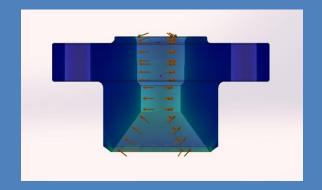


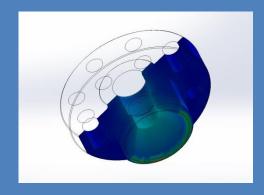
# FITTING CATALOG



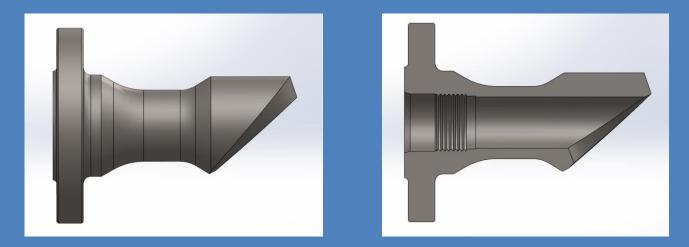
www.wwmwinc.com

Worldwide Machining & Welding manufactures a complete line of fittings. Our fittings are held to stringent tolerances and hand assembled by select employees, to ensure perfect operation every time. All fittings are backed by FEA (Finite Element Analysis) Studies to ensure proper operation throughout the duration of use. We strive to provide the shortest lead time possible.





Worldwide Machining & Welding also produces custom fittings to order based upon customer specifications. These can be any of our standard fittings in a different configuration as well as completely custom.



www.wwmwinc.com

# **Flanges and Specialty Fittings**

Worldwide Machining & Welding has the ability to manufacture Spectacle Blinds, Flushing Rings, as well as Custom Spacer Rings to customer specifications.







www.wwmwinc.com



# **FOL FITTINGS**

(FLANGE-O-LET)

WorldWide Machining & Welding, Inc., has developed a single bodied FOL (Flange-O-Let) fitting with integral reinforcement.

This NEW single body design reduces the number of welds required during the manufacturing process. The elimination of the weld between the main body and the weld-o-let reduces manufacturing costs and increases the overall strength of the FOL.

#### FIELD APPLICATION

FOL fittings differ from a TORF (Thread-O-Ring, Flanged) fitting, as FOLs do not contain internal threading, an aluminum bronze plug, a Viton o-ring or a Teflon oring backer. FOL fittings were developed with the intention that they be used in the place of a standard weld-o-let and flange combination, commonly used in the pipeline industry.

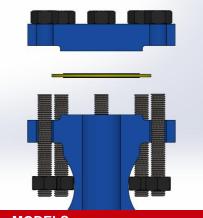
FOL fittings are fully compatible with current hot tapping machines.

#### FEATURES/SPECIFICATIONS

- Main body machined out of a solid piece of SA350 LF2 CL1 low temp or A105 material.
- CGI 304 gasket with an option for 316.
- Raised face blind flange machined out of SA350 LF2 CL1 low temp or A105 material.
- B7 studs and nuts with an option for L7.
- Material test reports provided for all fittings supplied.

#### PROCUREMENT

Price and lead time quotes available upon request.

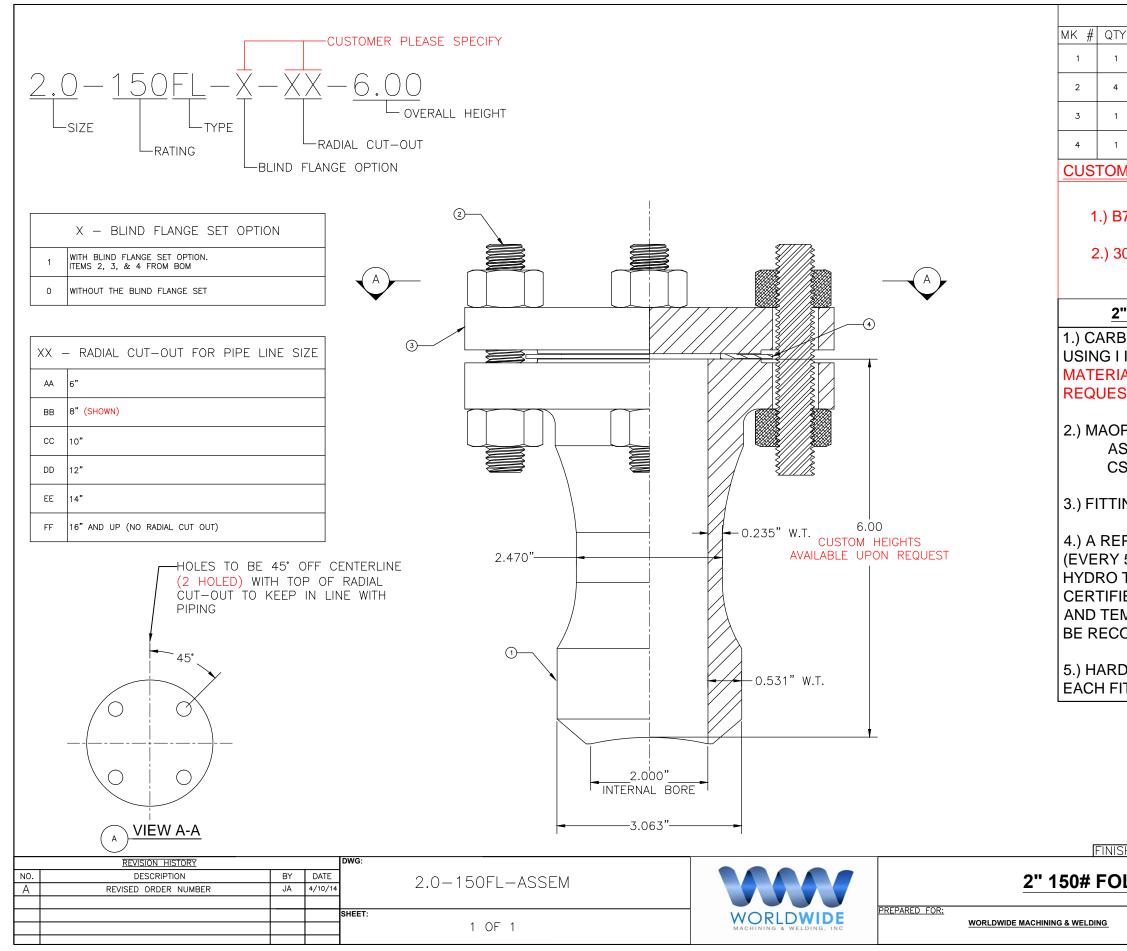


#### MODELS

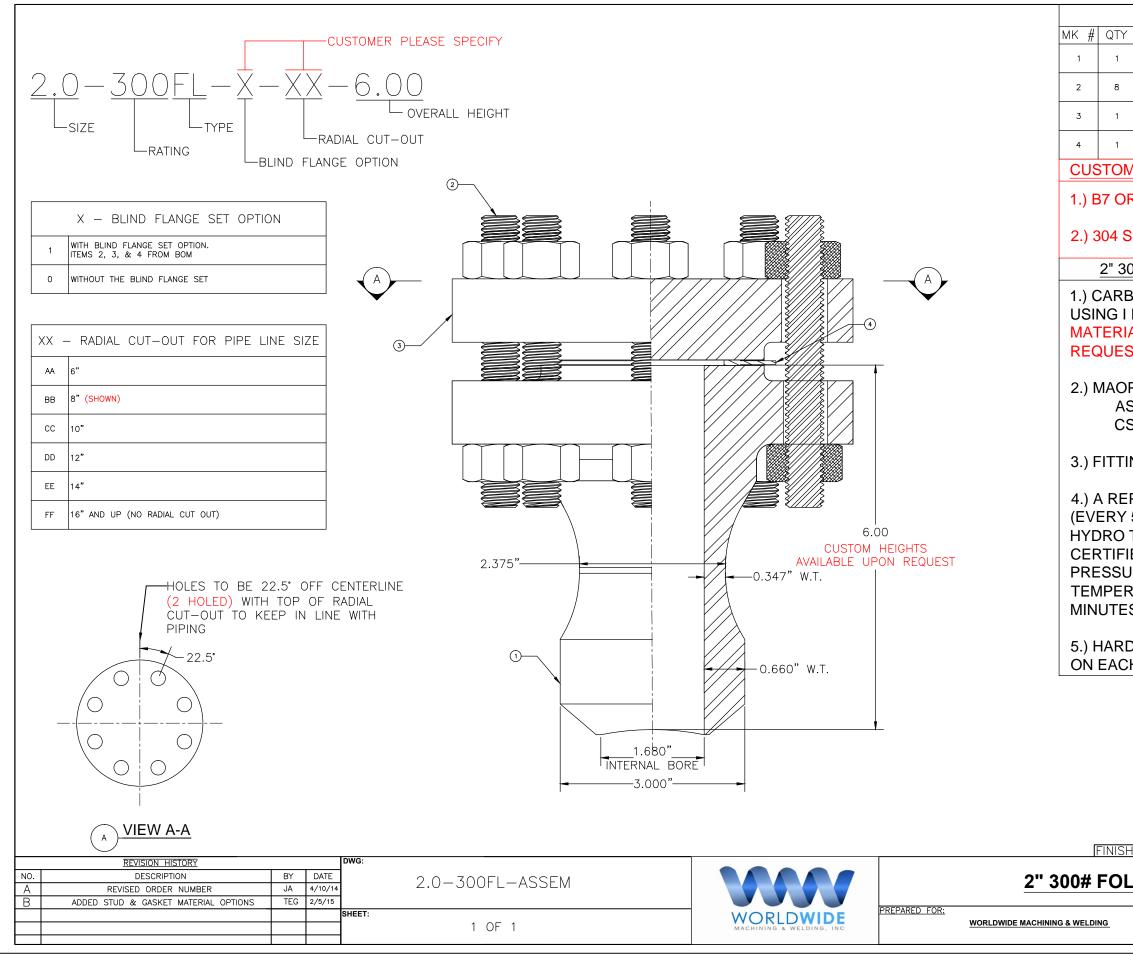
2.0"	ANSI	150
2.0"	ANSI	300
2.0"	ANSI	600
3.0"	ANSI	150
3.0"	ANSI	300
3.0"	ANSI	600
4.0"	ANSI	150
4.0"	ANSI	300
4.0"	ANSI	600

