



**SALTIRE**

*INFRASTRUCTURE*

**INNOVATE ▸ DELIVER ▸ EXCEL**

***S-GATE VALVE***

## COMPANY OVERVIEW

Saltire Infrastructure Pty Ltd is a specialist civil contracting company focused on delivering services to Western Australia's water service industry. Our company is headed by a team of highly experienced industry personnel who hold decades of engineering, management and operations experience within the water and waste water industry. Our team possesses a strong understanding of client requirements and we focus on building long term professional relationships and exceeding expectations within safety, quality and environment.



### INNOVATE

Our dedicated focus on the water services sector means we have our finger on the pulse in latest technologies and industry developments. We think outside the box to develop the best solution for each project.



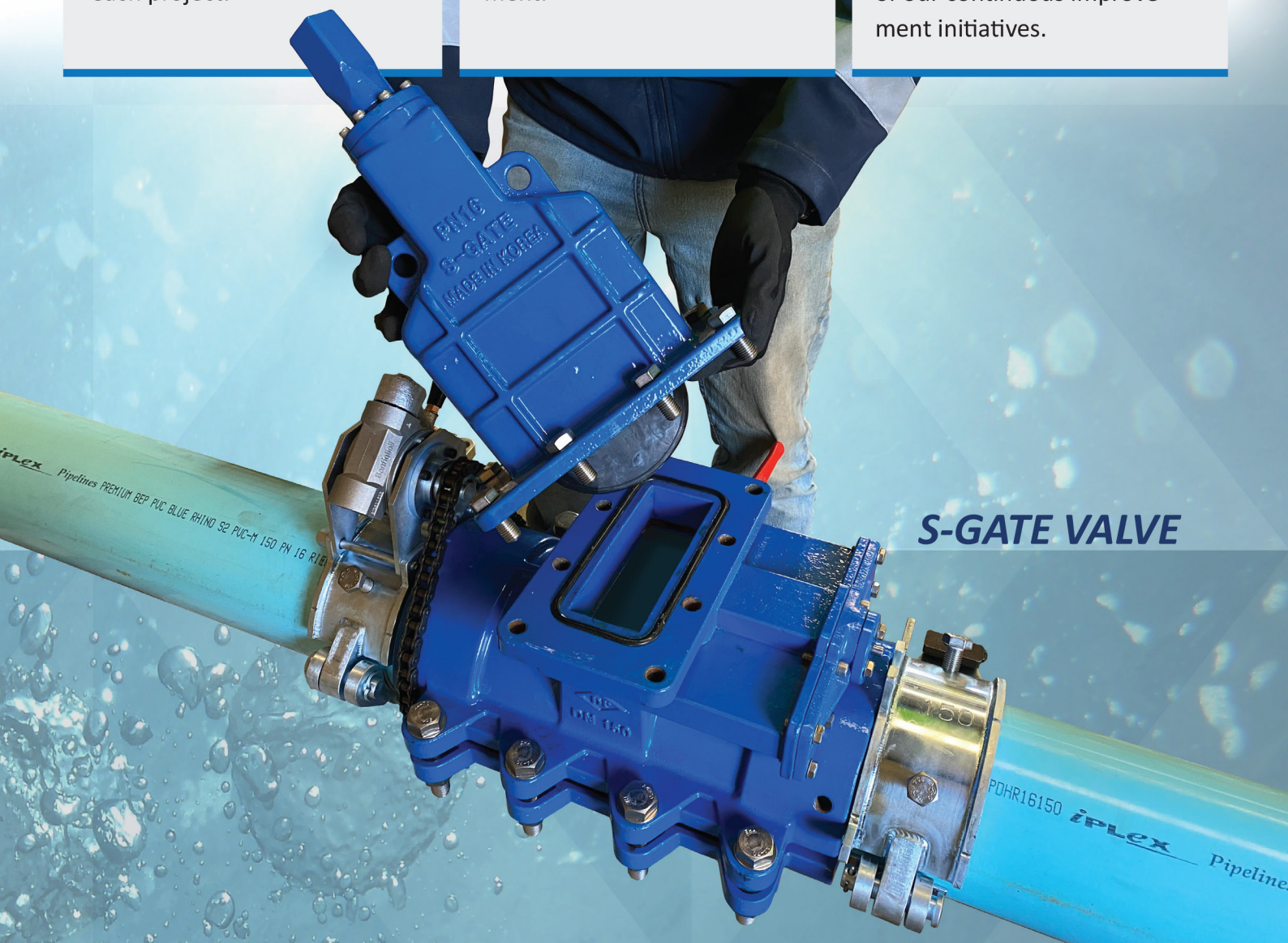
### DELIVER

Our commitment to safety and professionalism, means our focus are for projects to be delivered on time, within budget, and to the highest standards of safety, quality, and environmental management.



