

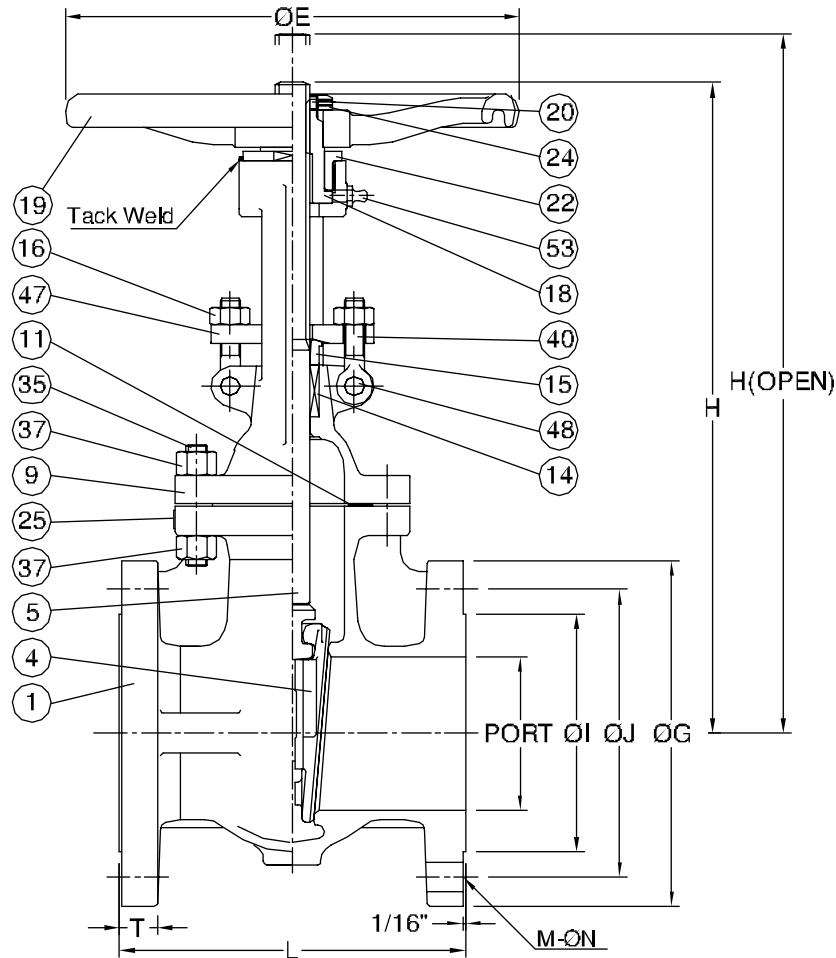
# Fig No: WARREN-1156

## MATERIALS LIST

NO.	NAME PARTS	MATERIALS
1	BODY	ASTM A351 Gr.CF8M
4	WEDGE	ASTM A351 Gr.CF8M (FLEXIBLE WEDGE)
5	STEM	ASTM A276 Gr.316
9	BONNET	ASTM A351 Gr.CF8M
11	GASKET	PTFE.
14	PACKING	PTFE.
15	GLAND	ASTM A351 Gr.CF8M
16	EYE BOLT NUT	ASTM A194 Gr.8 (HEAVY)
18	SLEEVE	ASTM A394 Gr.D2C
19	HANDWHEEL	ASTM A536 DUCTILE IRON
20	SET SCREW	ASTM A193 Gr.B8
22	STEM NUT	ASTM A351 Gr.CF8 (1-1/2" ~ 12")
23	WASHER	ASTM A276 Gr.304 (1" UNDER)
24	HANDWHEEL NUT	ASTM A351 Gr.CF8
25	NAME PLATE	ASTM A666-304
35	BONNET STUD	ASTM A193 Gr.B8 CLASS 2
37	BONNET NUT	ASTM A194 Gr.8 (HEAVY)
40	EYE BOLT	ASTM A193 Gr.B8
47	GLAND FLANGE	ASTM A351 Gr.CF8
48	EYE BOLT PIN	ASTM A276 Gr.304
53	GREASE FITTING	ANSI 304 (1-1/2" ABOVE)