Custom sizes available upon request.

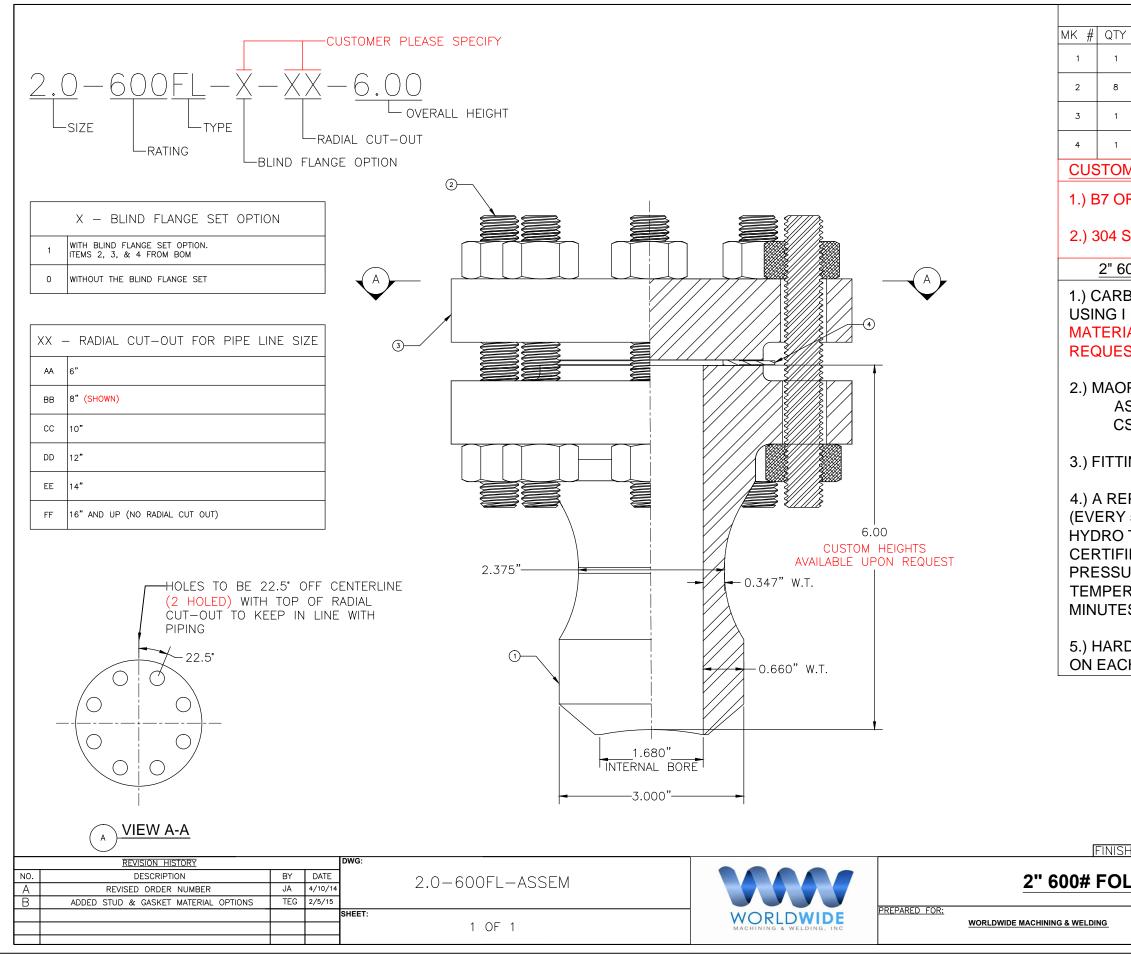




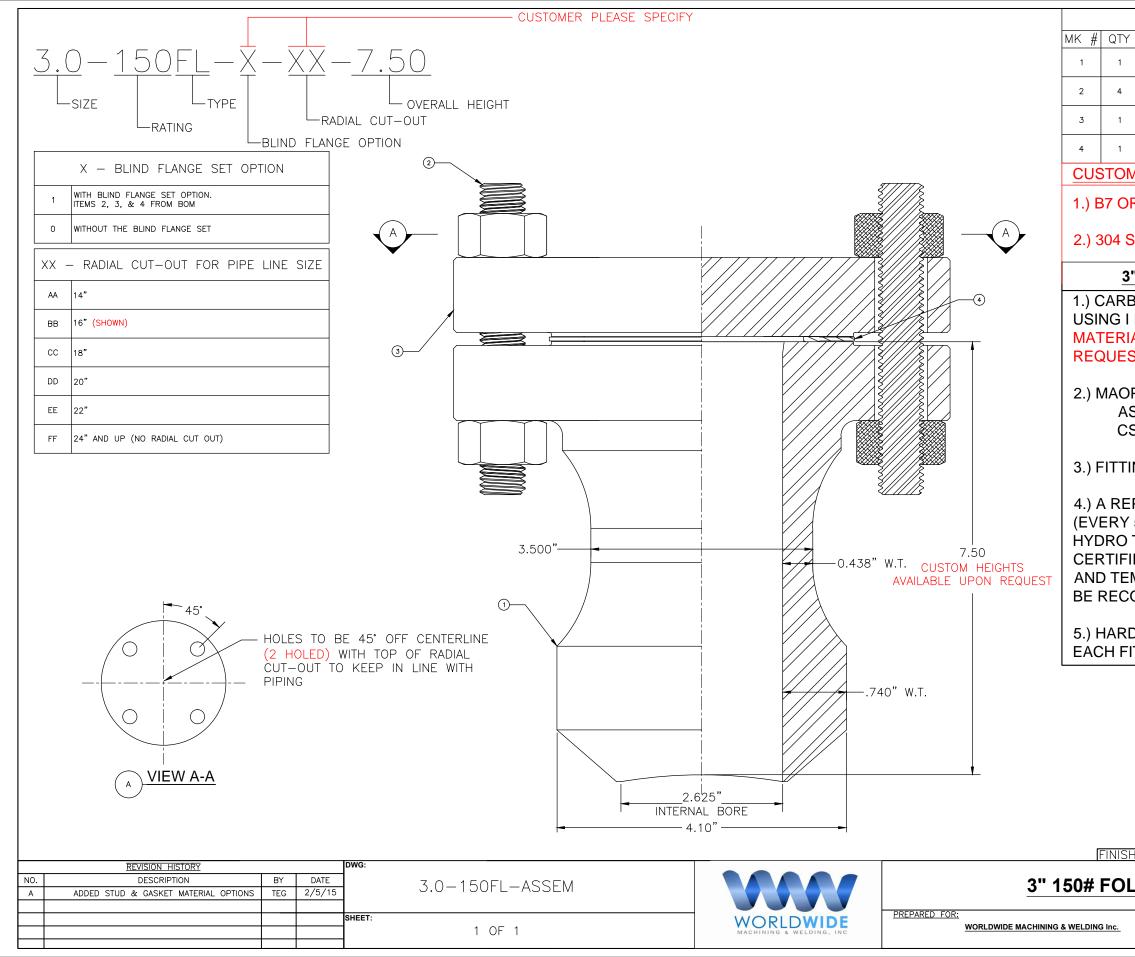
BII	L OF N	MATERI	۹L		
ſ	DESCR	RIPTION		-	MAT'L
FLANGE-O-L	ET MAIN BODY				SA 350 LF2 CLASS 1 OF A105
STUD WITH 2	2 NUTS				B7 OR L7
BLIND FLANG	E				SA 350 LF2 CLASS 1 OF A105
SPIRAL SEAL	GASKET CGI				304 OR 316
IER PLEA	ASE SPE	CIFY W	HEN	ORD	ERING
7 OR L7 S 04 SS OR			SEAI	_ GA	SKET
' 150# FO	L DATA	SPECIF	ICAT	IONS	6
BON EQUI I W AND AL TYPES ST)	CSA FOF	MULAS	6 (CL	JSTC	M
D: SME B31.4 SA Z662 C		-	SI		
NG IS DE	SIGNED	TO -50°	F		
PRESENT 500TH UN TESTED / ED CHAR MPERATU ORDED E	NIT PROI AT 428 P TS PROV JRE. THE	DUCED) SI FOR /IDED F TEMPI	4.25   For F Erat	HOU	SURE
DNESS TE TTING.	ESTING T	O BE P	REFC	DRMI	ED ON
HED PROD	UCT TO B	E PAINTE			
L		DRAWN – CHECKED			+-10-2014 )4-10-2014
		APPROVED			4-10-2014
	PREPARED BY	WORLDWIDE	405 JOHN	NG & WE	LDING INC
	Pł	H: (715) 394-6006	SUPERIOR, V	VI 54880	FX: (715) 394-6007
	•				



