- +2 to +2.6 mm  
- +2.6 to +3.2 mm  
- +1.8 to +3.2 mm

#### Non-Pressure Pipe ODs (mm):  
- +0.8 mm  
- +1 mm  
- +2 mm  
- +3 mm  
- +0.5 mm  
- +1.5 mm  
- +2.5 mm  
- +3.5 mm  
- +0.5 mm  
- +1 mm  
- +2 mm  
- +3 mm  
- +0.5 mm  
- +1.5 mm  
- +2.5 mm  
- +3.5 mm  
- +0.5 mm  
- +1 mm  
- +2 mm  
- +3 mm  
- +0.5 mm  
- +1.5 mm  
- +2.5 mm  
- +3.5 mm  
- +0.5 mm  
- +1 mm  
- +2 mm  
- +3 mm  
- +0.5 mm  
- +1.5 mm  
- +2.5 mm  
- +3.5 mm  
- +0.5 mm  
- +1 mm  
- +2 mm  
- +3 mm  
- +0.5 mm  
- +1.5 mm  
- +2.5 mm  
- +3.5 mm

#### Pressure Pipe ODs (mm):  
- +0.8 mm  
- +1 mm  
- +2 mm  
- +3 mm  
- +0.5 mm  
- +1.5 mm  
- +2.5 mm  
- +3.5 mm  
- +0.5 mm  
- +1 mm  
- +2 mm  
- +3 mm  
- +0.5 mm  
- +1.5 mm  
- +2.5 mm  
- +3.5 mm  
- +0.5 mm  
- +1 mm  
- +2 mm  
- +3 mm  
- +0.5 mm  
- +1.5 mm  
- +2.5 mm  
- +3.5 mm  
- +0.5 mm  
- +1 mm  
- +2 mm  
- +3 mm  
- +0.5 mm  
- +1.5 mm  
- +2.5 mm  
- +3.5 mm

### NOTES FOR TABLE 1 (Parts A & B)

#### Note 1:
Cast Iron Outside Diameter (CIOD) means the range of ODs of Imperial Grey/Cast Iron (CI) Pipe Classes C & D (vintage 1938 onwards) and of other pipes subsequently manufactured to the same ODs, including CI Pipe Class B < DN 250, Metric Ductile Iron (DI), Asbestos Cement (AC) Pipe Classes C & D (and Classes A & B < DN 250), PVC Pipe Series 2 and GRP Pipe. It excludes Steel Pipe, Copper Pipe, DN 300 and larger CI Pipe Class B, DN 300 and larger AC Pipe Classes A & B, PVC Pipe Series 1 and non-pressure pipe except GRP.

#### Note 2:
Nominated AC pipe ODs relate to factory machined pipe spigot ends only. There are no published manufacturing data for unmachined or 'wrinkly' AC pipe barrel ODs or OD tolerances. The use of 'wrap around' clamps to repair unmachined or 'wrinkly' AC pipe is not recommended because the thin elastomeric lining gasket of a repair clamp is not designed for this application and is unlikely to attain a complete seal. The recommended repair method in these circumstances is replacement of the full AC pipe length within which a failure has occurred with PVC pipe, duly coupled to the machined ends of the two adjoining AC pipes with a pair of 'multifit' repair couplings of the modern 'gibaulet' style.

#### Note 3:
Wherever the mean OD of a pipeline to be repaired is very close to the lower or upper limit of a selected clamp OD range, it is recommended that a second clamp from an adjoining OD range is deployed at the repair site as an added precaution, having due regard to the pipe OD tolerance ranges shown in this Table and the sometimes uncertainty of legacy pipe ODs.

#### Note 4:
Suitability of SS repair clamps for use with nominated pressure and non-pressure pipe materials is based on compliance of all pipes to be repaired with the appropriate pipe product standards. Not all nominated pipe sizes and materials form part of the operational pipeline infrastructure at present. It is recommended that the ODs of older vintage pipes are verified by direct measurement prior to the selection of an appropriate repair clamp.
3 Quality Assurance

3.1 Certification

3.1.1 Certification of Product

Compliance with this Specification shall be certified by means of an ISO Type 5 Product Certification Scheme i.e. a scheme that meets the criteria described in HB 18.28 (ISO/IEC Guide 28), conducted by a JAS-ANZ accredited Certification Body. Each Certificate shall expressly attest compliance of all Product items with the nominated Standards. Wherever specified, Certificates shall be submitted to the Officer nominated for this purpose. Product shall be marked in accordance with the requirements of the Certification Body.

