



# Galvin Engineering Pty Ltd

## PRODUCT APPRAISAL REPORT 1403 Issue 6

Ductile Iron Pipe Fittings DN 100 – DN 300

**AS/NZS 2280:2020 Ductile iron pipes and fittings**

Issue 1 Published: 19 September 2014

Issue 2 Published: 22 February 2016

Issue 3 Published: 22 May 2018

Issue 4 Published: 28 May 2021

Issue 5 Published: 19 August 2021

Issue 6 Published: 25 June 2024

## Document History

The following information indicates the changes made to this document.

Date	Version
25 August 2014	Peer Review
19 September 2014	Publication
22 February 2016	Publication Issue 2
21 May 2018	Client Review Issue 3
22 May 2018	Publication Issue 3
28 May 2021	Client Review Issue 4
28 May 2021	Publication Issue 4
19 August 2021	Client Review Issue 5
19 August 2021	Publication Issue 5
25 June 2024	Client Review Issue 6
25 June 2024	Publication Issue 6

## Peer Reviewers

Name/Title	Organisation	Date
Product Appraisal Technical Advisory Group	WSAA	15 September 2014
WSAA Expert Panel	WSAA	15 September 2014
Peter Pittard, WSAA Consultant	WSAA	18 August 2014
Carl Radford, Product Appraisal Manager	WSAA	18 August 2014
Peter Pittard, WSAA Consultant	WSAA	20 January 2016
Carl Radford, Product Appraisal Manager	WSAA	22 February 2016
Peter Pittard, WSAA Consultant	WSAA	16 May 2018
Carl Radford, Product Appraisal Manager	WSAA	22 May 2018
Peter Pittard, WSAA Consultant	WSAA	27 May 2021
Carl Radford, Product Appraisal Manager	WSAA	28 May 2021
Peter Pittard, WSAA Consultant	WSAA	18 August 2021
Carl Radford, Product Appraisal Manager	WSAA	19 August 2021
Peter Pittard, WSAA Consultant	WSAA	25 June 2024
Carl Radford, Product Appraisal Manager	WSAA	25 June 2024

## **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

Galvin Engineering Pty Ltd (Galvin) is a diversified manufacturer and supplier of a wide range of products including taps and valves, drains, general plumbing products, firefighting equipment and civil products. Its manufacturing facility is located in Malaga, Western Australia and incorporates a ferrous and non-ferrous foundry with design and machining capability. The Company has been in operation since 1930.

The Galvin ductile iron fittings range is manufactured by Himgiri Castings Pvt Ltd (Himcast) located in Goa, India.

This Appraisal is for a range of polymeric coated ductile iron fittings in sizes from DN 80 to DN 300 manufactured to AS/NZS 2280:2020 *Ductile iron pipes and fittings*. The range includes both traditional and lightweight fittings (designated as Ezy-Lift™). See Section 4 for details.

This Issue 6 is to include additional products in the Scope of this Appraisal, indicated by a red asterisk in Table 2.

The traditional fittings have wall thicknesses complying with AS/NZS 2280:2020 Appendix H PN 35 and the Ezy-Lift fittings have minimum wall thicknesses complying with AS/NZS 2280:2020 Appendix H PN16.

Both Galvin and Himcast hold an ISO 9001:2015 Quality Management System Licence.

The Galvin ductile iron fittings have ISO Type 5 StandardsMark product certification to AS/NZS 2280:2020 *Ductile iron pipes and fittings*.

The Galvin ductile iron fittings described within this appraisal meet the requirements of WSA PS 201 *Ductile Iron Fittings (CIOD) for Pressure and Non-Pressure Applications – Drinking Water, Non-Drinking Water Supply and Sewerage* and are therefore deemed as 'fit for purpose'.

### 1.1 Recommendations

It is recommended that WSAA members and associates accept or authorise the range of Galvin DI fittings in sizes DN 80 to DN 300, as detailed in this report, for use in water supply and sewerage pressure pipelines, provided they are installed in accordance with applicable WSAA Codes and the manufacturer's requirements, where specified.

