

Metal Seat Solid Wedge Valve



Construction Specifications

Sizes: 3" through 96"

Pressure Rating: 250 psi

Flange Drilling: ANSI B 16.1 CL 125# Standard
(250# drilling available upon request).

Body: Ductile Iron (ASTM A536 Gr. 65-45-12)

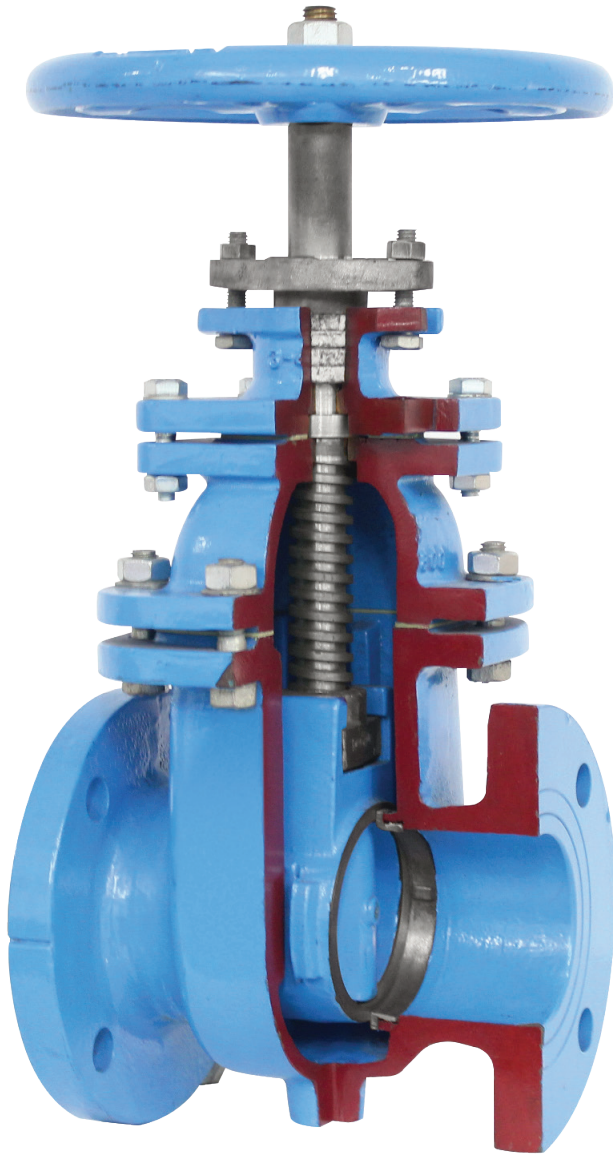
Disc: Ductile Iron (ASTM A536 Gr. 65-45-12)

Disc & Seat Ring: Bronze (ASTM B62)

Designed and manufactured for use in wastewater and sewage applications, the Henry Pratt Metal Seated Solid Wedge Valve is available in both non-rising stem and outside stem & yoke (OS&Y) designs. Available in sizes 3" through 96" the Metal Seated Solid Wedge Valve is designed in accordance with AWWA C500 standards as well as ANSI and ASTM standards. All valves 16" and larger are designed with bronze body and wedge guides. The valve is available with hand wheels, operating nuts and integrally cast mounting pads for gears or electric actuators and all valves are coated internally and externally with liquid epoxy conforming to AWWA C500.



- Conforms with AWWA C500, ANSI B16.1 CL. 125 # Drilling as standard. (250# drilling available upon request)
- Available with flanged or mechanical joint ends
- Bronze trim with 304 stainless steel stems
- Bronze body and wedge guides in all valves 16" and larger
- Valves can be manufactured with by-passes, clean-out ports, indicator, rollers and tracks as well as extension stems and floor stands.
- Available with o-ring stem seal or pull down packing



- Full flow waterway assures top performance and prevents clogging
- Extra wide bronze surfaces on disc and seat provide large seating area
- Corrosion resistant one piece stem is manufactured using high strength stainless steel
- Corrosion fitting stem to wedge connection maintains alignment of components
- Ductile iron valve body and wedge coated with liquid epoxy