**NOTE:** Compliance of Product including related accessories and services with nominated Standards and specified requirements may be verified by means of a Product Verification Report provided by a Product Assessor. The Product Verification Report should identify all relevant Certificates of Product compliance, duly issued in accordance with Certification Scheme rules.

3.1.2 Quality System

The processes for manufacture, testing, supply, transportation, handling, delivery and storage of Product to be supplied in accordance with this Specification shall form part of a documented Quality System. The System shall be certified by a Certification Body as complying with the requirements of AS/NZS ISO 9001 and shall provide for identification and traceability, control of production and delivery to the specified destination, customer verification and control of documents and records.

3.1.3 Product Re-verification

Product compliance with the Specification shall be subject to re-verification by a Product Assessor when, during the agreed Product supply period, there occurs any:

- substantive change in Product design, material formulation or performance
- Product failure to perform in operational service to the nominated performance specification.

Re-verification shall require the issue of a new or supplementary Product Verification Report. Product components and test outcomes that are not significantly affected by the Product change or failure may be excluded from the scope of re-verification, provided that these outcomes have already been reported in a current valid Product Verification Report that is acceptable to the Corporation.

Wherever the requirements of the Specification apply to a Product supply period in excess of three years, continuing acceptance of Product shall be subject to re-verification. The purpose of re-verification shall be to confirm the continuing compliance of Product quality and production control processes with the requirements of the Specification.

3.2 Compliance and Acceptance

3.2.1 Means of Demonstrating Compliance

Compliance with this Specification shall be demonstrated by means of Product Appraisal and issue by a Product Assessor of a Product Verification Report that confirms compliance. Otherwise, Product shall be deemed non-compliant and ineligible for registration as Product authorized for use in Corporation infrastructure.

**NOTE 1:** Where a project includes design work including Product design, Product Appraisal may form part of the project design review process and the Product Assessor may be a member of the project design review team.

**NOTE 2:** A Product Verification Report should verify the extent of compliance with the Specification including all relevant ‘Technical Compliance Schedule’ Appendices and the currency of a Certificate where relevant to the Product.

3.2.2 Acceptance Criteria

For acceptance, Product shall be supplied as specified in the Purchasing Schedule.
Prior to the implementation of any arrangement to supply Product, the Supplier shall, in accordance with specified requirements:

- nominate applicable Product Warranty terms; and
- provide documentary verification in the form of a current valid Certificate or Product Verification Report as appropriate to the Product; and
- detail each element of Product that does not comply with the specified requirements together with the extent of non-compliance.

**NOTE:** Where the Specification includes Technical Compliance Schedules, the nature and extent of all non-compliances should be recorded in the appropriate Schedules to be submitted for acceptance.

### 3.3 Non-compliant Product

#### 3.3.1 General

Product whose design, workmanship or performance fails to conform to the specified requirements shall be clearly tagged and quarantined by the Supplier as non-compliant and shall be subject to rejection for return to and replacement by the Supplier.

#### 3.3.2 Manufacturing Repairs (In-process)

Welding, the use of fillers and other repairs shall not be permissible on Product which is in the course of production. Accordingly, details of any defect which the Manufacturer considers can be repaired; together with details of proposed repair procedures shall be submitted in writing for determination by the Corporation.

The Manufacturer shall make provision in its production Quality System and in the appropriate ITP’s for sufficient hold points whenever significant defects occur. Production work on non-compliant components shall cease and repair work shall not commence until it has been confirmed by the Corporation in writing that:

- (a) repair of the non-compliant components in lieu of their replacement is acceptable; and
- (b) proposed repair procedures are acceptable; and
- (c) any proposal to vary the terms of the original Product Warranty is acceptable.

#### 3.3.3 Product Warranty

The Supplier shall replace non-compliant Product with Product that conforms to the acceptance criteria or shall repair or rectify all faults, damage or losses caused by defective Product. Except as may otherwise be specified, the Product Warranty shall indemnify and keep indemnified the Corporation against all losses suffered by the Corporation as a result of non-compliant Product for a period no less than 24 months after Product delivery or 12 months after Product installation, whichever period elapses first.