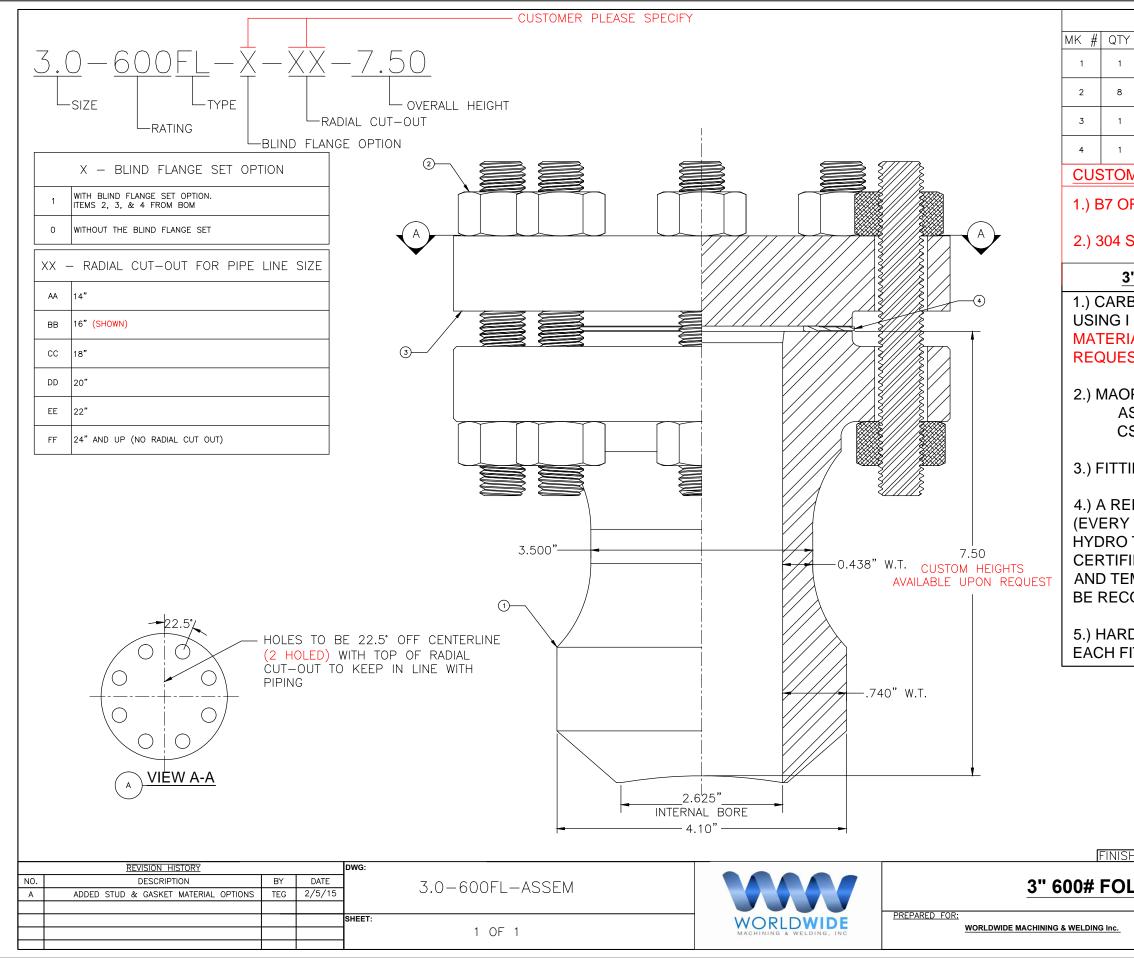
BILL OF MATERIAL	
Y DESCRIPTION	MAT'L
FLANGE-O-LET MAIN BODY	SA 350 / A105
STUD WITH 2 NUTS	B7 OR L7
BLIND FLANGE	SA 350 / A105
SPIRAL SEAL GASKET CGI	304 OR 316
MER PLEASE SPECIFY WHEN ORE	DERING
OR L7 STUDS & NUTS	
SS OR 316 SS SPIRAL SEAL GASK	ET
300# FOL DATA SPECIFICATIONS	
BON EQUIVALENT OF 0.43% MAXI I I W AND CSA FORMULAS (CUSTO IAL TYPES & GRADES AVAILABLE ST)	MC
DP: ASME B31.4/.6: 740 PSI CSA Z662 CAT I I / .6: 720 PSI	
TING IS DESIGNED TO -50°F	
EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL B D TESTED AT 1110 PSI FOR 4.25 HC FIED CHARTS PROVIDED FOR URE AND TEMPERATURE. THE RATURE WILL BE RECORDED EVE ES.	OURS.
RDNESS TESTING TO BE PREFORM	1ED
APPROVED - DATE IEG - 0	4-10-2014 04-11-2014 4-11-2014
PREPARED BY: WORLDWIDE MACHINING & WE 405 JOHN AVE SUPERIOR, WI 54880	
PH: (715) 394-6006 www.wwmwinc.com	FX: (715) 394-6007



BILL OF MATERIAL
Y   DESCRIPTION   MAT'L
FLANGE-O-LET MAIN BODY SA 350 / A105
STUD WITH 2 NUTS B7 OR L7
BLIND FLANGE SA 350 / A105
SPIRAL SEAL GASKET CGI 304 OR 316
MER PLEASE SPECIFY WHEN ORDERING
OR L7 STUDS & NUTS
SS OR 316 SS SPIRAL SEAL GASKET
600# FOL DATA SPECIFICATIONS
RBON EQUIVALENT OF 0.43% MAXIMUM I I W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST)
DP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSI
TING IS DESIGNED TO -50°F
EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR SURE AND TEMPERATURE. THE ERATURE WILL BE RECORDED EVERY 15 ES.
RDNESS TESTING TO BE PREFORMED CH FITTING.
SHED PRODUCT TO BE PAINTED WORLDWIDE BLUE DRAWN – DATE BF – 04–10–2014 CHECKED – DATE TEG – 04–11–2014 APPROVED – DATE JA – 04–11–2014
PREPARED BY: WORLDWIDE MACHINING & WELDING INC 405 JOHN AVE SUPERIOR, WI 54880
PH: (715) 394-6006 www.wwmwinc.com FX: (715) 394-6007