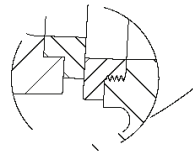
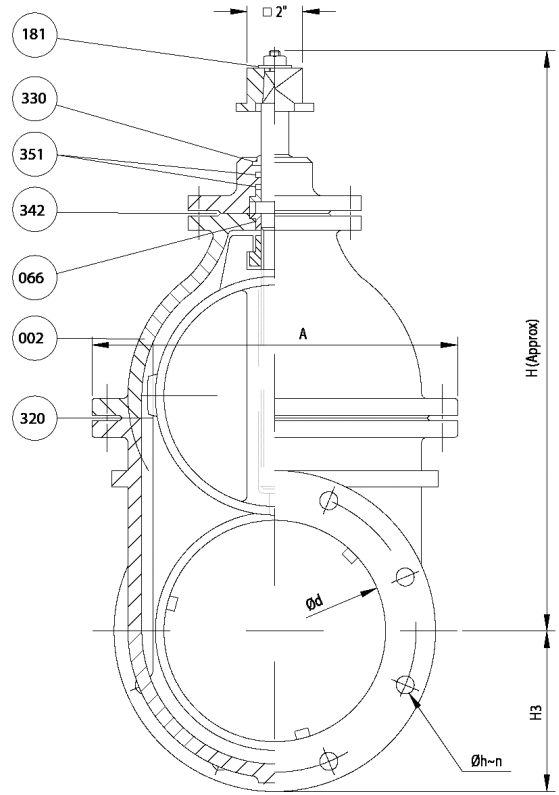
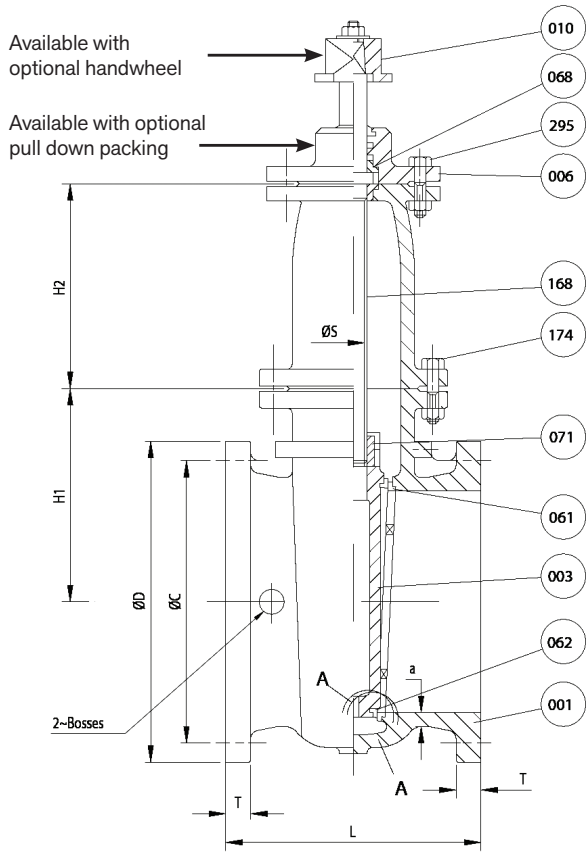
Suggested Specification

Metal Seat Solid Wedge Valves for wastewater and sewage applications should be manufactured in accordance with AWWA C500 standards. Pressure containing components should be ductile iron ASTM A536 65-45-12 and wedge seating surfaces and body seat rings are be cast from ASTM B62 bronze. Stems should have integral collars and be machined from corrosion resistant grade 304 stainless steel. Body and bonnet fasteners should be of rustproof material having the physical properties of ASTM A307.

Wedge valves are to be designed and manufactured with minimal moving parts to prevent clogging or buildup of foreign matter. Valve coatings shall be consistent with AWWA C500 standard. Valve testing and all markings shall conform to AWWA C500 standard.

Contact Henry Pratt Company at 877-436-7977 for additional information and certified product drawings.

Metal Seat Solid Wedge Gate Valve: Size 3" - 12"