#### 3.3.4 Product Repair

All reasonable proposals for repair or remedy of defects will be considered, provided that each such proposal is accompanied by a methodology statement that accords with the performance objectives of this Specification, as determined by the Corporation. For acceptance, a proposal for repair or remedy of Product defects shall not void or otherwise diminish the provisions of the Product Warranty.
## APPENDIX A: Material Master Records (Informative)

The following Material Master Records (MMR) comprise Corporation catalogue numbers that are unique to the particular products described for the purposes of Corporation activities or work.

<table>
<thead>
<tr>
<th>MMR</th>
<th>PURCHASE ORDER LONG TEXT (Repair Clamp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9121</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn50 x 150mm Minimum Clamp Length; To Suit Pipe OD Range 59mm - 64mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152. Not Permissible for Dn63 PE Pipe. Note: Not Permissible, unless an all Stainless Steel Design Available. Need to check for Dissimilar Metals Contact.</td>
</tr>
<tr>
<td>19939</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn80 x 150mm Minimum Clamp Length; To Suit Pipe OD Range 76mm - 83mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>17197</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn80 x 150mm Minimum Clamp Length; To Suit Pipe OD Range 88mm - 95mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>9120</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn80 x 150mm Minimum Clamp Length; To Suit Pipe OD Range 95mm - 102mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>16630</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn100 x 200mm Minimum Clamp Length; To Suit Pipe OD Range 110mm - 120mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152. Not Permissible for Dn110 PE Pipe.</td>
</tr>
<tr>
<td>21760</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; DN100 x 200mm Minimum Clamp Length; To Suit Pipe OD Range 100mm - 110mm; Single Section; For use with Non-Standard White PVC. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152. Not Permissible for DN110 PE Pipe.</td>
</tr>
<tr>
<td>9122</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn100 x 200mm Minimum Clamp Length; To Suit Pipe OD Range 120mm - 130mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152. Not Permissible for Dn125 PE Pipe.</td>
</tr>
<tr>
<td>19931</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn125 x 200mm Minimum Clamp Length; To Suit Pipe OD Range 130mm - 140mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>16779</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn125 x 200mm Minimum Clamp Length; To Suit Pipe OD Range 140mm - 150mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>20111</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn125 x 200mm Minimum Clamp Length; To Suit Pipe OD Range 145mm - 155mm; For Old 5-7/8&quot; Steel Pipe; Single Section.</td>
</tr>
<tr>
<td>8073</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn150 x 200mm Minimum Clamp Length; To Suit Pipe OD Range 150mm - 160mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>19932</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn150 x 200mm Minimum Clamp Length; To Suit Pipe OD Range 160mm - 170mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152. Not permissible for Dn160 PE Pipe.</td>
</tr>
<tr>
<td>MMR</td>
<td>PURCHASE ORDER LONG TEXT (Repair Clamp)</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>21291</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; DN150 x 400mm Minimum Clamp Length; To Suit Pipe OD Range 175mm - 185mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152. Not permissible for DN160 PE Pipe.</td>
</tr>
<tr>
<td>9123</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; DN150 x 200mm Minimum Clamp Length; To Suit Pipe OD Range 175mm - 185mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152. Not Permissible for DN180 PE Pipe.</td>
</tr>
<tr>
<td>19933</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; DN150 x 200mm Minimum Clamp Length; To Suit Pipe OD Range 190mm - 200mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>8074</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; DN175 x 200mm Minimum Clamp Length; To Suit Pipe OD Range 200mm - 210mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152. Not Permissible for DN200 PE Pipe.</td>