### EXCEL

Our mission is to exceed client expectations in terms of safety, presentation, engagement, and delivery. Our performance is monitored through both formal and informal feedback as part of our continuous improvement initiatives.



**S-GATE VALVE**



## S-GATE VALVE

S-Gate Valve is a innovative product where a resilient seated valve can be installed under pressure. Water isolation of the main is not required during any stages of the installation. S-Gate Valves can be installed on the following Australia Pipes. DI, CI, AC and mPVC. (S-Gate Valve can also be installed on 125PE and 180 PE pipe)

### Standard Compliance

AS4181-2013 Repair and Offtake Clamps for Water Industry Purposes

AS2638.2 Gate Valves for water works purposes

AS4020 Compliant

WSAA Appraised

### Quality & Enviromental Assurance

ISO 9001: 2008 Quality management Systems

ISO 14001:2015 Environmental Management Systems

### Sizes & Applications

Under-Pressure installation of Resilient Seated Valve.

DN 100, 150, 200, 250. We are currently developing larger sized valves and will have the capacity to install the S – Gate Valves on DN225, DN300, DN375 and DN450.



## INNOVATIVE TECHNOLOGY | S-GATE VALVE

High durability and strength manufactured with Ductile Iron Grade JS/400/15 in accordance with ISO 1083.

Ductile Iron Temporary Gate valve to allow installation of S-Gate Valve under Pressure

Thermal bonded polymeric coating for corrosion resistance. Akzo Nobel Resicoat R-4ES applied in accordance with AS/NZS 4158

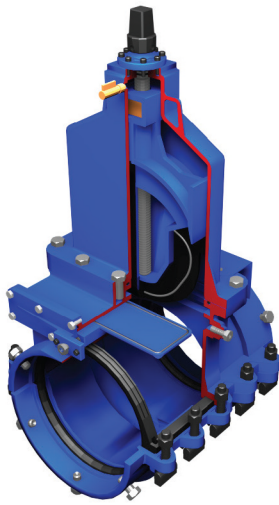








## VALVE SPECIFICATION



### S-GATE VALVE GEN II

Upper Valve Component - AS2638.2 Gate Valves for water works purpose  
 Clamp Component - AS4181-2013 Repair and Offtake Clamps for Water Industry Purposes

Allowable Operating Pressures:

DN80 to DN 250 - 1600kPa DN 300 to DN 450 - 1200 kPa

Maximum Temperature: 40 °C

Connection Type: Clamp Type AS4181-2019

Temporary DI Gate

MPVC, POLYETHYLENE, DUCTILE IRON, CAST IRON, MSCL PIPELINE SYSTEM

## MAIN ADVANTAGES OF S-GATE VALVE

**Cost:** Use of S-Gate Valve eliminates many night shift operations, leading to substantial cost savings.  
 Eg.: Concrete opening fees, additional labour cost and down-day cost

**Water Saving:** Reduced water wastage with reduced shut area and reduction in number of trial shuts.

**Customer Satisfaction:** Reduced community notification and outage areas. (Often No outage)

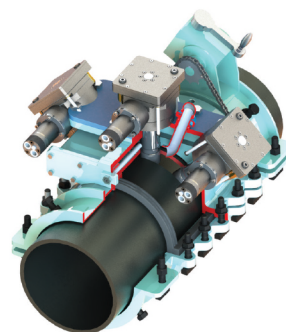
**Fatigue Management:** Reduced shift changes and reduction in night shifts

**Program & Productivity:** Less delays associated with failed trial shuts. Allowing improved programming & Scheduling of works.



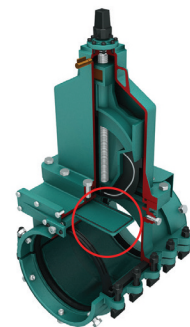
### ▶ OUR GATE VALVE

Gate valve with embedded internal spring & two sealing points to allow greater adaptation to all types of internal pipe condition



### ▶ OUR DRILL

Our hydraulically driven compact S-Gate valve drill has a full vertical height of 310 mm when fully extended.