## 2 THE APPLICANT

The Applicant is Galvin Engineering Pty Ltd

### 2.1 The Supplier

Galvin Engineering Pty Ltd was formed in 1930 and was originally named Premier Engineering. The firm was renamed Galvin Engineering Pty Ltd in 1971 and focused on the manufacture of ferrous and non-ferrous castings.

In 1992 the Company shifted into custom built premises in Malaga, incorporating a technologically advanced machine shop and foundry including a bank of computer operated lathes and drilling machines, heat treatment facilities and sand blasting capability.

Galvin is a supplier of a wide range of products including taps and valves, drains, general plumbing products, firefighting equipment and civil products. Sales to export markets are also an important component of the company's business with areas serviced including UK, USA, Hong Kong, New Zealand, Brunei, Bahrain, Singapore and Dubai.

Galvin has developed its own range of ductile iron pipe fittings. Himcast manufactures the finished castings and applies the polymeric coatings. The products are manufactured under a StandardsMark product certification licence held jointly by Himgiri Castings Pvt Ltd and Galvin Engineering Pty Ltd. The fittings are imported into Australia and marketed by Galvin.

Galvin Engineering has branches in NSW, Victoria, Queensland and SA.

## 2.2 The Manufacturer

Himgiri Castings Pvt Ltd was founded in 1993 in Goa, India. It now has two foundry operations, one at Goa and the other at Halol, Gujarat. The combined output is approximately 20,000 tonnes per annum. Himcast is a ductile and grey cast iron foundry servicing the automotive sector and also manufactures pipe fittings, valves, gears, textile machinery, marine castings and other general engineering castings. The company exports to countries including USA, Australia, New Zealand, France, Germany, Spain, Italy and Belgium.

Galvin ductile iron fittings are supplied from the Himcast Goa foundry, which includes DISA moulding machines, state of the art machining capability, a coating plant and comprehensive testing equipment.

## 3 THE PRODUCT

This Appraisal is for a range of polymeric coated ductile iron fittings manufactured to AS/NZS 2280:2020 *Ductile iron pipes and fittings*. The range of DN 80 to DN 300 fittings includes both traditional and lightweight fittings, designated as Ezy-Lift™. See Section 4 for details.

The Galvin traditional fittings have wall thicknesses complying with AS/NZS 2280:2020 Appendix H PN 35 and the Ezy-Lift range have minimum wall thicknesses complying with AS/NZS 2280:2020 Appendix H PN16.

Flanges comply with AS/NZS 4087 Fig B5 PN16. The Ezy-Lift fittings incorporate flanges with lightweight alternative designs in accordance with AS/NZS 4087. The socket profile designs are T-type.

## 4 SCOPE OF THE APPRAISAL

The scope of this appraisal includes a range of Galvin traditional and lightweight ductile iron polymeric coated fittings in sizes DN 80 to DN 300 as detailed in Tables 1 and 2 below and included in the ISO Type 5 StandardsMark Product Certification schedule included in Appendix B.

**TABLE 1  
GALVIN TRADITIONAL FITTINGS**

Fitting	Ends	80	100	150	200	225	250	300
90 Bends	Soc-Soc		*	*	*	*		
	FI-FI		*	*				
45 Bends	Soc-Soc		*	*	*	*	*	*
	FI-FI		*	*				
22 1/2 Bends	Soc-Soc		*	*	*	*	*	*
	FI-FI		*	*				
11 1/4 Bends	Soc-Soc		*	*	*	*	*	*
	FI-FI							
Washout	FL-Soc		*	*				
X 80 Tee	Soc x Soc							
	Soc x FI		*	*	*	*	*	*

Fitting	Ends	80	100	150	200	225	250	300
X 100 Tee	Soc x Soc		*	*	*			
	Soc x FI		*	*	*	*	*	*
	Sp x FI							
X 150 Tee	Soc x Soc			*	*			
	Soc x FI				*	*	*	*
X 200 Tee	Soc x Soc				*			
X 80 Taper	FI-FI		*					
X 100 Taper	Soc-Soc			*				
	FI-FI			*				
X 100 Connector	FI-FI	*	*					
X 150 Connector	FI-FI	*	*					
X 225 Connector	FI-FI	*	*					
X 300 Connector	FI-FI	*	*					
X 375 Connector	FI-FI	*	*					
X 450 Connector	FI-FI	*	*					
X 600 Connector	FI-FI	*	*					
Connector	FI-Soc		*	*	*	*	*	*
	FI-Sp		*	*	*	*	*	*
Thrust Connector	FI-Soc x 600		*	*		*		*