</tr>
<tr>
<td>64062</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; DN200 x 200mm Minimum Clamp Length; To Suit Pipe OD Range 215mm - 225mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>9124</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; DN200 x 200mm Minimum Clamp Length; To Suit Pipe OD Range 230mm - 240mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152. Not Permissible for DN200 PE Pipe.</td>
</tr>
<tr>
<td>16997</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; DN225 x 300mm Minimum Clamp Length; To Suit Pipe OD Range 250mm - 260mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>19935</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; DN250 x 300mm Minimum Clamp Length; To Suit Pipe OD Range 270mm - 280mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152. Not Permissible for DN250 PE Pipe.</td>
</tr>
<tr>
<td>22304</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; DN250 x 300mm Minimum Clamp Length; To suit Pipe OD Range 275mm - 285mm; Single Section. For use with Pipe Materials and Sizes as shown in Table 1 of SPS152. Not Permissible for DN280 PE Pipe.</td>
</tr>
<tr>
<td>9126</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; DN250 x 300mm Minimum Clamp Length; To Suit Pipe OD Range 285mm - 295mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>8076</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; DN300 x 400mm Minimum Clamp Length; To Suit Pipe OD Range 310mm - 320mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152. Not Permissible for DN315 PE Pipe.</td>
</tr>
<tr>
<td>19937</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; DN300 x 400mm Minimum Clamp Length; To Suit Pipe OD Range 320mm - 330mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>16631</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; DN300 x 400mm Minimum Clamp Length; To Suit Pipe OD Range 330mm - 340mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>13974</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; DN300 x 400mm Minimum Clamp Length; To Suit Pipe OD Range 340mm - 350mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>MMR</td>
<td>PURCHASE ORDER LONG TEXT</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------------------------</td>
</tr>
<tr>
<td>21068</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn300 x 400mm Minimum Clamp Length; To Suit Pipe OD Range 340mm - 360mm; Single Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>19936</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn300 x 400mm Minimum Clamp Length; To Suit Pipe OD Range 360mm - 380mm; Double Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>16632</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn375 x 400mm Minimum Clamp Length; To Suit Pipe OD Range 385mm - 405mm; Double Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152. Not Permissible for Dn400 PE Pipe.</td>
</tr>
<tr>
<td>16684</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn375 x 400mm Minimum Clamp Length; To Suit Pipe OD Range 410mm - 430mm; Double Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>9128</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn400 x 400mm Minimum Clamp Length; To Suit Pipe OD Range 440mm - 460mm; Double Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152. Not Permissible for Dn450 PE Pipe.</td>
</tr>
<tr>
<td>16633</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn450 x 400mm Minimum Clamp Length; To Suit Pipe OD Range 490mm - 510mm; Double Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152. Not Permissible for Dn500 PE Pipe.</td>
</tr>
<tr>
<td>16634</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn500 x 400mm Minimum Clamp Length; To Suit Pipe OD Range 570mm - 600mm; Triple Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>16635</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn600 x 400mm Minimum Clamp Length; To Suit Pipe OD Range 620mm - 650mm; Triple Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152. Not Permissible for Dn630 PE Pipe.</td>
</tr>
<tr>
<td>16998</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn600 x 400mm Minimum Clamp Length; To Suit Pipe OD Range 650mm - 680mm; Triple Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>16999</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn600 x 400mm Minimum Clamp Length; To Suit Pipe OD Range 685mm - 715mm; Double Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152. Not Permissible for Dn710 PE.</td>