В	LL OF	MATERI	4L		
Ý	DESC	RIPTION		N	1AT'L
FOL MAIN E	ODY			SA	350 / A105
STUD WITH	2 NUTS			В7	OR L7
BLIND FLAN	GE			SA	350 / A105
SPIRAL SEA	_ GASKET CGI			304	OR 316
MER PLE	ASE SPE	ECIFY W	/HEN C	RDE	RING
R L7 ST	JDS & NI	JTS			
SS OR 3 <sup>.</sup>	I6 SS SP	IRAL SE	AL GA	SKET	
3" 150# F	OL DATA	SPECI	FICATI	ONS	
IAL TYPE ST) )P: .SME B3 <sup>2</sup>	) CSA FC S & GRA 1.4/.6: 285	DES AV	/AILABI		
SA Z662	CATII/	.6: 275 F	PSI		
ING IS D	ESIGNE	D TO -50	°F		
EPRESEN 500TH U TESTED TED CHA MPERA CORDED	JNIT PRO AT 428 RTS PRO TURE. TH	)DUCED PSI FOR )VIDED IE TEMF	) ) WILL 4.25 F FOR P PERATU	IOUR RESS	URE
DNESS <sup>-</sup> ITTING.	ESTING	TO BE I	PREFO	RMEI	D ON
SHED PROI	DUCT TO E	<u>3Ę PAINT</u> I	<u>ED WQR</u>	LDWIDE	<u>BLUE</u>
<u> </u>		DRAWN -	DATE TE	G- 2-15 A- 2-15	-2015 -2015
<u>L</u>		APPROVED			-2015 5-2015
	PREPARED B		405 JOHN AVE	=	G INC
	F	PH: (715) 394-6006	SUPERIOR, WI 54		15) 394-6007



BII	L OF N	/ATERI/	۹L	
Y	DESCR	IPTION		MAT'L
FOL MAIN BO	)DY			SA 350 / A105
STUD WITH 2	2 NUTS			B7 OR L7
BLIND FLANG	E			SA 350 / A105
SPIRAL SEAL	GASKET CGI			304 OR 316
MER PLE	ASE SPE	CIFY W	HEN O	RDERING
OR L7 STU	IDS & NU	ITS		
SS OR 31	6 SS SPI	RAL SE	AL GAS	SKET
3" 600# F0	OL DATA	SPECI	FICATIO	ONS
BON EQU I I W AND IAL TYPE ST)	CSA FO	RMULA	S (CUS	ТОМ
)P:				
SME B31 SA Z662			PSI	
ING IS DE	ESIGNED	TO -50	°F	
EPRESEN 500TH U TESTED IED CHAI MPERAT CORDED E	NIT PRO AT 2220 RTS PRO URE. TH	DUCED PSI FO VIDED E TEMF	) WILL R 4.25 H FOR PF PERATU	HOURS. RESSURE
DNESS T	ESTING	TO BE I	PREFOR	RMED ON
Shed prod	<u>UCT TO B</u>	<u>E PAINTE</u>   drawn –		<u>DWIDE BLUE</u> – 2–15–2015
L		CHECKED		
	PREPARED BY:	APPROVED		
			405 JOHN AVE SUPERIOR, WI 5488	
	PH	1: (715) 394-6006	www.wwmwinc.com	



# **TORF FITTINGS**

(THREADED O-RING, FLANGED)

# WorldWide Machining & Welding, Inc. has developed a single bodied TORF (Threaded O-Ring, Flanged) fitting with integral reinforcement.

This new single body design reduces the number of welds required during the manufacturing process. The elimination of the weld between the main body and the weld-o-let reduces manufacturing costs and increases the overall strength of the TORF.



#### FIELD APPLICATION

TORF fittings can be used in a variety of applications, such as for purge and equalization during drain-up operations. TORF fittings are fully compatible with current hot tapping machines, thermometer wells, gauge adapters and other probe instrumentation devices.

#### FEATURES/SPECIFICATIONS

- Main body machined out of a solid piece of SA350 LF2 CL1 low temp or A105 material.
- Aluminum bronze plug.
- Viton o-ring.
- Teflon o-ring backer.
- CGI 304 gasket with an option for 316.
- Raised face blind flange machined out of SA350 LF2 CL1 low temp or A105 material.
- B7 studs and nuts with an option for L7.
- Material test reports provided for all fittings supplied.

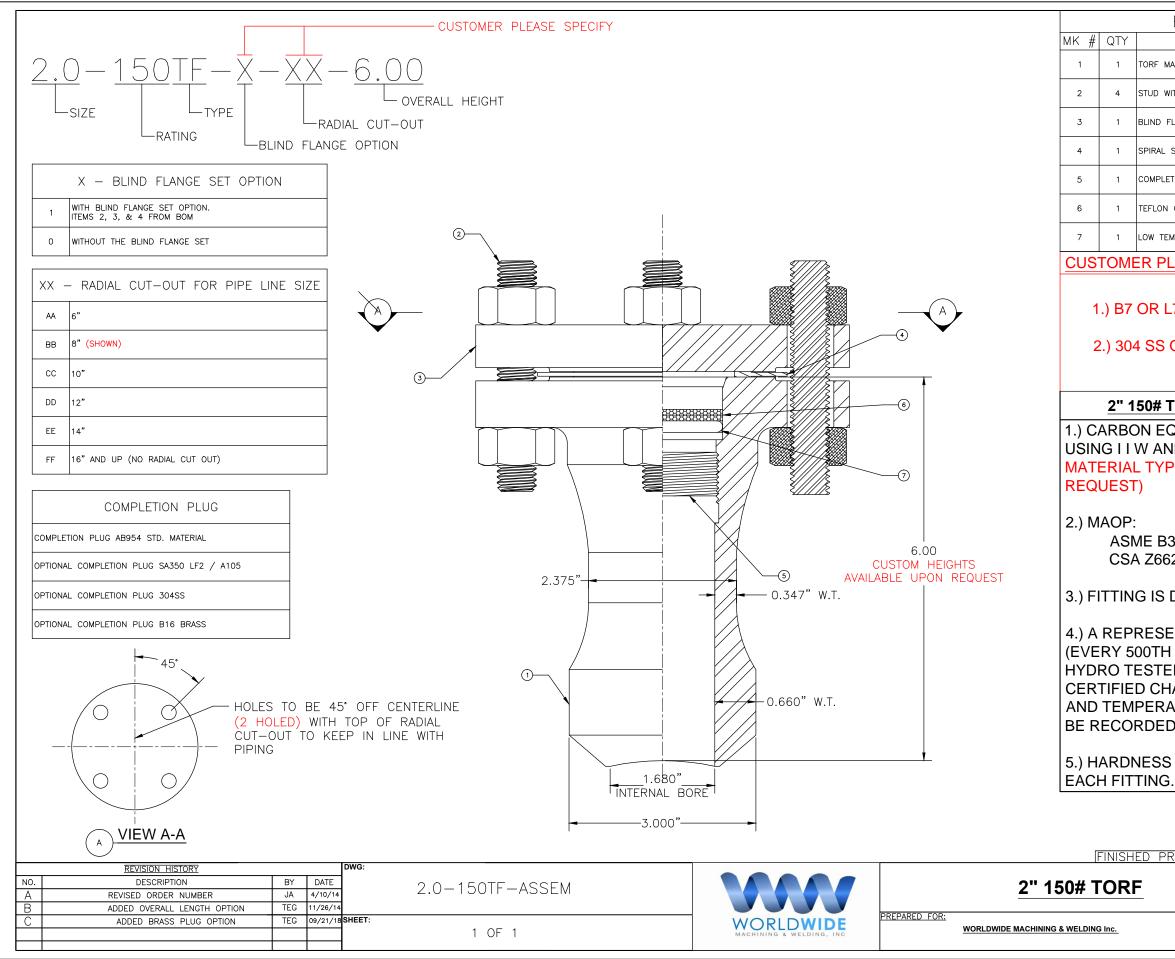
#### PROCUREMENT

Price and lead time quotes available upon request.