**TABLE 2  
GALVIN LIGHTWEIGHT EZY-LIFT FITTINGS**

Fitting	Ends	80	100	150	200	225	250	300
90 Bends	Soc-Soc		*	*				
	FI-FI							
45 Bends	Soc-Soc		*	*				
22 1/2 Bends	Soc-Soc		*	*				
11 1/4 Bends	Soc-Soc		*	*				
	FI-FI		*	*				
Washout	FL-Soc		*					
X 80 Tee	Soc x Soc							
	Soc x FI		*	*				

Fitting	Ends	80	100	150	200	225	250	300
	FI X FI		*					
X 100 Tee	Soc x Soc		*					
	Soc x FI		*	*		*		*
	Sp x FI		*	*				
	FI x FI		*	*		*		*
X 150 Tee	Soc x Soc			*				
	FI x FI			*				
X 100 Connector	FI-FI	*						
X 150 Connector	FI-FI	*	*	*				
X 225 Connector	FI-FI	*	*					
X 300 Connector	FI-FI	*	*	*				
X 450 Connector	FI-FI			*				
X 600 Connector	FI-FI		*	*		*		*
X 900 Connector	FI-FI		*	*				
X 1200 Connector	FI-FI		*	*				
Connector	FI-Soc		*	*		*		*
Thrust Connector	FI-Soc x 900					*		*
	FI-FI x 600		*	*				
	FI-FI x 750		*	*				
	FI-FI x 1000				*	*	*	*
	FI-FI x 1200		*	*				

## 5 APPRAISAL CRITERIA

### 5.1 Quality Assurance Requirements

The WSAA Product Appraisal Technical Advisory Group accepts ductile iron pipeline fittings manufactured in compliance with AS/NZS 2280:2020 *Ductile iron pipes and fittings* 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

The Galvin range of ductile iron fittings has been appraised for compliance to AS/NZS 2280:2020 *Ductile iron pipes and fittings*.

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 201 - *Ductile Iron Fittings (CIOD) for Pressure and Non-Pressure Applications – Drinking Water, Non-Drinking Water Supply and Sewerage*.

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

<https://www.wsaa.asn.au/shop/product/60961>

## 6 COMPLIANCE WITH APPRAISAL CRITERIA

### 6.1 Compliance with Quality Assurance Requirements

Galvin has submitted the following relevant quality certificates:

- ISO 9001:2015 Certificate of Registration No. QEC0133 issued to Galvin Engineering Pty Ltd by SAI-Global.
- ISO 9001:2015 Certificate of Registration No. 99 100 02811 issued to Himgiri Castings Pvt Ltd by TUV SUD.
- AS/NZS 2280:2020 ISO Type 5 StandardsMark Product Certification Licence No. SMK 20073 issued to Himgiri Castings & Galvin Engineering by SAI-Global.

Copies of certificates are included in Appendix B and are available from WSAA.

### 6.2 Compliance with Performance Requirements

#### 6.2.1 Material requirements

AS/NZS 2280 specifies that ductile iron properties shall have minimum tensile strength of 400Mpa and minimum elongation of 10%.

Galvin has submitted typical material test certificates from Himcast to demonstrate compliance.

#### 6.2.2 Wall thickness

AS/NZS 2280:2020 now includes prescriptive wall thicknesses for fittings with PN16, PN20 and PN35 pressure classifications. Galvin has provided drawings to indicate compliance with the minimum required wall thicknesses specified in AS/NZS 2280:2020.

#### 6.2.3 Elastomeric joints

Galvin fitting sockets are the T-type design. The sockets are compatible with spigots of AS/NZS 2280 ductile iron pipes and Series 2 PVC pipes manufactured to AS/NZS 1477 (PVC-U), AS/NZS 4441 (PVC-M) and AS/NZS 4765 (PVC-O).