</tr>
<tr>
<td>19019</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn675 x 400mm Minimum Clamp Length; To Suit Pipe OD Range 740mm - 770mm; Triple Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
<tr>
<td>19020</td>
<td>Clamp, Repair, Pipe; Type 316L Stainless Steel; Dn900 x 600mm Minimum Clamp Length; To Suit Pipe OD Range 910mm - 950mm; Quadruple Section. For use with Pipe Materials &amp; Sizes as shown in Table 1 of SPS152.</td>
</tr>
</tbody>
</table>
| MMR | PURCHASE ORDER LONG TEXT  
<p>| Tapped Boss Repair Clamp-Tapping Band |
|-----|---------------------------------|
| 20403 | Tapping Band, Pipe; All Stainless Steel (Gde 316); DN80; Tapped Rp1 25mm; To Suit Pipe Sizes 88-98mm OD; Threads to AS ISO 7.1; Band 150mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit CI &amp; AC Pipe. |
| 20402 | Tapping Band, Pipe; All Stainless Steel (Gde 316); DN80; Tapped Rp1-1/2 40mm; To Suit Pipe Sizes 88-98mm OD; Threads to AS ISO 7.1; Band 150mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit CI &amp; AC Pipe. |
| 20404 | Tapping Band, Pipe; All Stainless Steel (Gde 316); DN80; Tapped Rp3/4 20mm; To Suit Pipe Sizes 88-98mm OD; Threads to AS ISO 7.1; Band 150mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit CI &amp; AC Pipe. |
| 20400 | Tapping Band, Pipe; All Stainless Steel (Gde 316); DN100; Tapped Rp1 25mm; To Suit Pipe Sizes 114-124mm OD; Threads to AS ISO 7.1; Band 200mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit PVC S1, PVC S2, CI, AC, &amp; Steel Pipe. |
| 20394 | Tapping Band, Pipe; All Stainless Steel (Gde 316); DN100; Tapped Rp1 25mm; To Suit Pipe Sizes 152-162mm OD; Threads to AS ISO 7.1; Band 200mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit PVC S1, PVC S2, CI, AC, &amp; Steel Pipe. |
| 20397 | Tapping Band, Pipe; All Stainless Steel (Gde 316); DN100; Tapped Rp1 25mm; To Suit Pipe Sizes 130-140mm OD; Threads to AS ISO 7.1; Band 200mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit AC Sutton Pipe. |
| 20399 | Tapping Band, Pipe; All Stainless Steel (Gde 316); DN100; Tapped Rp1-1/2 40mm; To Suit Pipe Sizes 114-124mm OD; Threads to AS ISO 7.1; Band 200mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit PVC S1, PVC S2, CI, AC, &amp; Steel Pipe. |
| 20396 | Tapping Band, Pipe; All Stainless Steel (Gde 316); DN100; Tapped Rp1-1/2 40mm; To Suit Pipe Sizes 130-140mm OD; Threads to AS ISO 7.1; Band 200mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit AC Sutton Pipe. |
| 20401 | Tapping Band, Pipe; All Stainless Steel (Gde 316); DN100; Tapped Rp3/4 20mm; To Suit Pipe Sizes 114-124mm OD; Threads to AS ISO 7.1; Band 200mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit PVC S1, PVC S2, CI, AC, &amp; Steel Pipe. |
| 20398 | Tapping Band, Pipe; All Stainless Steel (Gde 316); DN100; Tapped Rp3/4 20mm; To Suit Pipe Sizes 130-140mm OD; Threads to AS ISO 7.1; Band 200mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit AC Sutton Pipe. |</p>
<table>
<thead>
<tr>
<th>MMR</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>20395</td>
<td>Tapping Band, Pipe; All Stainless Steel (Gde 316); DN100; Tapped Rp3/4 20mm; To Suit Pipe Sizes 152-162mm OD; Threads to AS ISO 7.1; Band 200mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit RC &amp; Dn150 PVC S1 Pipe.</td>
</tr>
<tr>
<td>20393</td>
<td>Tapping Band, Pipe; All Stainless Steel (Gde 316); DN100; Tapped Rp1-1/2 40mm; To Suit Pipe Sizes 152-162mm OD; Threads to AS ISO 7.1; Band 150mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276 &amp; Nuts to ISO 4032 &amp; AS 1112.1; To Suit RC &amp; Dn150 PVC S1 Pipe.</td>
</tr>
<tr>
<td>21756</td>
<td>Tapping Band, Pipe; All Stainless Steel(Gde 316); DN125 (5&quot;); Tapped Rp1-1/2 40mm; To Suit Pipe Sizes 140-150mm OD; Threads to AS ISO 7.1; Band 200mm Minimum Length; Full Circle Nitrile(NBR)Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit Crinkley AC Pipe.</td>
</tr>
<tr>
<td>20392</td>
<td>Tapping Band, Pipe; All Stainless Steel (Gde 316); DN150; Tapped Rp3/4 20mm; To Suit Pipe Sizes 168-178mm OD; Threads to AS ISO 7.1; Band 200mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit PVC S2, CI, AC &amp; Steel Pipe.</td>
</tr>
<tr>
<td>20391</td>
<td>Tapping Band, Pipe; All Stainless Steel (Gde 316); DN150; Tapped Rp1 25mm; To Suit Pipe Sizes 168-178mm OD; Threads to AS ISO 7.1; Band 200mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit PVC S2, CI, AC &amp; Steel Pipe.</td>
</tr>
<tr>
<td>20388</td>