MODELS		
2.0"	ANSI	150
2.0"	ANSI	300
2.0"	ANSI	600
2.0"	ANSI	900
3.0"	ANSI	150
3.0"	ANSI	600

Custom sizes available upon request



	BILL OF MATERIAL	
Y	DESCRIPTION	MAT'L
	TORF MAIN BODY	SA 350/ A105
	STUD WITH 2 NUTS	B7 OR L7
	BLIND FLANGE	SA 350 LF2 CLASS 1
	SPIRAL SEAL GASKET CGI	304 OR 316
	COMPLETION PLUG (STD. MATERIAL)	AB954/ BRASS
	TEFLON O-RING BACK UP	PTFE
	LOW TEMP O-RING	VITON
ME	ER PLEASE SPECIFY WHEN ORDE	RING
_		

2.) 304 SS OR 316 SS SPIRAL SEAL GASKET

# **2" 150# TORF DATA SPECIFICATIONS**

1.) CARBON EQUIVALENT OF 0.43% MAXIMUM USING I I W AND CSA FORMULAS (CUSTOM MATERIAL TYPES & GRADES AVAILABLE UPON

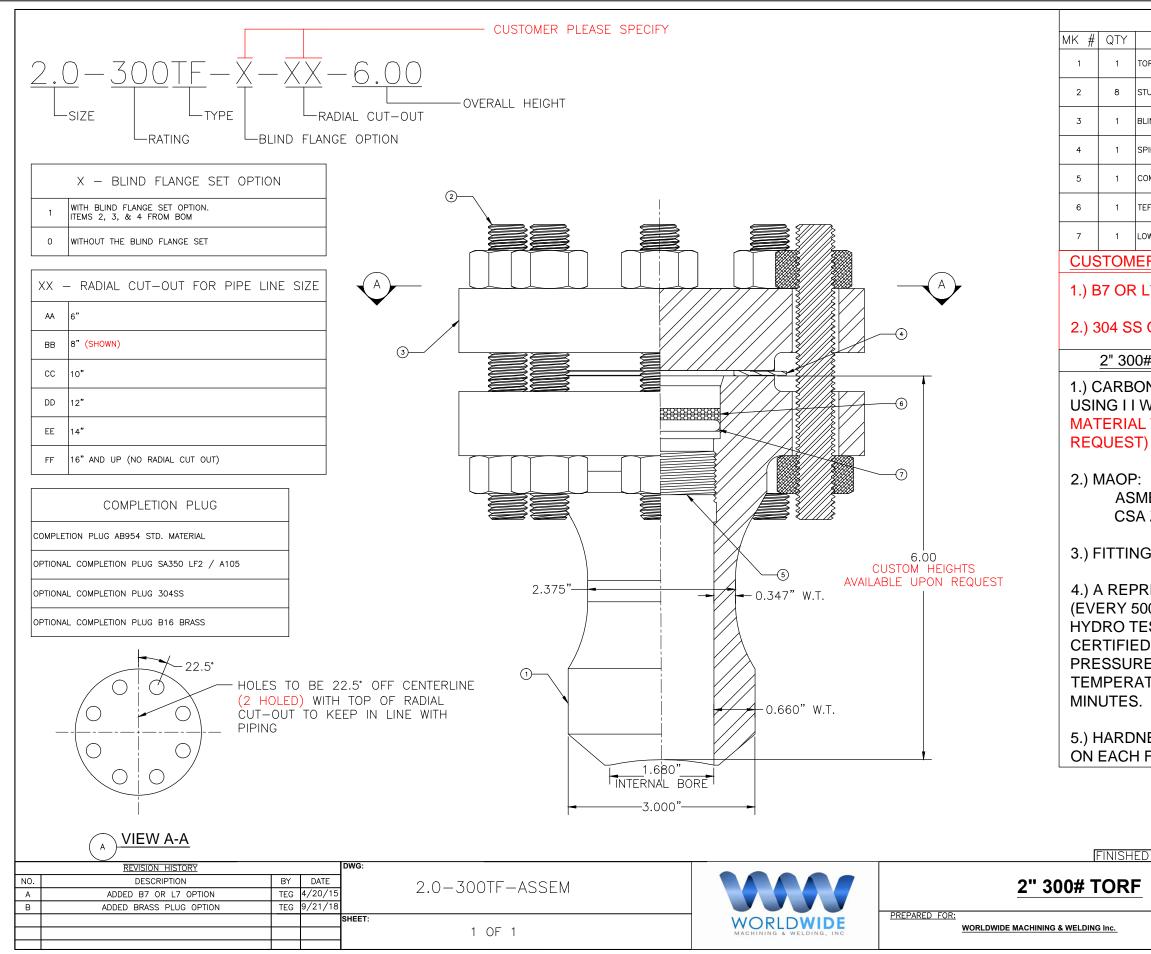
ASME B31.4/.6: 285 PSI CSA Z662 CAT I I / .6: 275 PSI

3.) FITTING IS DESIGNED TO -50°F

4.) A REPRESENTATIVE FITTING (EVERY 500TH UNIT PRODUCED) WILL BE HYDRO TESTED AT 428 PSI FOR 4.25 HOURS. CERTIFIED CHARTS PROVIDED FOR PRESSURE AND TEMPERATURE. THE TEMPERATURE WILL **BE RECORDED EVERY 15 MINUTES.** 

# 5.) HARDNESS TESTING TO BE PREFORMED ON

SHED	PROD	UCT	TO	BE	. PAINT	ED W	ORLD	WIDE	BLUE
					DRAWN -	- DATE	BF —	04-10-	-2014
RF					CHECKED	– DATE	TEG –	04-11	-2014
					APPROVED	<ul> <li>DATE</li> </ul>	JA —	04-11-	-2014
		PREPA	RED	<u>BY:</u>	WORLDWID		ING & W	/ELDING	INC
						405 JOH			
				PH: (	(715) 394-6006	SUPERIOR		FX: (715)	394-6007



		BILL OF MATERIAL				
MK #	QTY	DESCRIPTION	MAT'L			
1	1	TORF MAIN BODY	SA 350 / A105			
2	B7 OR L7					
3	1	BLIND FLANGE	SA 350 LF2 CLASS 1			
4	4 1 SPIRAL SEAL GASKET CGI					
5	5 1 COMPLETION PLUG (STD. MATERIAL)					
6	1	TEFLON O-RING BACK UP	PTFE			
7	7 1 LOW TEMP O-RING VITON					
CUS	STOM	ER PLEASE SPECIFY WHEN ORI	DERING			

# 2.) 304 SS OR 316 SS SPIRAL SEAL GASKET

## 2" 300# TORF DATA SPECIFICATIONS

1.) CARBON EQUIVALENT OF 0.43% MAXIMUM USING I I W AND CSA FORMULAS (CUSTOM MATERIAL TYPES & GRADES AVAILABLE UPON

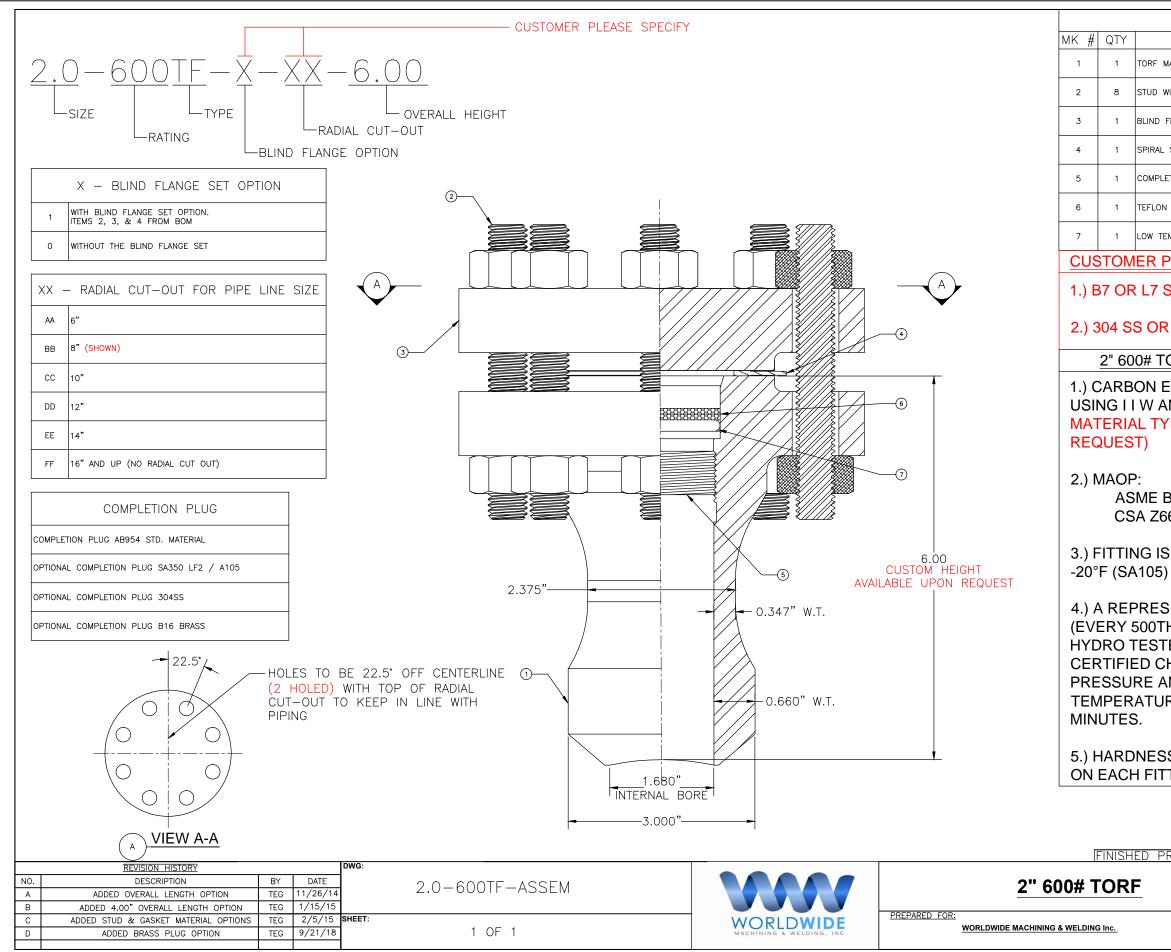
ASME B31.4/.6: 740 PSI CSA Z662 CAT I I / .6: 720 PSI