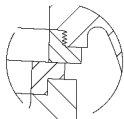
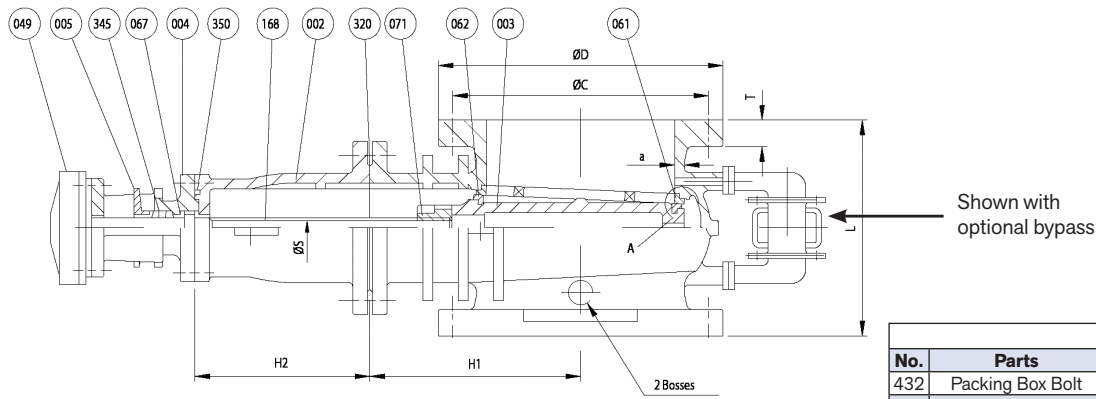
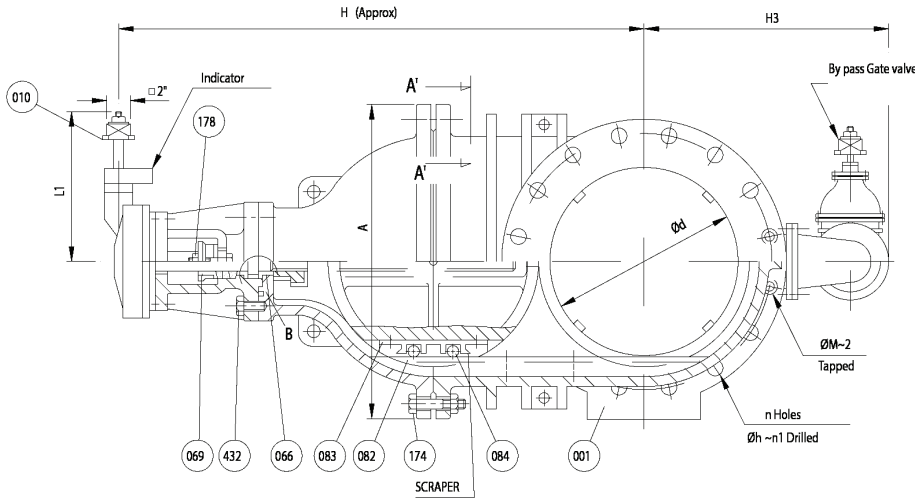


Detail A
Screwed in Body Seat

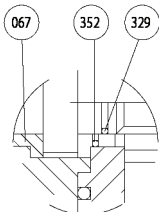
Size Ød	L	ANSI B 16.1 Class 125						a (min)	A	ØS at base of thread	H	H1	H2	H3
		ØD	ØC	Øh	n	T								
3	80	8	7 1/2	6	3/4	4	3/4	0.37	7.72	0.874	13.19	4.93	3.04	3.75
4	100	9	9	7 1/2	3/4	8	15/16	0.40	8.78	0.874	14.68	5.71	3.63	4.50
6	150	10 1/2	11	9 1/2	7/8	8	1	0.43	11.11	1.034	18.70	7.49	5.44	5.50
8	200	11 1/2	13 1/2	11 3/4	7/8	8	1 1/8	0.50	14.02	1.034	22.00	9.06	7.25	6.75
10	250	13	16	14 1/4	1	12	1 3/16	0.63	16.46	1.157	25.39	10.95	8.67	8.00
12	300	14	19	17	1	12	1 1/4	0.68	18.82	1.192	28.97	11.82	11.03	9.50

Material List				
No.	Parts	Material	ASTM.Design.	Qty
351	O-Ring	Rubber (Buna N)	D 2000 BK 707	2
342	Stuffing Box Gasket	Rubber (Buna N)	D 2000 BK 807	1
330	Wiper Ring	Rubber (Buna N)	D 2000 BK 707	1
320	Bonnet Gasket	Rubber (Buna N)	D 2000 BK 807	1
299	Stuffing Box Bolt	Zinc Coated Steel	A 307 Grade B	1 set
295	Stuffing Box Bolt & Nut	Zinc Coated Steel	A 307 Grade B	1 set
181	Top Nut	Zinc Coated Steel	A 307 Grade B	1
175	Bonnet Stud & Nut	Zinc Coated Steel	A 307 Grade B	1 set
174	Bonnet Bolt & Nut	Zinc Coated Steel	A 307 Grade B	1 set
168	Stem	Stainless Steel	A 276 Type 304	1
071	Stem Nut	Bronze	B62	1
068	Stuffing Box Bushing	Bronze	B62	1
066	Bonnet Bushing	Bronze	B62	1
062	Disc Seat Ring	Bronze	B62	2
061	Body Seat Ring	Bronze	B62	2
010	Operating Nut	Cast Iron	A 126 Class B	1
006	Stuffing Box	Ductile Iron	A 536 Gr.65-45-12	1
003	Disc	Ductile Iron	A 536 Gr.65-45-12	1
002	Bonnet	Ductile Iron	A 536 Gr.65-45-12	1
001	Body	Ductile Iron	A 536 Gr.65-45-12	1

