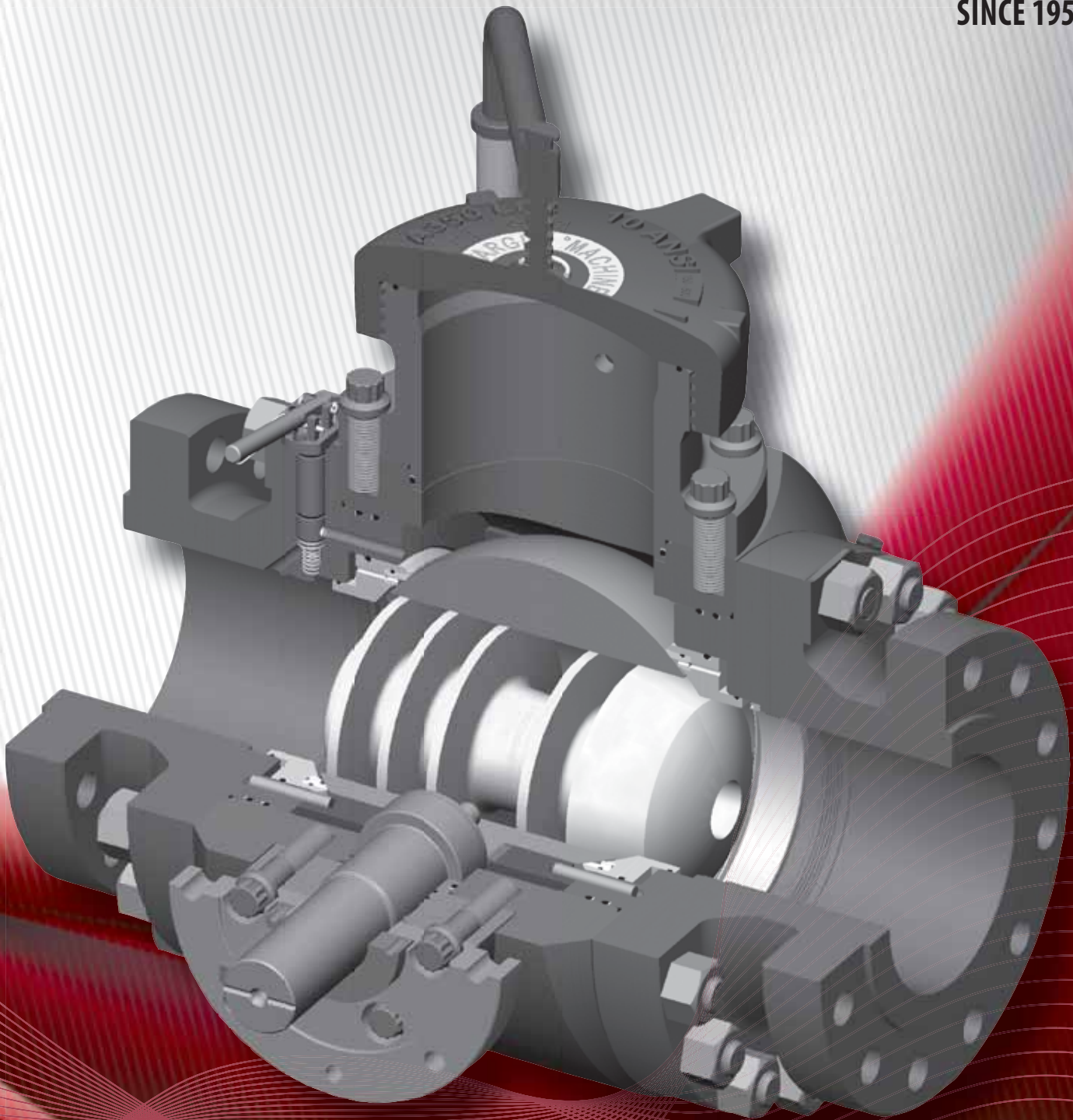


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SINCE 1958



## PIG VALVES

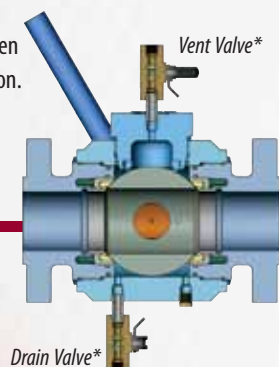
for a safe and efficient pigging process

# PIG LAUNCHING & RECEIVING SEQUENCE

## LAUNCHING

### STEP 1

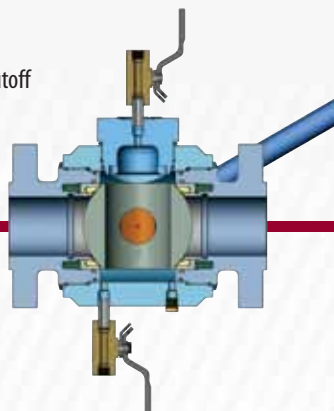
Pig valve in the open and flowing position.