Type tests completed by QTL Pty Ltd were submitted for the previous issues of this report to demonstrate compliance with the AS/NZS 2280 performance requirements for elastomeric seal joints.

The depth of engagement for sockets meets the minimum requirements of AS/NZS 2280 and are shown in Table 3.

**TABLE 3**  
**DEPTH OF ENTRY BEYOND THE ELASTOMERIC SEAL**

Size DN	Galvin Depth of Entry		AS/NZS 2280 Min requirement
	Lightweight	Traditional	
100	74	54	42
150	82	54	50
200	-	66	58
225	86	66	62
250	-	71	66
300	105	71	71

#### 6.2.4 Elastomeric seals

The T-type dual hardness EPDM elastomeric seals are manufactured by Thong Nhat Rubber Company, Vietnam and supplied by Gulf Rubber. The seals are manufactured under cover of ISO Type 5 StandardsMark product certification. A copy of the current certification is held on file by WSAA.

#### 6.2.5 Angular joint deflection

Galvin has confirmed that minimum joint deflections comply with the requirements of AS/NZS 2280.

**TABLE 4**  
**ELASTOMERIC SEAL JOINT DEFLECTION**

Nominal size DN	Recommended maximum angular joint deflection (degrees) <sup>1</sup>
100 – 250	3 ½ °
300	2 ½ °

<sup>1</sup> Includes light weight fittings sockets

#### 6.2.6 Polymeric coatings

AS/NZS 2280 requires that thermal bonded polymeric coatings on fittings shall comply with AS/NZS 4158.

Galvin fittings are coated and lined by Himcast, Goa, India using the electrostatic spray method. The fusion bonded epoxy coating utilised is Jotun Jotaguard VA 5001.

A copy of the current StandardsMark licence covering the Jotaguard polymeric coating is held on file by WSAA.

The Himcast coating plant is audited by SAI-Global in conjunction with their annual audit schedule for AS/NZS 2280 certification.

#### 6.2.7 Flanges

Galvin fittings PN 16 flanges comply with AS/NZS 4087 *Metallic flanges for waterworks purposes*, Figure B5.

Light weight fittings incorporate alternative shaped light weight flanges.

Galvin do not offer flange gaskets or accessories with their fittings.

### 6.2.8 Design verification

The 2020 version of AS/NZS 2280 now includes prescriptive wall thicknesses for fittings with PN16, PN20 and PN35 pressure classifications. Where alternative wall thicknesses are proposed by the manufacturer, each fitting is required to be individually designed by recognised engineering techniques and proven by a hydrostatic design verification test.

Galvin has submitted drawings to indicate compliance to the specified minimum wall thicknesses for their PN 35 and PN 16 range of fittings, however Type Test reports from QTL Pty Ltd (NATA Accreditation No 14783) were submitted for the previous issue of this report to demonstrate compliance with the design verification tests for their range of Ezy-Lift fittings.

### 6.2.9 Contact with drinking water

The AS/NZS 4020:2018 test report for Jotaguard VA 5001 was completed by AWQC (NATA accreditation No 1115) on 23 October 2019 and the test for Gulf 5514S EPDM was completed by AWQC on 6 December 2019.