## DIMENSIONS

SIZE		PORT	L	ØE	H	H(OPEN)	ØG	ØJ	ØI	T	M	ØN	unit:inch
													Wcig ht(lbs)
DN15	1/2"	0.59	4.25	3.94	7.01	7.72	3.50	2.38	1.38	0.38	4	5/8	7
DN20	3/4"	0.75	4.62	3.94	7.87	8.66	3.88	2.75	1.69	0.41	4	5/8	9
DN25	1"	1.00	5.00	5.91	9.13	10.24	4.25	3.12	2.00	0.44	4	5/8	15
DN40	1-1/2"	1.50	6.50	7.09	10.35	12.13	5.00	3.88	2.88	0.56	4	5/8	23
DN50	2"	2.00	7.00	7.09	10.98	13.27	6.00	4.75	3.62	0.62	4	3/4	29
DN65	2-1/2"	2.50	7.50	7.87	12.95	15.87	7.00	5.50	4.12	0.69	4	3/4	42
DN80	3"	3.11	8.00	7.87	14.41	17.83	7.50	6.00	5.00	0.75	4	3/4	53
DN100	4"	4.00	9.00	11.81	16.93	21.42	9.00	7.50	6.19	0.94	8	3/4	82
DN125	5"	5.00	10.00	11.81	19.96	25.59	10.00	8.50	7.31	0.94	8	7/8	119
DN150	6"	6.00	10.50	11.81	22.52	29.13	11.00	9.50	8.50	1.00	8	7/8	141
DN200	8"	8.00	11.50	13.78	28.54	37.17	13.50	11.75	10.62	1.12	8	7/8	223
DN250	10"	10.00	13.00	15.75	34.37	45.08	16.00	14.25	12.75	1.19	12	1	317
DN300	12"	12.00	14.00	17.72	39.72	52.44	19.00	17.00	15.00	1.25	12	1	494



BODY MARK  
(EXAMPLE)

WARREN

2  
150  
CF8M

### APPLICABLE STANDARDS:

Gate Valve:API 603  
Shell Wall Thickness:ANSI B16.34  
Face to Face:ANSI B16.10  
End Flanges:ANSI B16.5  
Inspection Per API 598

### TEST PRESSURE:

Shell (by Water),413 Psig  
Seat (by Water),303 Psig  
(by Air),80 Psig

**warren alloy**

	APPROVED BY.	CHECK BY.	DRAWN BY.	DRAWING NO.		MATERIAL		UNIT
SIGN	TONY	MICHAEL	SAYA	WARREN-1156		MATERIAL LIST		Inch
DATE	04/12/2009	04/12/2009	04/12/2009	REVISION	02	SCALE	FREE	