*\*Drain Valve & Vent Valve optional*

### STEP 2

Closing the valve achieves positive shutoff in both directions. Vent body cavity pressure.



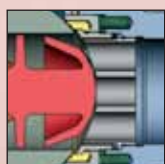
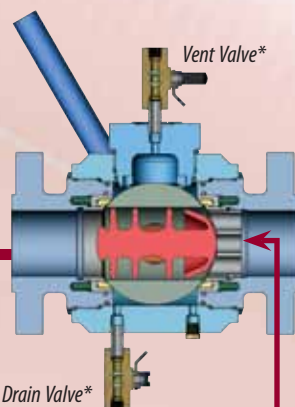
### STEP 3

Remove entry plug. Insert pig into valve ball cavity.

## RECEIVING

### STEP 1

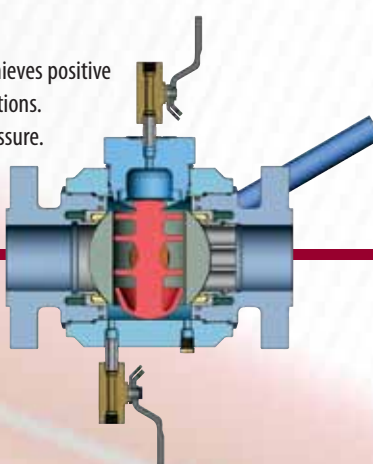
The pig has arrived into the valve which is in the open and flowing position.



*When utilizing a pig receiving valve, the pig stop located in the downstream flanged tail piece is used to receive the pig and position it within the ball cavity.*

### STEP 2

Closing the valve achieves positive shutoff in both directions. Vent body cavity pressure.

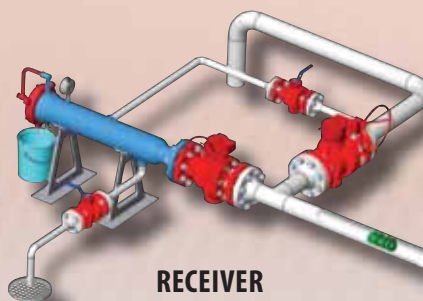


### STEP 3

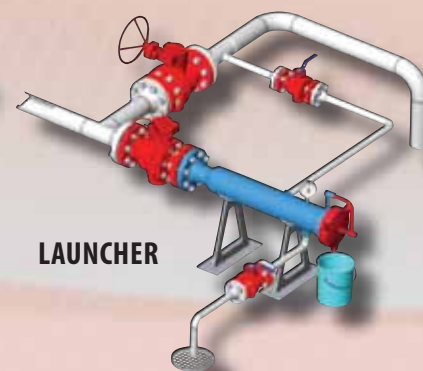
Remove entry plug. Remove pig from valve ball cavity.

## PIGGING WITH FABRICATED, BARREL-STYLE LAUNCHING AND RECEIVING TRAPS

The necessity for supports, large footprint and complicated operation, along with maintenance and environmental issues, all contribute to a higher-cost, less-efficient pigging process.



RECEIVER

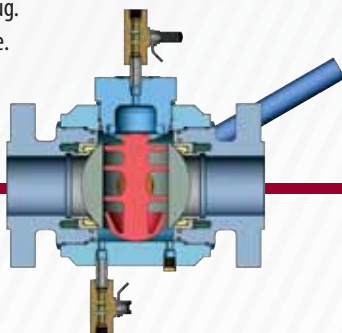
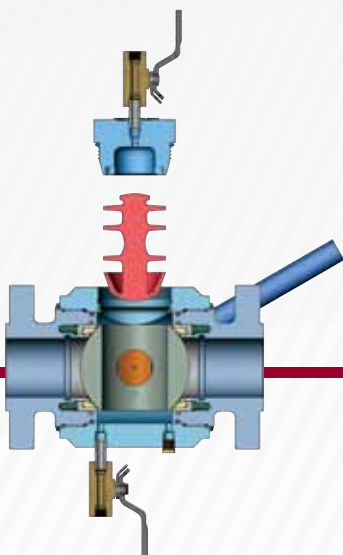