WSAA retains a copy on file of the current AS/NZS 4020:2018 test reports

## 7 FITTING INSTRUCTIONS, TRAINING AND INSTALLATION

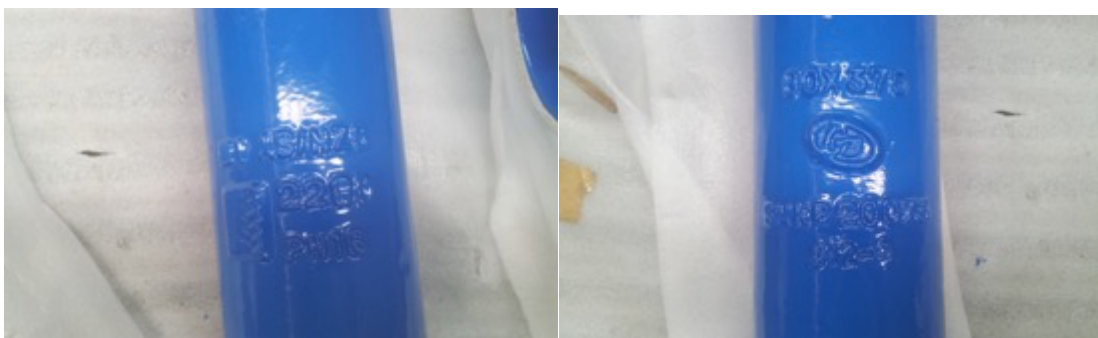
Ductile iron fittings are considered a mature pipeline product and installation procedures are well established.

## 8 PRODUCT MARKING

Galvin fittings are marked in accordance with AS/NZS 2280. Marking includes:

- Manufacturer's name or mark
- Nominal size of fitting.
- Ductile" or "D.I." moulded in raised form on the fitting.
- Where applicable, the angle of the bend cast on the fitting.
- Pressure classification of fittings.
- The number of the manufacturing standard, i.e. AS/NZS 2280.
- StandardsMark logo

An example of the marking is shown in Figure 1.



**FIGURE 1 PRODUCT MARKING**

## 9 PACKAGING AND TRANSPORTATION

Galvin DI fittings are wrapped separately before being packed into wooden crates for despatch. Cardboard liners separate each layer from each other to prevent damage to coatings during transport. Refer to Figure 2.



**FIGURE 2 PACKAGING OF GALVIN DI FITTINGS**

## **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 Galvin's warranty is included in their terms and conditions of sale.

## **11 WATER AGENCY EXPERIENCE WITH THE PRODUCT OR FIELD-TESTING REPORT**

Ductile iron fittings are well established products and additional field testing is not considered necessary.

## **12 OUTCOMES OF EXPERT PANEL PRODUCT REVIEW**

There are no outstanding issues.

## **13 FUTURE WORKS**

No future works have been identified.

## **14 DISCLAIMERS**

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, email [carl.radford@wsaa.asn.au](mailto:carl.radford@wsaa.asn.au).

### **14.1 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.

### **14.2 Limits on Reliance on Information and Recommendations**

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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 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.

#### **14.3 No Updating**

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.

#### **14.4 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

A copy of the Galvin DI Fittings catalogue is available directly from Galvin.



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[www.galvinengineering.com.au](http://www.galvinengineering.com.au)

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## APPENDIX B - QUALITY CERTIFICATIONS

Copies of the following Quality Certificates are available from WSAA.

**TABLE B1  
GALVIN ENGINEERING PTY LTD - MANAGEMENT SYSTEMS**

410 Victoria Road Malaga WA	
Quality Systems Standard	ISO 9001:2015
Certification Licence No.	QEC0133
Certifying Agency	SAI-Global
First Date of Certification	24 January 1991
Current Date of Certification	30 March 2022
Expiry Date of Certification	16 May 2025

**TABLE B2  
HIMGIRI CASTINGS PVT LTD (HIMCAST) - MANAGEMENT SYSTEMS**

Plot 291, Kundaim Industrial Estate, Kundaim, Goa, India	
Quality Systems Standard	ISO 9001:2015
Certification Licence No.	99 100 02811
Certifying Agency	TUV SUD
First Date of Certification	27 June 2007
Current Date of Certification	5 February 2024
Expiry Date of Certification	4 February 2027

**TABLE B3  
HIMGIRI CASTINGS & GALVIN ENGINEERING - PRODUCT CERTIFICATION**

Plot 291, Kundaim Industrial Estate, Kundaim, Goa, India	
Product Standard/Spec.	AS/NZS 2280:2020
Certificate No.	SMKP20073
Issuing Certification Body	Intertek SAI-Global
First Date of Certification	22 April 2004
Current Date of Certification	8 May 2024
Expiry Date of Certification	21 April 2029





# CERTIFICATE OF REGISTRATION

This is to certify that:

## Galvin Engineering Pty Ltd

ABN 78 008 719 382

410 Victoria Road Malaga WA 6090 AUSTRALIA

operates a

### QUALITY MANAGEMENT SYSTEM

which complies with the requirements of

### ISO 9001:2015

for the following scope

The design, procurement, manufacture, assembly and testing of plumbing fittings and fire-fighting equipment for commercial and industrial applications. The manufacture and procurement of ferrous and non-ferrous castings and machining services – including NC automatic and conventional machinery; fabrication – assembly, welding, soldering and testing.

