



# S-Gate Valve Technical Information

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## Contents

1.0 - Number of Turns Per Valve.....	2
2.0 - S-Gate Valve Clamp Tolerance.....	3
3.0 - S-Gate Valve Disc Specification (Inner DIA Tolerance).....	4
4.0 - S-Gate Valve Torque.....	5
5.0 - S-Gate Valve Working Space.....	6
6.0 - S-Gate Valve WSAA Appraisal.....	7
7.0 - S-Gate Valve Standard (Sydney Water Specs)	

## 1.0 - Number of Turns Per Valve

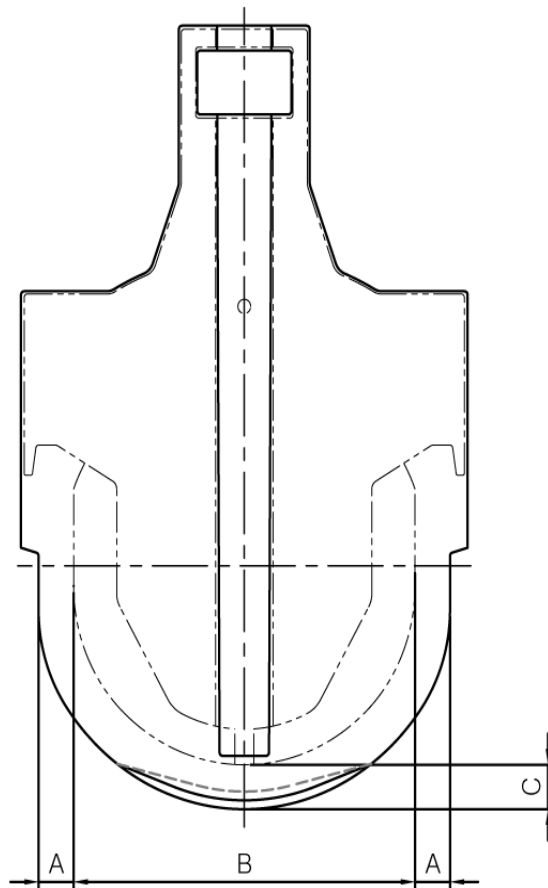
S-Gate Valve Number of Turns			
✂ This is based on pipe with perfect inner DIA			
✂ If the pipe is larger than standard ID, more turns are required for a shut			
✂ If the pipe is lesser than standard ID, the turns associated with a shut can be less than below			
AS/NZS 2280		Number of Turns - (Based on Design)	
DN	Standard OD	From	To
100	122 (Over Size Valve)	39	41
		36	38
150	177	45	47
200	232	56	58
225	259	66	68
250	286	67	70
300	345	71	73
375	426	76	77
450	507	79	80

## 2.0 - S-Gate Valve Clamp Tolerance

S-Gate Valve Installation Range							
<p>✘ For DN200 and under, if exceeding the tolerance <math>\pm 3\text{mm}</math> Pressure test for 15 Minutes</p> <p>✘ DN 250 and over <math>\pm 4\text{mm}</math> Pressure test for 15 Minutes</p> <p>✘ Number of turns are for guidance only and will vary depending on the actual inner dia size &amp; conditions</p>							
AS/NZS 2280		Description	Gasket Design ID	Actual Data (mm)		Installation Range (mm)	
DN	Standard OD			min	Max	Min	Max
100	122	100	122	121.8	130.5	119	125
		100 (132) Oversize Clamp	132	128	135	128	135
150	177	150	177	177.1	186.6	174	180
		150(183) Oversize Clamp	183			180	186
200	232	200	232	232.1	240.1	229	235
		200(239) Oversize Clamp	239			236	242
225	259	225(259)	259	257.8	270.4	256	262
		225 Oversize Clamp	268			265	271
250	286	250	286	286.1	297.1	282	290
		250(294) Oversize Clamp	294			290	298
300	345	300	345~349	343.4	357	341	353
		300 Oversize Clamp	356			352	360
375	426	375	429	425.1	432.8	425	433
450	507	450	508	507.1	516.2	504	512
		450(516)	516			512	520

### 3.0 - S-Gate Valve Disc Specification (Inner DIA Tolerance)

AU Size	A	B	C
100	17	80	14
100-OS	17	80	14
150	23	118	18
200	23	168	22
225	21	192	24
250	26.5	212	28
300	29	262	26
375	29.5	324	30.5
450	34.5	390	36



## 4.0 - S-Gate Valve Torque

SPS-KWAA B102-0709

### S-Gate Valve Torque

Units: N.m

<u>Size</u>	<u>Maximum Torque</u>	<u>Maximum Operational Torque</u>
<b>100</b>	300	100
<b>150</b>	450	150
<b>200</b>	600	200
<b>225</b>	750	250
<b>300</b>	975	325
<b>375</b>	1050	350
<b>450</b>	1575	525