LAUNCHER



#### STEP 4

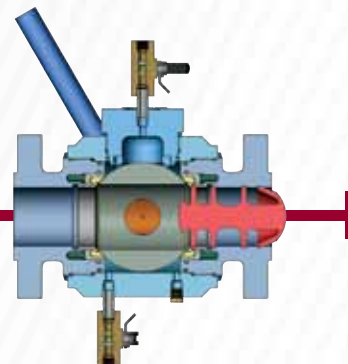
Install entry plug.  
Close vent valve.



*\*If valve is equipped with the optional pressure equalization valve (eq.), open the eq. valve to equalize pressure*

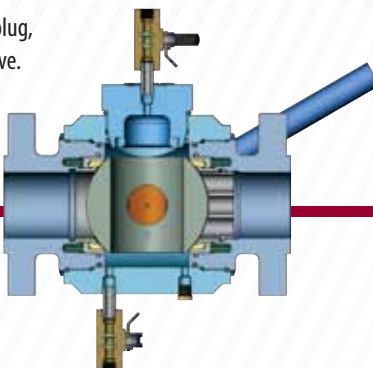
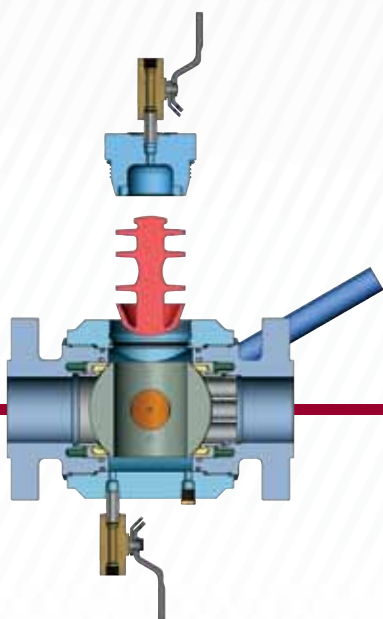
#### STEP 5

Open pig valve.  
Flowline volume and pressure moves the pig downstream.



#### STEP 4

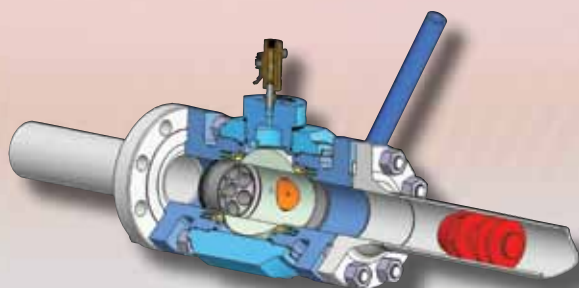
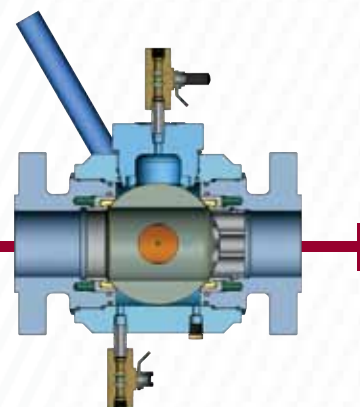
Install entry plug,  
close vent valve.



*\*If valve is equipped with the optional pressure equalization valve (eq.), open the eq. valve to equalize pressure*

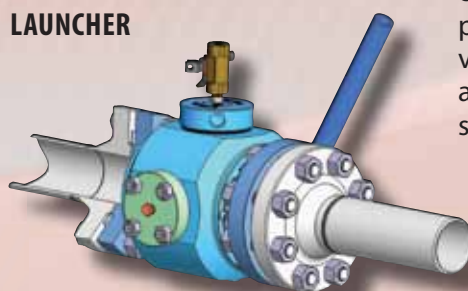
#### STEP 5

Open valve into the  
flowing position.