3.) FITTING IS DESIGNED TO -50°F

4.) A REPRESENTATIVE FITTING (EVERY 500TH UNIT PRODUCED) WILL BE HYDRO TESTED AT 1110 PSI FOR 4.25 HOURS. CERTIFIED CHARTS PROVIDED FOR PRESSURE AND TEMPERATURE. THE **TEMPERATURE WILL BE RECORDED EVERY 15** 

5.) HARDNESS TESTING TO BE PREFORMED ON EACH FITTING.

HED PR	ODUCT TO BE	E PAINTED W	ORLDWIDE BLUE
		DRAWN – DATE	TEG- 09-23-2014
RF		CHECKED – DATE	APX- 4-20-2015
		APPROVED – DATE	TEG- 4-20-2015
	PREPARED BY:	WORLDWIDE MACHIN 405 JOH	
	PH:	(715) 394-6006 SUPERIOR	



	BILL OF MATERIAL						
MK #	QTY	DESCRIPTION	MAT'L				
1	1	TORF MAIN BODY	SA 350 / A105				
2	B7 OR L7						
3	1	BLIND FLANGE	SA 350 LF2 CLASS 1				
4	4 1 SPIRAL SEAL GASKET CGI						
5	5 1 COMPLETION PLUG (STD. MATERIAL)						
6	1	TEFLON O-RING BACK UP	PTFE				
7	7 1 LOW TEMP O-RING VITON						
CUS	STOM	ER PLEASE SPECIFY WHEN OR	DERING				

# 2.) 304 SS OR 316 SS SPIRAL SEAL GASKET

## 2" 600# TORF DATA SPECIFICATIONS

1.) CARBON EQUIVALENT OF 0.43% MAXIMUM USING I I W AND CSA FORMULAS (CUSTOM MATERIAL TYPES & GRADES AVAILABLE UPON

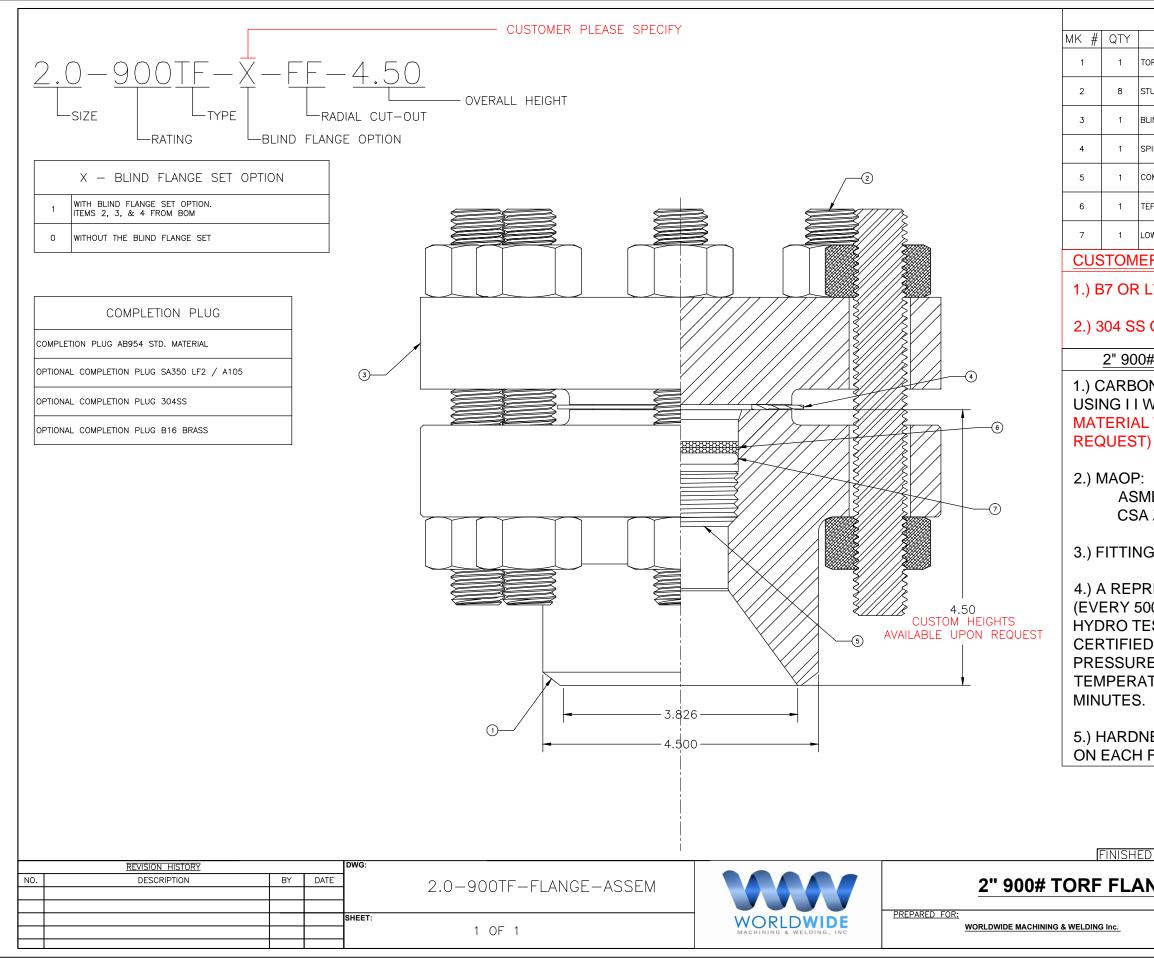
ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSI

3.) FITTING IS DESIGNED TO -50°F (SA350) OR

4.) A REPRESENTATIVE FITTING (EVERY 500TH UNIT PRODUCED) WILL BE HYDRO TESTED AT 2220 PSI FOR 4.25 HOURS. CERTIFIED CHARTS PROVIDED FOR PRESSURE AND TEMPERATURE. THE **TEMPERATURE WILL BE RECORDED EVERY 15** 

### 5.) HARDNESS TESTING TO BE PREFORMED ON EACH FITTING.

SHED	PROD	UCT	TO	BE	<u>PAINT</u>	ED	ŴÇ	DRLD	WIDE	BLUE	-
					DRAWN -	DAT	Έ	MJN-	09-23-	-2014	
RF					CHECKED	- D	ATE	JA-	09-23-	-2014	
					APPROVED	- [	DATE	TEG-	1-15-	2015	
		PREPA	RED	<u>3Y:</u>	WORLDWID				ELDING	INC	
							5 JOHN	N AVE WI 54880			
				PH: (	(715) 394-6006			vinc.com	FX: (715)	394-6007	



		BILL OF MATERIAL			
MK #	QTY	DESCRIPTION	MAT'L		
1	1	TORF MAIN BODY	SA 350 / A105		
2	8	STUD WITH 2 NUTS	B7 OR L7		
		SA 350 / A105			
4	4 1 SPIRAL SEAL GASKET CGI 304 OR 316				
5 1 COMPLETION PLUG (STD. MATERIAL) AB954 OR BRASS		AB954 OR BRASS			
6 1 TEFLON O-RING BACK UP PTFE		PTFE			
7 1 LOW TEMP O-RING VITON					
CUS	CUSTOMER PLEASE SPECIFY WHEN ORDERING				