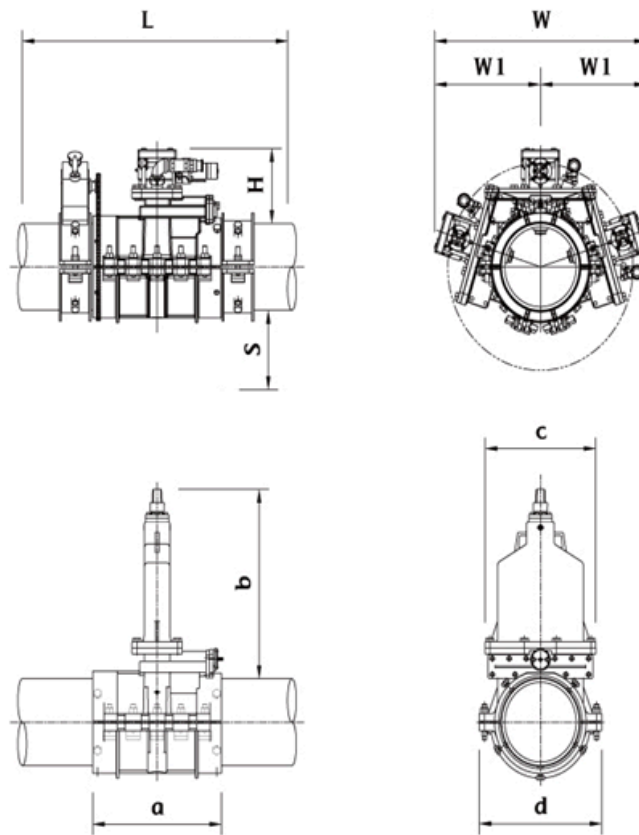
#### 10.3 – Maximum Torque

Maximum torque value S-Gate Valve stem can resist before failing.

#### 10.4 – Maximum Operational Torque

Maximum torque value where S-Gate valve should be fully operational.

## 5.0 - S-Gate Valve Working Space



DN	Body Specs				Theoretical number of Turns	Drill	Minimum Space			
	a	b	c	d		H	W	W1	L	S
100	400	440	224	274	46 / 4	300	600	300	700	200
100 OS	424	464	252	303	39 / 5		640	320	730	200
150	450	491	285	338	47 / 5		680	340	750	200
200	450	563	346	399	58 / 5		760	380	750	200
225	520	638	404	444	68 / 5		820	410	820	200
250	520	638	420	457	70 / 5		820	410	820	200
300	650	833	594	598	74 / 6	600	1000	500	950	200
375	680	970	620	727	78 / 7		1600	800	980	300
450	850	1220	744	898	81 / 8		1700	850	1150	300

※ Note that the numbers of turns are calculated on CAD and the actual number of turns may differ on site

## 6.0 – S-Gate Valve WSAA Appraisal



### WSAA PRODUCT APPRAISAL CERTIFICATE

#### Dahsian Pty Ltd t/a CNS Engineering S-Gate Valve for Underpressure Line Stopping

This appraisal is for a range of S-Gate valves in sizes DN 100, DN 150, DN 200, DN 250, DN 300, DN 375 and DN 450 with PN16 pressure classification designed to enable under-pressure installation of a gate valve into an existing pipeline without interruption to the water supply.

The product consists of a ductile iron clamp with a flanged outlet that is installed onto the pipe using a bolting arrangement. An elastomeric gasket provides a leak proof seal.

A custom designed cutting machine is fitted to the flanged outlet to provide a circumferential slot into the pipe wall whilst the pipeline is under pressure. A temporary slide valve is used to allow the cutting machine to be removed and a specially designed valve bonnet and gate to be fitted to the outlet flange. The temporary valve can then be opened and the gate inserted into the pipeline to provide a line stoppage. The gate valve then remains permanently in the pipeline as a fully functioning gate valve. .

Details of ISO 9001 certification and the product are included in the attached Schedules A and B.

Product Category	Underpressure Linestopping
PA Number:	PA 1823 Issue 4
Supplier	Dahsian Pty Ltd t/a CNS Engineering
Brand	Daepoong
Standards	-
WSAA Product Specification	WSA PS 283 <i>Gate valves, resilient seated, for underpressure linestopping – Drinking water and non-drinking water supply.</i>
Other Specifications	
Issue date	31 March 2022
Expiry date	2 July 2024
Recommendations	It is recommended that WSAA members, subject to any specific requirements of the member, accept or authorise the Daepoong S-Valves, as detailed in the report, for use in water supply and sewerage pressure pipelines provided they are installed in accordance with any relevant conditions relating to the design, installation, and acceptance testing provided in relevant standards, WSAA Codes and the 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 underlie it. Please read it carefully and take into account when considering the content in this Certificate.