RECEIVER

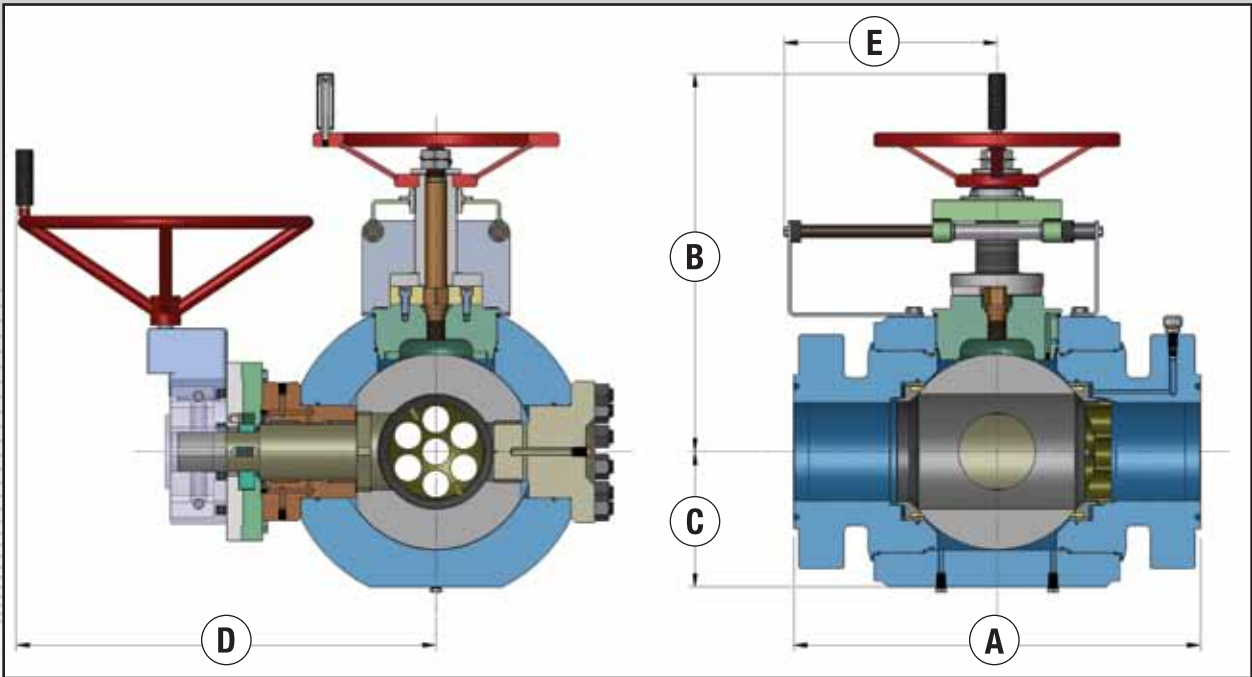
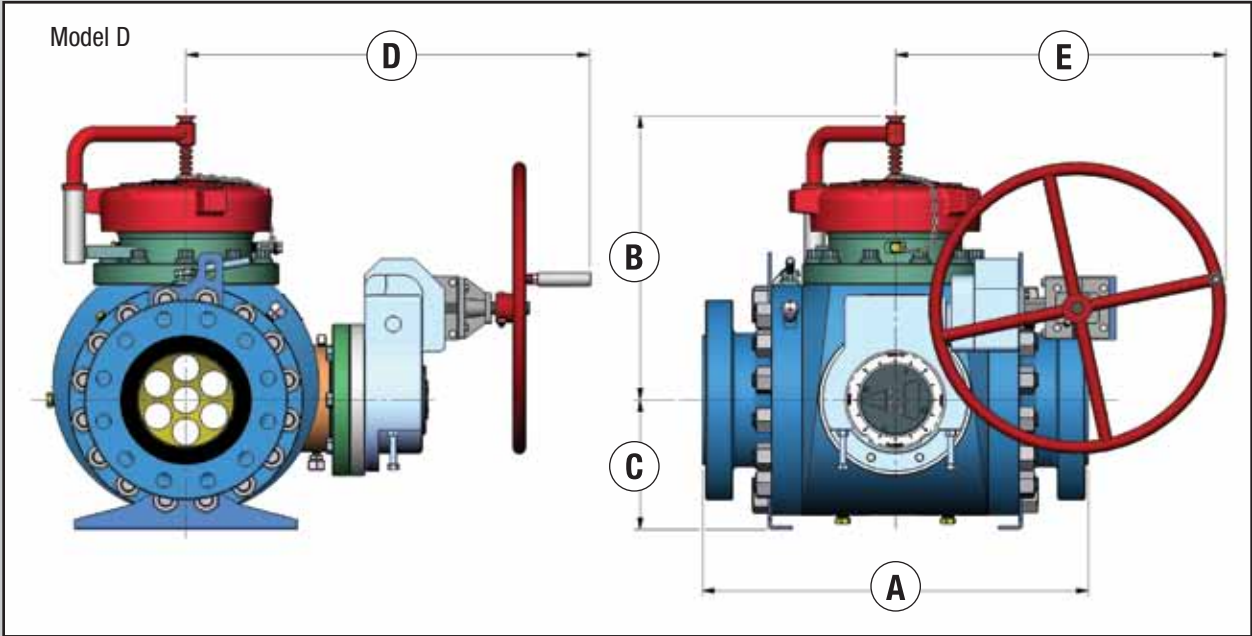