# 2.) 304 SS OR 316 SS SPIRAL SEAL GASKET

## 2" 900# TORF DATA SPECIFICATIONS

1.) CARBON EQUIVALENT OF 0.43% MAXIMUM USING I I W AND CSA FORMULAS (CUSTOM MATERIAL TYPES & GRADES AVAILABLE UPON REQUEST)

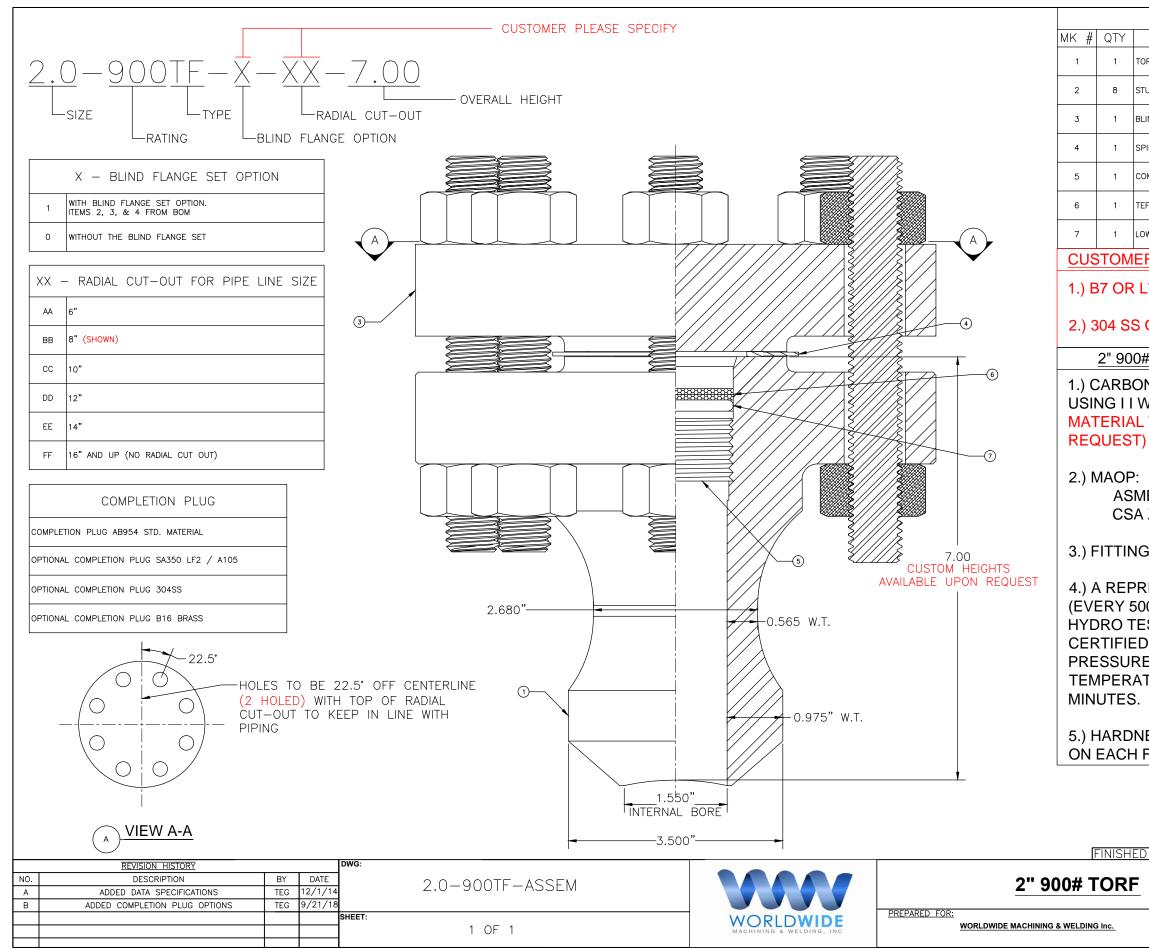
> AOP: ASME B31.4/.6: 2220 PSI CSA Z662 CAT I I / .6: 2160 PSI

3.) FITTING IS DESIGNED TO -50°F

4.) A REPRESENTATIVE FITTING (EVERY 500TH UNIT PRODUCED) WILL BE HYDRO TESTED AT 3330 PSI FOR 4.25 HOURS. CERTIFIED CHARTS PROVIDED FOR PRESSURE AND TEMPERATURE. THE TEMPERATURE WILL BE RECORDED EVERY 15 MINUTES.

5.) HARDNESS TESTING TO BE PREFORMED ON EACH FITTING.

SHED PRODUCT TO	BE	. PAINT	ED W(	PRLD	NIDE	BLUE
		DRAWN -	DATE	BF- C	)5–28–	2014
.ANGE		CHECKED	- DATE	TEG-	05–28-	-2014
		APPROVED	– DATE	APX-	5-1-3	2015
PREPARED	BY:	WORLDWID			ELDING	INC
			405 JOH SUPERIOR,			
	PH: (	715) 394-6006	www.wwmv	vinc.com	FX: (715)	394-6007



		BILL OF MATERIAL			
MK #	QTY	DESCRIPTION	MAT'L		
1	1	TORF MAIN BODY	SA 350 / A105		
2	8	STUD WITH 2 NUTS	B7 OR L7		
3	1	BLIND FLANGE SA 350 LF2 CLASS 1			
4	1	SPIRAL SEAL GASKET CGI 304 OR 316			
5	1	COMPLETION PLUG (STD. MATERIAL) AB954 / BRASS			
6	1 TEFLON O-RING BACK UP PTFE				
7	1 LOW TEMP O-RING VITON				
CUS	CUSTOMER PLEASE SPECIFY WHEN ORDERING				

# 2.) 304 SS OR 316 SS SPIRAL SEAL GASKET

# 2" 900# TORF DATA SPECIFICATIONS

1.) CARBON EQUIVALENT OF 0.43% MAXIMUM USING I I W AND CSA FORMULAS (CUSTOM MATERIAL TYPES & GRADES AVAILABLE UPON REQUEST)

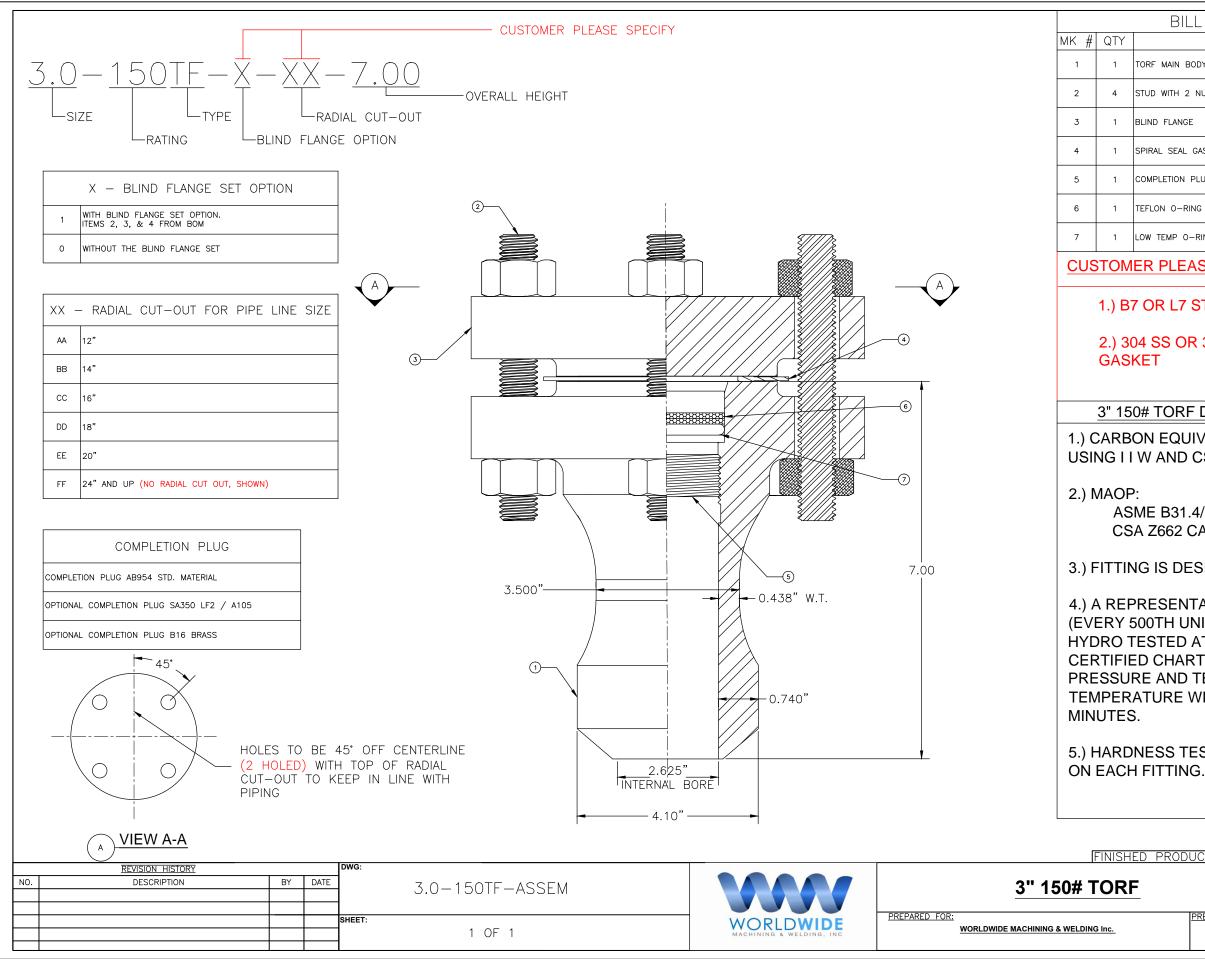
> AOP: ASME B31.4/.6: 2220 PSI CSA Z662 CAT I I / .6: 2160 PSI

