WSAA PRODUCT APPRAISAL CERTIFICATE

Iplex Pipelines Australia Pty Ltd Irontite[®] Ductile Iron Pipes

This appraisal is for Jindal SAW manufactured Irontite ductile iron pipes suitable for conveyance of drinking water, recycled, raw, bore and irrigation waters, slurries and sewage.

This Issue 7 is a replacement for the previous version of the appraisal which had reached its 5year expiry date.

The scope of this appraisal includes ductile iron pipe in sizes DN 100 to DN 750 with spigot and socket elastomeric joints manufactured to AS/NZS 2280:2020 *Ductile iron pipes and fittings*.

Pipes with PN20 pressure classification are available in sizes from DN 225 to DN 750 whilst pipes with PN35 and Flange Class pressure classifications are available in sizes from DN 100 to DN 750.

The pipes may be internally lined with General Purpose (GP) Portland Cement, Sulphate Resistant (SR) Cement, Calcium Aluminate Cement or Polyurethane. Seal coated cement mortar linings are also available. The external coating options are metallic zinc-aluminium alloy with a two-part epoxy finishing layer or polyurethane, according to the required application.

A complete listing of Quality and Product Certification Certificates and details of products are included in the attached Schedules A and B.

Product Category	Ductile Iron Pipes
PA Number:	PA 1802 Issue 7
Supplier	Iplex Pipelines Australia Pty Ltd
Brand	Irontite
Standards	AS/NZS 2280:2020 Ductile iron pipes and fittings
WSAA Product Specification	WSA PS-200 Ductile Iron Pipes (CIOD) for Pressure Applications – Drinking Water, Non-Drinking Water Supply and Sewerage.
Issue date	12 July 2023
Expiry date	11 July 2028
Recommendations	It is recommended that WSAA members, subject to any specific requirements of the member, accept or authorise the Irontite range of ductile iron pipes as detailed in this report for use in water supply and sewerage applications subject to any relevant conditions relating to the design, installation and acceptance testing being in accordance with the relevant WSAA Codes and manufacturer's requirements.
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 underlay it. Please read it carefully and take it into account when considering the content in this Certificate.

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.

TABLE A1 IPLEX PIPELINES AUSTRALIA PTY LTD- MANAGEMENT SYSTEMS

Strathpine QLD, Chipping Norton NSW, Reservoir VIC, Elizabeth SA		
Quality Systems Standard	ISO 9001:2015	
Certification Licence No.	QEC 0037	
Certifying Agency	SAI-Global	
First Date of Certification	3 April 1990	
Current Date of Certification	17 December 2020	
Expiry Date of Certification	9 January 2024	

TABLE A2 JINDAL SAW GULF LLC – MANAGEMENT SYSTEMS

Plot No. 11 NR 28, P.O Box: 132595, ICAD-III, Musaffah, Abu Dhabi, U.A.E		
Quality Systems Standard	ISO 9001:2015	
Certification Licence No.	IT 246234	
Certifying Agency	Bureau Veritas	
First Date of Certification	12 November 2012	
Current Date of Certification	19 November 2021	
Expiry Date of Certification	11 November 2024	

TABLE A3 JINDAL SAW LIMITED IPU – MANAGEMENT SYSTEMS

Jindal Center, 12 Bikaji Cama Place, New Delhi-110066, India		
Quality Systems Standard	ISO 9001:2015	
Certification Licence No.	IND.21.1974/IM/U	
Certifying Agency	Bureau Veritas	
First Date of Certification	28 May 2012	
Current Date of Certification	25 May 2021	
Expiry Date of Certification	27 May 2024	



SCHEDULE A

TABLE A4 JINDAL SAW GULF LLC – PRODUCT CERTIFICATION

Plot No. 11 NR 28, P.O Box: 132595, ICAD-III, Musaffah, Abu Dhabi, U.A.E		
Product Standard/Spec.	AS/NZS 2280:2020	
Certificate No.	10000466250-PA-JAS-ANZ-AUS	
Issuing Certification Body	DNV	
First Date of Certification	09 December 2017	
Current Date of Certification	09 December 2020	
Expiry Date of Certification	9 December 2025	

TABLE A5JINDAL SAW LIMITED – PRODUCT CERTIFICATION

Jindal Center, 12 Bikaji Cama Place, New Delhi-110066, India		
Product Standard/Spec.	AS/NZS 2280:2020	
Certificate No.	10000432364-PA-JAS-ANZ-AUS	
Issuing Certification Body	DNV	
First Date of Certification	09 December 2017	
Current Date of Certification	09 December 2020	
Expiry Date of Certification	09 December 2025	



WATER SERVICES ASSOCIATION OF AUSTRALIA

SCHEDULE B

IRONTITE DUCTILE IRON PIPES – PN20

DN	OUTSIDE DIAMETER	PIPE WALL THICKNESS mm	CEMENT MORTAR LINING THICKNESS mm
225	259	4.5	5
250	286	4.6	5
300	345	4.6	5
375	426	4.8	5
450	507	5.4	5
500	560	5.8	5
600	667	6.7	5
750	826	8.0	6

IRONTITE DUCTILE IRON PIPES - PN35

DN	OUTSIDE DIAMETER mm	PIPE WALL THICKNESS mm	CEMENT MORTAR LINING THICKNESS mm
100	122	4.9	5
150	177	5.0	5
200	232	5.0	5
225	259	5.0	5
250	286	5.2	5
300	345	5.9	5
375	426	7.0	5
450	507	8.1	5
500	560	8.8	5
600	667	10.2	5
750	826	12.3	6



WATER SERVICES ASSOCIATION OF AUSTRALIA

SCHEDULE B

IRONTITE DUCTILE IRON PIPES - FLANGE CLASS

DN	OUTSIDE DIAMETER mm	PIPE WALL THICKNESS mm	CEMENT MORTAR LINING THICKNESS mm
100	122	7.4	5
150	177	7.5	5
200	232	8.5	5
225	259	8.5	5
250	286	9.6	5
300	345	9.6	5
375	426	10.7	5
450	507	11.8	5
500	560	11.8	5
600	667	12.9	5
750	826	15.1	6

INTERNAL LINING OPTIONS

OPTIONS	INTERNAL LINING
1	General Purpose (GP) Portland Cement *
2	Sulphate Resistant (SR) Cement *
3	Calcium Aluminate Cement
4	Polyurethane *

 * Lining suitable for contact with drinking water, complying with AS/NZS 4020

Options 1 and 2 may be seal coated where required

EXTERNAL COATING OPTIONS

OPTIONS	EXTERNAL COATING
1	Zn-Al (mean mass 400 g/m²) + Blue or Red epoxy (min. 100 μm DFT)
2	Polyurethane



SCHEDULE C

SUPPLIER CONTACTS

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