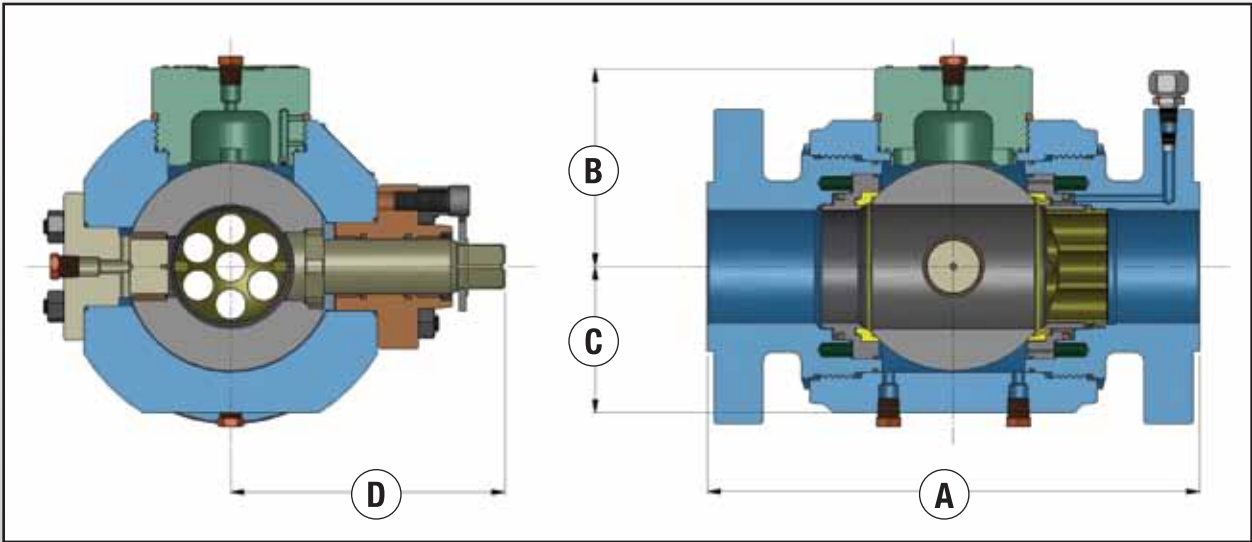
LAUNCHER