<td>Tapping Band, Pipe; All Stainless Steel (Gde 316); DN150; Tapped Rp1 25mm; To Suit Pipe Sizes 200-220mm OD; Threads to AS 1772.1; Band 200mm Minimum Length; Full Circle Nitrile NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit RC Pipe.</td>
</tr>
<tr>
<td>21755</td>
<td>Tapping Band, Pipe; All Stainless Steel(Gde 316); DN150; Tapped Rp1-1/2 40mm; To Suit Pipe Sizes 175-185mm OD; Threads to AS ISO 7.1; Band 200mm Minimum Length; Full Circle Nitrile(NBR)Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit CIOD, AC &amp; Steel Pipe.</td>
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<tr>
<td>20390</td>
<td>Tapping Band, Pipe; All Stainless Steel (Gde 316); DN150; Tapped Rp1-1/2 40mm; To Suit Pipe Sizes 168-178mm OD; Threads to AS ISO 7.1; Band 200mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit PVC S2, CI, AC &amp; Steel Pipe.</td>
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<td>20387</td>
<td>Tapping Band, Pipe; All Stainless Steel (Gde 316); DN150; Tapped Rp1-1/2 40mm; To Suit Pipe Sizes 200-220mm OD; Threads to AS ISO 7.1; Band 200mm Minimum Length; Full Circle Nitrile(NBR)Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit RC Pipe.</td>
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<tr>
<td>20389</td>
<td>Tapping Band, Pipe; All Stainless Steel(Gde 316); DN150; Tapped Rp3/4 20mm; To Suit Pipe Sizes 200-220mm OD; Threads to AS ISO 7.1; Band 200mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit RC Pipe.</td>
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<tr>
<td>20385</td>
<td>Tapping Band, Pipe; All Stainless Steel (Gde 316); DN200; Tapped Rp1 25mm; To Suit Pipe Sizes 215-235mm OD; Threads to AS ISO 7.1; Band 200mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit PVC S1, PVC S2, CI, AC &amp; Steel Pipe.</td>
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<td>MMR</td>
<td>PURCHASE ORDER LONG TEXT</td>
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<td>20384</td>
<td>Tapping Band, Pipe; All Stainless Steel (Gde 316); DN200; Tapped Rp1-1/2 40mm; To Suit Pipe Sizes 215-235mm OD; Threads to AS ISO 7.1; Band 200mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit PVC S1, PVC S2, CI, AC, &amp; Steel Pipe.</td>
</tr>
<tr>
<td>20386</td>
<td>Tapping Band, Pipe; All Stainless Steel (Gde 316); DN200; Tapped Rp3/4 20mm; To Suit Pipe Sizes 215-235mm OD; Threads to AS ISO 7.1; Band 200mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit PVC S1, PVC S2, CI, AC &amp; Steel Pipe.</td>
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<tr>
<td>20382</td>
<td>Tapping Band, Pipe; All Stainless Steel (Gde 316); DN250; Tapped Rp1 25mm; To Suit Pipe Sizes 290-310mm OD; Threads to AS ISO 7.1; Band 300mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit RC Pipe.</td>
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<tr>
<td>20381</td>
<td>Tapping Band, Pipe; All Stainless Steel (Gde 316); DN250; Tapped Rp1-1/2 40mm; To Suit Pipe Sizes 290-310mm OD; Threads to AS ISO 7.1; Band 300mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit RC Pipe.</td>
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<tr>
<td>21757</td>
<td>Tapping Band, Pipe; All Stainless Steel (Gde 316); DN250; Tapped Rp1-1/2 40mm; To Suit Pipe Sizes 270-290mm OD; Threads to AS ISO 7.1; Band 300mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit CIOD &amp; AC Pipe.</td>
</tr>
<tr>
<td>20383</td>
<td>Tapping Band, Pipe; All Stainless Steel (Gde 316); DN250; Tapped Rp3/4 20mm; To Suit Pipe Sizes 290-310mm OD; Threads to AS ISO 7.1; Band 300mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit RC Pipe.</td>
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<tr>
<td>21759</td>
<td>Tapping Band, Pipe; All Stainless Steel (Gde 316); DN300; Tapped Rp1-1/2 40mm; To Suit Pipe Sizes 330-350mm OD; Threads to AS ISO 7.1; Band 300mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit AC, CI &amp; DN250 (10&quot;) RC Pipe.</td>
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<tr>
<td>21758</td>
<td>Tapping Band, Pipe; All Stainless Steel (Gde 316); DN300; Tapped Rp1-1/2 40mm; To Suit Pipe Sizes 300-320mm OD; Threads to AS ISO 7.1; Band 300mm Minimum Length; Full Circle Nitrile (NBR) Sealing Gasket to AS 1646 &amp; AS/NZS 4020; Molybond Coating of Studs to ASTM A276, Nuts to ISO 4032 &amp; AS 1112.1; To Suit DN215 (8.5&quot;) RC, DN250 (10&quot;) RC, S1PVC &amp; Sewer Pipe.</td>
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