### Certificate No: QEC0133

Issued: 30 March 2022

Originally Certified: 24 January 1991

Expires: 16 May 2025

Current Certification: 30 March 2022

Calin Moldovean  
President, Business Assurance  
SAI Global Assurance



JAS-ANZ



WWW.JAS-ANZ.ORG/REGISTER

**Registered by:**

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ZERTIFIKAT ♦ CERTIFICATE ♦ 認証証書 ♦ CERTIFICADO ♦ CERTIFICAT



# CERTIFICATE

The Certification Body  
of TÜV SÜD South Asia Private Limited  
certifies that



**Hingiri Castings Pvt. Ltd.**  
Plot No. 291, Kundaim Industrial Estate,  
Kundaim, Goa – 403115, India

has implemented Quality Management System  
in accordance with ISO 9001:2015  
for the scope of

**MANUFACTURE AND SUPPLY OF DUCTILE AND  
GREY IRON CASTINGS / MACHINED CASTINGS**

The certificate is valid from **2024-02-05** until **2027-02-04**

Subject to successful completion of annual periodic audits

The present status of this certificate can be obtained through TÜV SÜD website by scanning below QR code and by entering the certificate number (without spaces) on web page. Further clarifications regarding the status & scope of this certificate may be obtained by consulting the certification body at [info.in@tuvsud.com](mailto:info.in@tuvsud.com)

Certificate Registration No. **99 100 02811**

Date of Initial certification: **2007-06-27**

Issue Date: **2024-02-02 Rev. 00**

Rahul Kale  
Head of Certification Body  
of TÜV SÜD South Asia Private Limited,  
Mumbai  
Member of TÜV SÜD Group



TÜV SÜD South Asia Pvt. Ltd. • TÜV SÜD House • Saki Naka • Andheri (East) • Mumbai – 400072 • Maharashtra • India **TUV<sup>®</sup>**

The Product Schedule for this certification is 14 pages long. It may be obtained from Galvin, WSAA or the following link: <https://register.saiglobal.com/Client/PrintSchedule/schedules/Certificate%20SMKP20073%2020240509.pdf>

# STANDARDSMARK LICENCE



## Intertek SAI Global hereby grants: Himgiri Castings & Galvin Engineering

291 Kundaim Industrial Estate, Kundaim, Goa India

### StandardsMark Licence

Manufactured to:  
**AS/NZS 2280:2020 - Ductile iron pipes and fittings**

"the StandardsMark Licensee "the right to use the STANDARDSMARK as shown below only in respect of the goods described and detailed in the Schedule which are produced by the Licensee or on behalf of the Licensee\* and which comply with the appropriate Standard referred to above as from time to time amended. The Licence is granted subject to the rules governing the use of the STANDARDSMARK and the Terms and Conditions for certification and licence. The Licensee covenants to comply with all the Rules and Terms and Conditions.

**Certificate No:**  
**SMKP20073**

Originally Certified:  
22 April 2004

Current Certification:  
8 May 2024

Issued:  
9 May 2024

Expires:  
21 April 2029



Calin Moldovean  
President, Business Assurance  
SAI Global Certification Services Pty. Ltd.  
Level 7 Suite 7.01 45 Clarence Street  
Sydney NSW 2000 Australia

\* For details of manufacture, refer to the licensee

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## **APPENDIX C - SUPPLIER CONTACTS**

### **Galvin Engineering Pty Ltd**

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Malaga WA 6090

Phone: 08 9338 2344

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Web site: [www.galvinengineering.com.au](http://www.galvinengineering.com.au)



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