## PIGGING WITH THE ARGUS PIG VALVE

The reduced footprint, minimal construction, safety features and proven application of the Argus pig valve provide simplified operations and maintenance, in addition to significant cost savings.

# DRAWINGS AND DIMENSIONS



General Notes 1. \*Face to Face Length does not meet API Spec. '6D', ASME 'B16.10', or CSA 'Z245.15'.  
2. Specifications are subject to change without prior notice.

# SIZE RANGE, WEIGHTS, AND DIMENSIONS

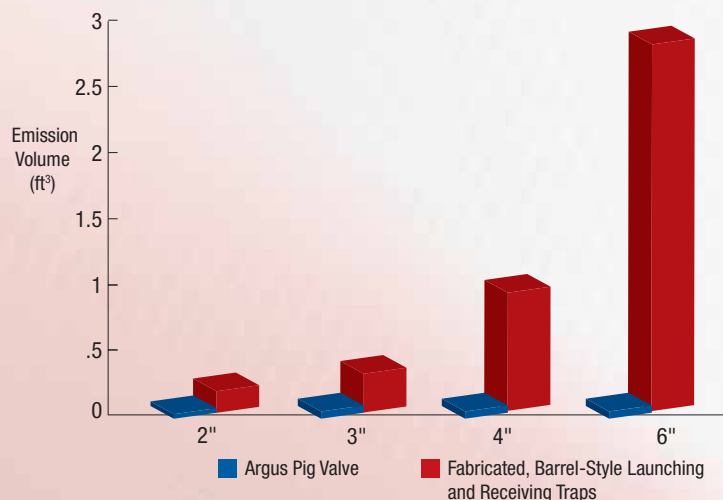
2" Pig Valve	A (Overall Length)				B		C		D		E		VALVE BORE		BALL CORE ID		ENTRY PLUG BORE		APPROX WT.	
	RF		RTJ		in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	lbs	(kg)
	in	(mm)	in	(mm)																
150 ANSI*	11.50	(292)	11.88	(302)	5.62	(143)	4.00	(102)	7.62	(194)			2.06	(52)	2.50	(64)	2.56	(65)	135	(61)
300/600 ANSI*	14.25	(362)	14.62	(371)	5.62	(143)	4.00	(102)	7.62	(194)			2.06	(52)	2.50	(64)	2.56	(65)	145	(66)
900 ANSI	14.50	(368)	14.62	(371)	5.62	(143)	4.00	(102)	7.62	(194)			2.06	(52)	2.50	(64)	2.56	(65)	175	(79)
Line Pipe*	11.00		(279)		5.62	(143)	4.00	(102)	7.62	(194)			2.06	(52)	2.50	(64)	2.56	(65)	135	(61)
3" Pig Valve	A (Overall Length)				B		C		D		E		VALVE BORE		BALL CORE ID		ENTRY PLUG BORE		APPROX WT.	
	RF		RTJ		in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	lbs	(kg)
	in	(mm)	in	(mm)																
150 ANSI*	12.75	(324)	13.12	(333)	6.38	(162)	4.75	(121)	8.38	(213)			3.12	(79)	3.56	(90)	3.59	(91)	190	(86)
300 ANSI*	14.00	(356)	14.12	(359)	6.38	(162)	4.75	(121)	8.38	(213)			3.12	(79)	3.56	(90)	3.59	(91)	210	(95)
600 ANSI	14.00	(356)	14.12	(359)	6.38	(162)	4.75	(121)	8.38	(213)			3.12	(79)	3.56	(90)	3.59	(91)	210	(95)
900 ANSI	15.00	(381)	15.12	(384)	6.38	(162)	4.75	(121)	8.38	(213)			3.12	(79)	3.56	(90)	3.59	(91)	230	(104)
4" Pig Valve	A (Overall Length)				B		C		D		E		VALVE BORE		BALL CORE ID		ENTRY PLUG BORE		APPROX WT.	
	RF		RTJ		in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	lbs	(kg)
	in	(mm)	in	(mm)																
150 ANSI*	15.50	(394)	16.00	(406)	7.34	(186)	5.35	(136)	10.03	(255)			4.12	(105)	4.56	(116)	4.59	(117)	310	(141)
300 ANSI*	16.00	(406)	16.62	(422)	7.34	(186)	5.35	(136)	10.03	(255)			4.12	(105)	4.56	(116)	4.59	(117)	325	(147)
600 ANSI	17.00	(432)	17.12	(435)	7.34	(186)	5.35	(136)	10.03	(255)			4.12	(105)	4.56	(116)	4.59	(117)	350	(159)
900 ANSI	18.00	(457)	18.12	(460)	7.34	(186)	5.35	(136)	10.03	(255)			4.12	(105)	4.56	(116)	4.59	(117)	370	(168)
1500 ANSI	21.50	(546)	21.62	(549)	21.00	(533)	6.25	(159)	25.82	(656)			4.00	(102)	4.75	(121)	4.97	(126)	600	(272)
6" Pig Valve	A (Overall Length)				B		C		D		E		VALVE BORE		BALL CORE ID		ENTRY PLUG BORE		APPROX WT.	
	RF		RTJ		in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	lbs	(kg)
	in	(mm)	in	(mm)																
150 ANSI*	18.00	(457)	18.38	(467)	9.50	(241)	7.12	(181)	9.20	(234)			6.12	(155)	6.75	(172)	6.72	(171)	580	(263)
300 ANSI*	18.88	(480)	19.38	(492)	9.50	(241)	7.12	(181)	9.20	(234)			6.12	(155)	6.75	(172)	6.72	(171)	620	(281)