**GATE VALVES,  
ANSI CLASS 150**

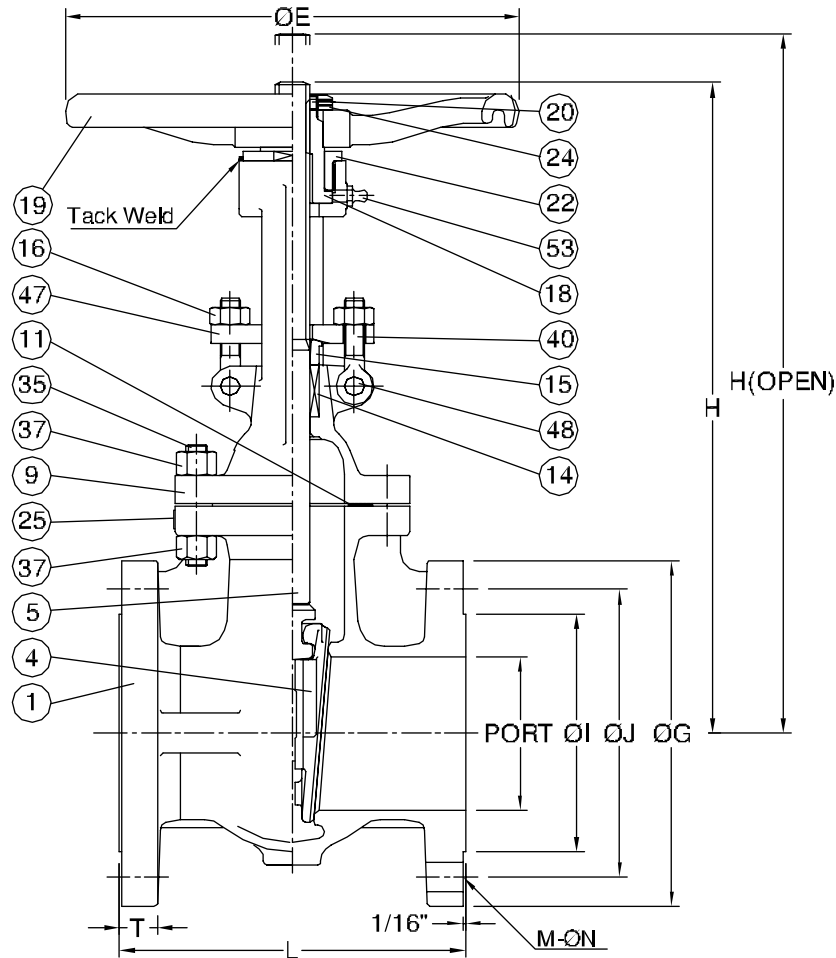
# Fig No: WARREN-1156PG

## MATERIALS LIST

NO.	NAME PARTS	MATERIALS
1	BODY	ASTM A351 Gr.CF8M
4	WEDGE	ASTM A351 Gr.CF8M (FLEXIBLE WEDGE)
5	STEM	ASTM A276 Gr.316
9	BONNET	ASTM A351 Gr.CF8M
11	GASKET	GRAPHITE
14	PACKING	GRAPHITE
15	GLAND	ASTM A351 Gr.CF8M
16	EYE BOLT NUT	ASTM A194 Gr.8 (HEAVY)
18	SLEEVE	ASTM A394 Gr.D2C
19	HANDWHEEL	ASTM A536 DUCTILE IRON
20	SET SCREW	ASTM A193 Gr.B8
22	STEM NUT	ASTM A351 Gr.CF8 (1-1/2" ~ 12")
23	WASHER	ASTM A276 Gr.304 (1" UNDER)
24	HANDWHEEL NUT	ASTM A351 Gr.CF8
25	NAME PLATE	ASTM A666-304
35	BONNET STUD	ASTM A193 Gr.B8 CLASS 2
37	BONNET NUT	ASTM A194 Gr.8 (HEAVY)
40	EYE BOLT	ASTM A193 Gr.B8
47	GLAND FLANGE	ASTM A351 Gr.CF8
48	EYE BOLT PIN	ASTM A276 Gr.304
53	GREASE FITTING	ANSI 304 (1-1/2" ABOVE)

## DIMENSIONS

SIZE		PORT	L	ØE	H	H(OPEN)	ØG	ØJ	ØI	T	M	ØN	unit:inch
													Wcig ht(lbs)
DN15	1/2"	0.59	4.25	3.94	7.01	7.72	3.50	2.38	1.38	0.38	4	5/8	7
DN20	3/4"	0.75	4.62	3.94	7.87	8.66	3.88	2.75	1.69	0.41	4	5/8	9
DN25	1"	1.00	5.00	5.91	9.13	10.24	4.25	3.12	2.00	0.44	4	5/8	15
DN40	1-1/2"	1.50	6.50	7.09	10.35	12.13	5.00	3.88	2.88	0.56	4	5/8	23
DN50	2"	2.00	7.00	7.09	10.98	13.27	6.00	4.75	3.62	0.62	4	3/4	29
DN65	2-1/2"	2.50	7.50	7.87	12.95	15.87	7.00	5.50	4.12	0.69	4	3/4	42
DN80	3"	3.11	8.00	7.87	14.41	17.83	7.50	6.00	5.00	0.75	4	3/4	53
DN100	4"	4.00	9.00	11.81	16.93	21.42	9.00	7.50	6.19	0.94	8	3/4	82
DN125	5"	5.00	10.00	11.81	19.96	25.59	10.00	8.50	7.31	0.94	8	7/8	119
DN150	6"	6.00	10.50	11.81	22.52	29.13	11.00	9.50	8.50	1.00	8	7/8	141
DN200	8"	8.00	11.50	13.78	28.54	37.17	13.50	11.75	10.62	1.12	8	7/8	223
DN250	10"	10.00	13.00	15.75	34.37	45.08	16.00	14.25	12.75	1.19	12	1	317
DN300	12"	12.00	14.00	17.72	39.72	52.44	19.00	17.00	15.00	1.25	12	1	494



BODY MARK  
(EXAMPLE)

WARREN

2  
150  
CF8M

### APPLICABLE STANDARDS:

Gate Valve:API 603  
Shell Wall Thickness:ANSI B16.34  
Face to Face:ANSI B16.10  
End Flanges:ANSI B16.5  
Inspection Per API 598

### TEST PRESSURE:

Shell (by Water),413 Psig  
Seat (by Water),303 Psig  
(by Air),80 Psig

**warren alloy**

	APPROVED BY.	CHECK BY.	DRAWN BY.	DRAWING NO.		MATERIAL		UNIT
SIGN	TONY	MICHAEL	SAYA	WARREN-1156PG		MATERIAL LIST		Inch
DATE	04/12/2009	04/12/2009	04/12/2009	REVISION	02	SCALE	FREE	