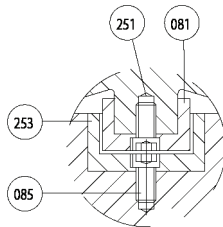
Metal Seat Solid Wedge Gate Valve: Size 14" - 24"



Detail A
Body Seat Screwed in



Detail B



Detail for Disc Guides
SECTION A-A'

Material List				
No.	Parts	Material	ASTM.Designation	Qty
432	Packing Box Bolt	Stainless Steel	A 276 Type 304	1 set
352	O-Ring C	Rubber (Buna N)	D 2000 BK 707	1
350	O-Ring A	Rubber (Buna N)	D 2000 BK 707	1
345	Packing	Braided Packing Synthetic Yarn with PTFE		1 set
329	O-Ring	Rubber (Buna N)	D 2000 BK 707	1
320	Bonnet Gasket	Rubber (Buna N)	D 2000 BK 807	1
253	Disc Guide	Bronze	B62	1
251	Body Guide Bolt	Stainless Steel	A 276 Type 304	1 set
178	Gland Bolt & Nut	Stainless Steel	A 276 Type 304	2
174	Bonnet Bolt & Nut	Stainless Steel	A 276 Type 304	1 set
168	Stem	Stainless Steel	A 276 Type 316	1
085	Disc Guide Bolt	Stainless Steel	A 276 Type 304	1
084	Roller	Bronze	B62	2
083	Roller Box	Bronze	B62	1
082	Bonnet Guide	Bronze	B62	2
081	Body Guide	Bronze	B62	2
071	Stem Nut	Bronze	B62	1
069	Gland Bushing	Bronze	B62	1
067	Packing Box Bushing	Bronze	B62	1
066	Bonnet Bushing	Bronze	B62	1
062	Disc Seat Ring	Bronze	B62	2
061	Body Seat Ring	Bronze	B62	2
049	Gear Operator	See Table	-----	1 set
010	Operating Nut	Cast Iron	A 126 Class B	1
005	Gland	Ductile Iron	A 536 Gr.65-45-12	1
004	Packing Box	Ductile Iron	A 536 Gr.65-45-12	1
003	Disc	Ductile Iron	A 536 Gr.65-45-12	1
002	Bonnet	Ductile Iron	A 536 Gr.65-45-12	1
001	Body	Ductile Iron	A 536 Gr.65-45-12	1

Size Ød	L	ANSI B 16.1 Class 125					a (min)	A	ØS at base of thread	H	H1	H2	H3	L1	ØM	n1	Gear Ratio	By pass size
		ØD	ØC	Øh	n	T												
14 350	15	21	18 3/4	1 1/8	12	1 3/8	0.78	22.76	1.398	38.58	14.59	12.68	11.50	11.18	1x8TPI (UNC)	10	2.5:1	2
16 400	16	23 1/2	21 1/4	1 1/8	16	1 7/16	0.87	26	1.556	44	16.64	14.38	25.79	14.58	1x8TPI (UNC)	14	3:1	3
18 450	17	25	22 3/4	1 1/4	16	1 9/16	0.95	29.29	1.556	47.33	18.71	15.59	27.88	14.58	1 1/8x7TPI (UNC)	14	3:1	3
20 500	18	27 1/2	25	1 1/4	20	1 11/16	1.10	32.52	1.831	51.38	20.79	17.56	27.88	14.58	1 1/8x7TPI (UNC)	18	3:1	3
24 600	20	32	29 1/2	1 3/8	20	1 7/8	1.18	36.54	2.028	60.24	22.05	24.73	32.63	17.32	1 1/4x7TPI (UNC)	18	4:1	4