600 ANSI	22.00	(559)	22.12	(562)	9.50	(241)	7.12	(181)	9.20	(234)			6.12	(155)	6.75	(172)	6.72	(171)	700	(317)
900 ANSI	24.00	(610)	24.12	(613)	21.00	(533)	7.12	(181)	27.06	(687)			6.12	(155)	6.75	(172)	6.72	(171)	770	(349)
1500 ANSI	27.75	(705)	28.00	(711)	27.40	(696)	8.63	(219)	31.08	(789)	15.62	(397)	6.00	(152)	7.00	(178)	6.94	(176)	1680	(762)
8" Pig Valve	A (Overall Length)				B		C		D		E		VALVE BORE		BALL CORE ID		ENTRY PLUG BORE		APPROX WT.	
Model P	RF		RTJ		in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	lbs	(kg)
	in	(mm)	in	(mm)																
150 ANSI*	23.50	(597)	23.88	(607)	29.00	(737)	11.00	(279)	32.50	(826)	16.50	(419)	8.00	(203)	9.00	(229)	9.18	(233)	1915	(868)
300 ANSI*	24.50	(622)	25.00	(635)	29.00	(737)	11.00	(279)	32.50	(826)	16.50	(419)	8.00	(203)	9.00	(229)	9.18	(233)	1965	(891)
600 ANSI	26.00	(660)	26.12	(663)	29.00	(737)	11.00	(279)	32.50	(826)	16.50	(419)	8.00	(203)	9.00	(229)	9.18	(233)	2085	(946)
900 ANSI	29.00	(737)	29.12	(740)	29.00	(737)	11.00	(279)	32.50	(826)	16.50	(419)	8.00	(203)	9.00	(229)	9.18	(233)	2215	(1005)
1500 ANSI	32.75	(832)	33.12	(841)	29.80	(757)	11.00	(279)	33.50	(851)	15.62	(397)	8.00	(203)	9.38	(238)	9.40	(239)	3000	(1361)
8" Pig Valve	A (Overall Length)				B		C		D		E		VALVE BORE		BALL CORE ID		ENTRY PLUG BORE		APPROX WT.	
Model D	RF		RTJ		in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	lbs	(kg)
	in	(mm)	in	(mm)																
	Consult with Argus for 150, 900 and 1500 ANSI Data																			
300 ANSI*	28.50	(724)	29.00	(737)	23.37	(594)	10.67	(271)	32.70	(831)	26.72	(679)	8.00	(203)	9.00	(229)	8.75	(222)	2075	(941)
600 ANSI*	31.20	(792)	31.32	(796)	23.37	(594)	10.67	(271)	32.70	(831)	26.72	(679)	8.00	(203)	9.00	(229)	8.75	(222)	2225	(1009)
900 ANSI*	35.00	(889)	35.12	(892)	24.65	(626)	11.24	(285)	33.34	(847)	31.72	(806)	8.00	(203)	8.88	(226)	8.75	(222)	2785	(1263)
10" Pig Valve	A (Overall Length)				B		C		D		E		VALVE BORE		BALL CORE ID		ENTRY PLUG BORE		APPROX WT.	
Model D	RF		RTJ		in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	lbs	(kg)
	in	(mm)	in	(mm)																
	Consult with Argus for 150, 900 and 1500 ANSI Data																			
300 ANSI*	35.36	(898)	35.86	(911)	26.09	(663)	12.00	(305)	34.56	(878)	32.33	(821)	10.00	(254)	11.00	(279)	10.75	(273)	3225	(1463)
600 ANSI*	37.12	(943)	37.25	(946)	26.09	(663)	12.00	(305)	34.56	(878)	32.33	(821)	10.00	(254)	11.00	(279)	10.75	(273)	3400	(1542)
12" Pig Valve	A (Overall Length)				B		C		D		E		VALVE BORE		BALL CORE ID		ENTRY PLUG BORE		APPROX WT.	
Model D	RF		RTJ		in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	in	(mm)	lbs	(kg)
	in	(mm)	in	(mm)																
	Consult with Argus for 150, 900 and 1500 ANSI Data																			
300 ANSI*	40.75	(1035)	41.25	(1048)	29.15	(740)	14.17	(360)	38.88	(988)	36.67	(931)	12.00	(305)	13.00	(330)	12.75	(324)	5120	(2322)
600 ANSI*	42.06	(1068)	42.19	(1071)	29.15	(740)	14.17	(360)	38.88	(988)	36.67	(931)	12.00	(305)	13.00	(330)	12.75	(324)	5300	(2404)