### ▶ IN-BUILT TEMPORARY DUCTILE IRON GATE

Built-in ductile iron gate allows the valve to be installed under pressure & gives further opportunity for under pressure maintenance in the future



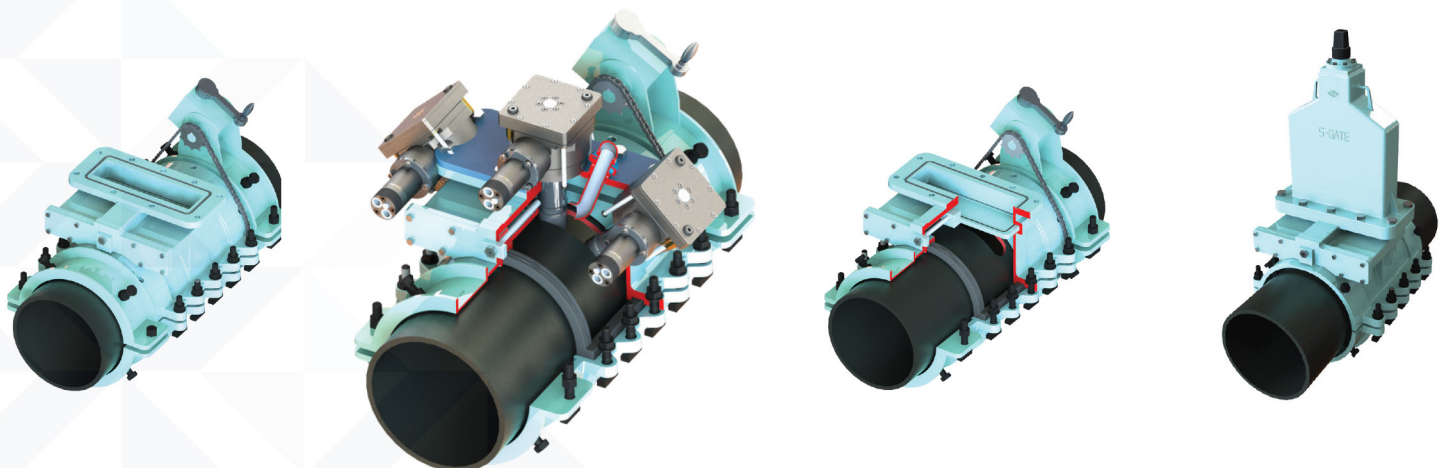
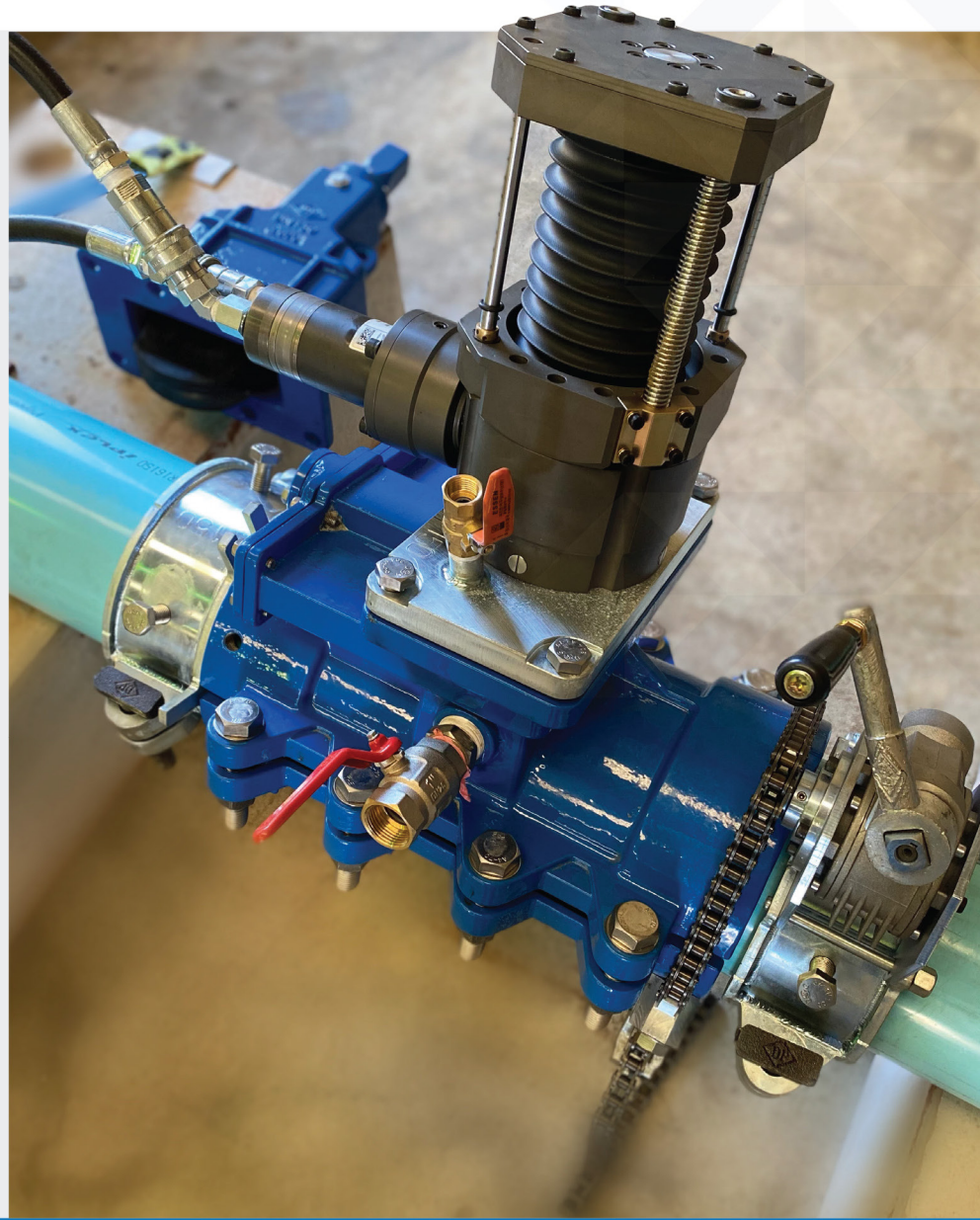
## OUR UNIQUE CUTTING TECHNOLOGY

