



WSAA PRODUCT APPRAISAL CERTIFICATE

Saint-Gobain Pipelines Co Ltd PAM Ductile Iron Pipes

PAM HYDROCLASS® ZINALIUM® and INTEGRAL® ZINALIUM® ductile iron pipe is manufactured to AS/NZS 2280:2014 *Ductile iron pipes and fittings* and is available in sizes from DN 100 to DN 600, in pressure classes PN20, PN35 and Flange Class. The joining system for both the HYDROCLASS® and INTEGRAL® range of pipes is the T-type elastomeric joint.

This Issue 3 recognises the closure of the PAM Xuzhou plant in China and revision of the available nominal diameters to include DN 100 to DN 600. All pipes are now manufactured at the PAM Maanshan manufacturing facility in Anhui, China. It also recognises the appointment of a new Australian distributor; Clover Pipelines Pty Ltd.

The PAM range of HYDROCLASS® ductile iron pipes is suitable for the transport of drinking water and non-drinking water. The pipes are cement mortar lined and coated externally with ZINALIUM® metallic zinc-aluminium alloy and a finishing layer of blue synthetic resin anticorrosive paint.

The PAM range of INTEGRAL® ductile iron pipes is suitable for the transport of sewerage or aggressive waters with pH values of 4 to 12. The pipes are lined with a calcium aluminate cement mortar and coated externally with ZINALIUM® metallic zinc-aluminium alloy and a finishing layer of red synthetic resin anticorrosive paint.

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 1418 Issue 3
Supplier	Saint-Gobain Pipelines Co Ltd
Brand	PAM
Standards	AS/NZS 2280:2014 <i>Ductile iron pipes and fittings</i>
WSAA Product Specification	<i>WSA PS 200 Ductile Iron Pipes (CIOD) for Pressure Applications – Water Supply and Sewerage.</i>
Issue date	Issue 3: 11 September 2020
Expiry date	30 July 2023
Recommendations	It is recommended that WSAA members and associates accept/authorise the PAM HYDROCLASS® ZINALIUM® and INTEGRAL® ZINALIUM® range of DI pipes that are relevant to pressure pipelines in water supply and sewerage, provided pipeline design, installation, acceptance testing and commissioning are in accordance with applicable WSAA Codes and the manufacturer's requirements where specified.
Disclaimer	The disclaimer on Page 2 explains a number of very important limits on your ability to rely on the information in this Product Appraisal Certificate and the assessment criteria used to 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 indemnity 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

APPENDIX A - QUALITY AND PRODUCT CERTIFICATIONS

Copies of the following Quality and Product Certification Certificates are available for downloading from the WSAA members only website.

**TABLE A1
SAINT-GOBAIN PIPELINES CO LTD - MANAGEMENT SYSTEM**

Huangong Road Cihu Maanshan Anhui China	
Quality Systems Standard	ISO 9001:2015
Certification Licence No.	CNBJ312420-UK
Certifying Agency	Bureau Veritas
First Date of Certification	17 October 1999
Current Date of Certification	15 November 2017
Expiry Date of Certification	14 November 2020

**TABLE A2
CLOVER PIPELINES PTY LTD – MANAGEMENT SYSTEMS**

237 Rex Road Campbellfield Victoria	
Quality Systems Standard	ISO9001:2015
Certification Licence No.	AMI-QM-78026
Certifying Agency	ApprovalMark International
Current Date of Certification	26 August 2019
Expiry Date of Certification	26 August 2022


**TABLE A3
SAINT-GOBAIN PIPELINES CO LTD– PRODUCT CERTIFICATION**


Huangong Road Cihu Maanshan Anhui China	
Product Standard/Spec.	AS/NZS 2280:2014
Certificate No.	BMP 549624
Issuing Certification Body	BSI
First Date of Certification	16 June 2009
Current Date of Certification	3 July 2019
Expiry Date of Certification	15 June 2024

PRODUCT INFORMATION

HYDROCLASS® ZINALIUM® & INTEGRAL® ZINALIUM®
DUCTILE IRON CEMENT MORTAR LINED PIPES

Nominal Diameter DN	Length	Outside Diameter	Pressure Classification		
			PN20	PN35	FLCL
mm	m	mm			
100	5.75	122		✓	✓
150	5.75	177		✓	✓
200	5.75	232		✓	✓
225	5.75	259	✓	✓	✓
250	5.75	286	✓	✓	✓
300	5.75	345	✓	✓	✓
375	5.75	426	✓	✓	✓
450	5.75	507	✓	✓	✓
500	5.75	560	✓	✓	✓
600	5.75	667	✓	✓	✓

HYDROCLASS® ZINALIUM®	
Available Diameter Range	DN100, 150, 200, 225, 250, 300, 375, 450, 500, 600
Pressure Rating	PN20 – Green mark on socket face PN35 – Red mark on socket face Flange Class – Blue mark on socket face 
Joints	Automatic push in T-type rubber ring joint - DN100 to 600
Deflection	DN 100-250: 3.5° DN 300-600: 2.5° DN 750: 1°
External coating	The external & socket area is coated with a "blue cobalt" synthetic coating
Internal coating	Blast furnace cement mortar (BFSC)
Length	DN 100 to DN 600: L=5.75m

INTEGRAL® ZINALIUM®	
Available Diameter Range	DN100, 150, 200, 225, 250, 300, 375, 450, 500, 600
Pressure Rating	PN20 – Green mark on socket face PN35 – Red mark on socket face Flange Class – Blue mark on socket face 
Joints	Automatic push in T- type rubber ring joint - DN100 to 600
Deflection	DN100-250: 3.5° DN300-600: 2.5° DN750: 1°
External coating	The external & socket area is coated with a 'red' synthetic coating
Internal coating	High Alumina Cement (HAC)
Length	DN100 to DN600: L=5.75m

SUPPLIER CONTACTS

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