# SAVE MONEY AND IMPROVE EFFICIENCIES

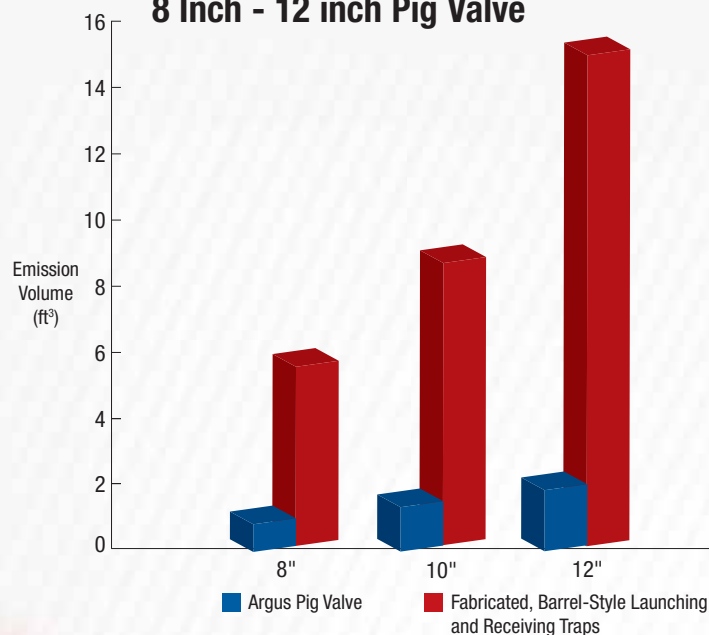
## Gas Emissions Comparison

Argus Pig Valve vs. Fabricated, Barrel-Style Launching and Receiving Traps

2 inch - 6 Inch Pig Valve



8 Inch - 12 inch Pig Valve



PHYSICAL VOLUME (ft³)

Size	Argus 600 Class Pig Valve	Fabricated, Barrel-Style Launching & Receiving Traps
2"	0.019	0.207
3"	0.049	0.433
4"	0.110	1.086
6"	0.304	2.865

PHYSICAL VOLUME (ft³)

Size	Argus 600 Class Pig Valve	Fabricated, Barrel-Style Launching & Receiving Traps
8"	0.884	5.756
10"	1.544	8.929
12"	2.379	15.212

## TRIM MATERIALS FOR STANDARD VALVES

Pressure Range	ASME/ANSI Class 150-1500
Temperature Range	-50°F to +250°F (-46°C to +121°C)
Body	ASTM A350 LF2
End Connection	ASTM A350 LF2
Ball	ASTM A350 LF2, ENP
Pig Entry Cap	ASTM A350 LF2
Trunnion / Bearing Plate	ASTM A350 LF2 w/ENP / ASTM A516 Gr. 70
Seat Ring	AISI 1020 / ASTM A350 LF2, ENP
Seat Spring	Inconel X-750
Primary Seals	HSN, LTN, Carboxylated Nitrile
Seat Ring Insert	Devlon 'V'
Bolting - Pressure Containing	ASTM A320 L7M / ASTM A194 L7M
Other trims are available upon request	



Argus Machine Co. Ltd. has provided design expertise, quality manufacturing and reliable service to the oil and gas industry since 1958. Argus has a quality assurance program that is certified to API Q1 and ISO 9001:2000. We hold five API licenses, assuring audited quality in all our products.

Achieve optimal flow line and pipeline performance and integrity with Argus pigging valves.

Consider these benefits:

- A much smaller footprint reduces the space required for pigging facilities.
- The pigging valve may be used as a traditional block valve reducing the number of valves in the pigging facility.
- Field construction time is reduced considerably due to the simple configuration and the limited requirement for ground support, piers and pilings in the traditional configuration.
- Emissions are reduced in excess of 80% compared to fabricated barrel-style launching and receiving traps.
- Built in safety features ensure lower personnel risk through the pigging operation.
- The application of the pigging valve simplifies the pigging operation through a single quarter-turn valve concept which minimizes training and operation time while reducing maintenance and overall costs.



Barnett Shale, 6" 600 ANSI Launching valve, with reduced bypass.



6" 600 ANSI Receiving valve, with full 6 inch bypass.



SINCE 1958

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