Traditionally, the line stops involved extraction of size x size coupon extraction. However, when the coupons are vertically extracted, often coupons were not able to be retrieved and would be displaced inside the main.

To eliminate this issue, S-Gate valve as adopted a milling technology in lieu of traditional coupon extraction methodology.

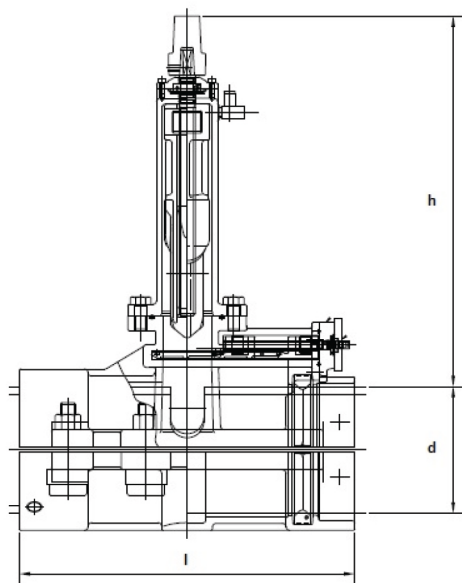
As part the drilling process, shavings are released instead of coupon, where the pressure from the existing watermain extracts the metal shavings produced during the S-Gate Valve drilling.

With this technology transition, S-Gate valve removes minimal surface area of the pipe, maintaining the structural integrity.





## TECNICAL DATA (PART 02)



Valve Diameter (DN)	Length	Height	Nominal Pipe outside Diameter (mm)	Install Range Pipe Outside Diameter (mm)	Product Code
100	400	440	122	119 - 125	SGATEII-100
150	450	498	177	174 - 180	SGATEII-150
150 (Oversize)	450	498	183	180 - 186	SGATEII-150OS
200	450	562	232	229 - 235	SGATEII-200
200 (Oversize)	450	562	239	236 - 242	SGATEII-200OS
225	520	511	259	265 - 271	SGATEII-225
250	520	638	286	282 - 290	SGATEII-250
250 (Oversize)	520	638	294	290 - 298	SGATEII-250OS
300*	540	711	345	341 - 353	SGATEII-300
300*(Oversize)	540	711	356	352 - 360	SGATEII-300OS
375*	680	970	426	425 - 433	SGATEII-375
450*	850	1167	507	504 - 512	SGATEII-400

\* All valves greater than 250mm diameter would need written approval from Water Corporation prior to use.

## PRODUCT APPROVED BY:







Saltire Infrastructure's technologies focus on water network continuity. Our equipment such as our S-Gate valve system, hot-tapping and line-stopping technology allows us to by-pass the existing network to facilitate repairs and maintenance without disruption.



## HOT TAPPING

*Saltire Infrastructure utilises high-pressure rated Hot Tapping (or under pressure tapping) equipment for the fast and safe installation of new branch connections and bypass mains, with the current capability to install DN25-DN400 offtakes.*



## FLOW STOPPING

*Line Stopping allows works to be undertaken on water mains without interruption to customer supply. Deploying a stopper and bypass system, the rig set-up allows for sections of pipelines to be made dry (or gasless) allowing safe repair or replacement of the existing network.*



## LIVE PIPELINE INSPECTION

*Our compact and mobile System is fitted into a van for easy access to pipelines. Its compact sensor design allows for efficient navigation through multiple bends in the pipeline. The technology also assists in commissioning works, surveying internal pipelines and identifying failure locations.*

Speak to one of our team members about how we can solve your problems today.