**GATE VALVES,  
ANSI CLASS 150**

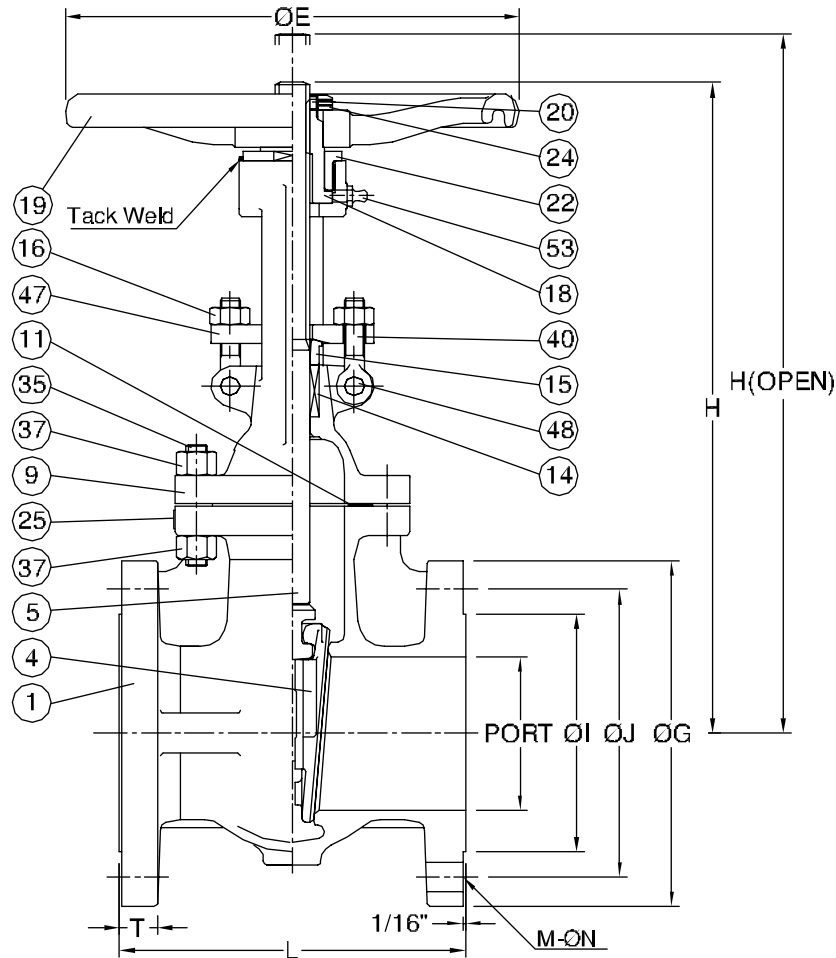
# Fig No: WARREN-1157

## MATERIALS LIST

NO.	NAME PARTS	MATERIALS
1	BODY	ASTM A351 Gr.CG8M
4	WEDGE	ASTM A351 Gr.CG8M (FLEXIBLE WEDGE)
5	STEM	ASTM A276 Gr.317
9	BONNET	ASTM A351 Gr.CG8M
11	GASKET	PTFE.
14	PACKING	PTFE.
15	GLAND	ASTM A351 Gr.CF8M
16	EYE BOLT NUT	ASTM A194 Gr.8 (HEAVY)
18	SLEEVE	ASTM A394 Gr.D2C
19	HANDWHEEL	ASTM A536 DUCTILE IRON
20	SET SCREW	ASTM A193 Gr.B8
22	STEM NUT	ASTM A351 Gr.CF8 (1-1/2" ~ 12")
23	WASHER	ASTM A276 Gr.304 (1" UNDER)
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25	NAME PLATE	ASTM A666-304
35	BONNET STUD	ASTM A193 Gr.B8 CLASS 2
37	BONNET NUT	ASTM A194 Gr.8 (HEAVY)
40	EYE BOLT	ASTM A193 Gr.B8
47	GLAND FLANGE	ASTM A351 Gr.CF8
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53	GREASE FITTING	ANSI 304 (1-1/2" ABOVE)

## DIMENSIONS

SIZE		PORT	L	ØE	H	H(OPEN)	ØG	ØJ	ØI	T	M	ØN	unit:inch
													Wcig ht(lbs)
DN15	1/2"	0.59	4.25	3.94	7.01	7.72	3.50	2.38	1.38	0.38	4	5/8	7
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DN25	1"	1.00	5.00	5.91	9.13	10.24	4.25	3.12	2.00	0.44	4	5/8	15
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(EXAMPLE)

WARREN

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CG8M

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Inspection Per API 598

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Seat (by Water),303 Psig  
(by Air),80 Psig

**warren alloy**

	APPROVED BY.	CHECK BY.	DRAWN BY.	DRAWING NO.		MATERIAL		UNIT
SIGN	TONY	MICHAEL	SAYA	WARREN-1157		MATERIAL LIST		Inch
DATE	04/12/2009	04/12/2009	04/12/2009	REVISION	02	SCALE	FREE	

**GATE VALVES,  
ANSI CLASS 150**