3.) FITTING IS DESIGNED TO -50°F

4.) A REPRESENTATIVE FITTING (EVERY 500TH UNIT PRODUCED) WILL BE HYDRO TESTED AT 3330 PSI FOR 4.25 HOURS. CERTIFIED CHARTS PROVIDED FOR PRESSURE AND TEMPERATURE. THE TEMPERATURE WILL BE RECORDED EVERY 15 MINUTES.

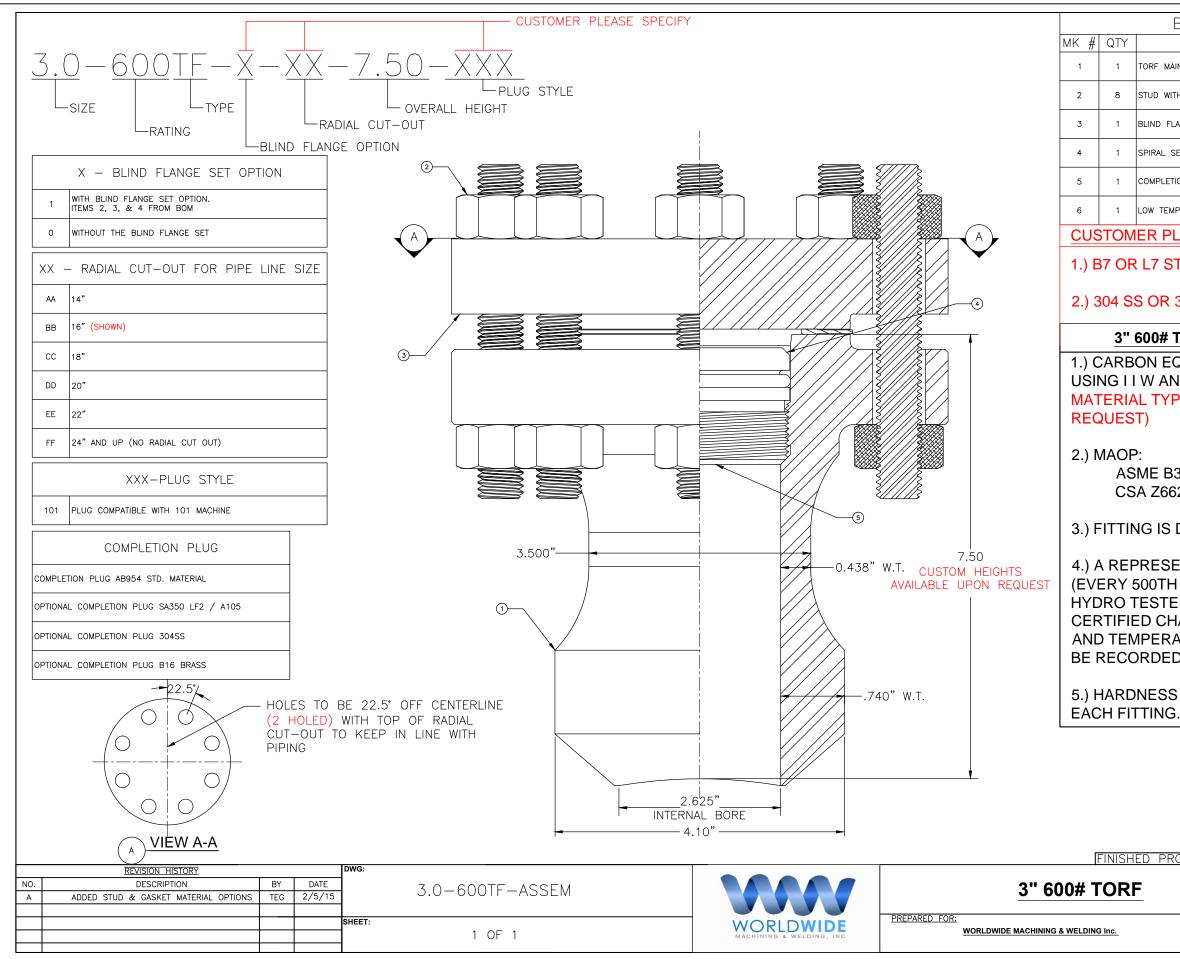
5.) HARDNESS TESTING TO BE PREFORMED ON EACH FITTING.

SHED PRODUCT TO I	BE PAINTED	) WQRLDV	WIDE BLUE
	DRAWN – D	ATE BF- C	5-28-2014
RF	CHECKED -	DATE TEG- (	05-28-2014
	APPROVED -	DATE APX-	5-1-2015
PREPARED B		ACHINING & W	ELDING INC
	SI	405 JOHN AVE UPERIOR, WI 54880	
		ww.wwmwinc.com	FX: (715) 394-6007



	BILL OF MATERIAL	
Y	DESCRIPTION	MAT'L
	TORF MAIN BODY	SA 350/ A105
	STUD WITH 2 NUTS	B7 OR L7
	BLIND FLANGE	SA 350 /A105
	SPIRAL SEAL GASKET CGI	304 OR 316
	COMPLETION PLUG (STD. MATERIAL)	AB954 /BRASS
	TEFLON O-RING BACK UP	PTFE
	LOW TEMP O-RING	VITON
M	ER PLEASE SPECIFY WHEN ORDE	RING
	0# TORF DATA SPECIFICATIONS ON EQUIVALENT OF 0.43% MAXIMI	INA
	W AND CSA FORMULAS	
-	9: ME B31.4/.6: 285 PSI A Z662 CAT I I / .6: 275 PSI	
	NG IS DESIGNED TO -50°F	
Y 4 7 7 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1	PRESENTATIVE FITTING 500TH UNIT PRODUCED) WILL BE TESTED AT 444 PSI FOR 4.25 HOUR ED CHARTS PROVIDED FOR RE AND TEMPERATURE. THE ATURE WILL BE RECORDED EVER S.	
RD	NESS TESTING TO BE PREFORME	D

SHED PRODUCT TO I	BE PAINTED WORLDWIDE BLUE
	DRAWN – DATE RDR– 11–18–2014
RF	CHECKED - DATE JA- 11-18-2014
	APPROVED – DATE XX– XX–XX–XXXX
PREPARED B	Y:         WORLDWIDE MACHINING & WELDING INC           405 JOHN AVE         500H AVE           SUPERIOR, WI54880         SUPERIOR, WI54880           PH: (715) 394-6006         www.wwmwinc.com         FX: (715) 394-6007



	BILL OF MATERIAL	
Y	DESCRIPTION	MAT'L
	TORF MAIN BODY	SA 350 / A105
	STUD WITH 2 NUTS	B7 OR L7
	BLIND FLANGE	SA 350 / A105
	SPIRAL SEAL GASKET CGI	304 OR 316
	COMPLETION PLUG (STD. MATERIAL)	AB954 / BRASS
	LOW TEMP O-RING	VITON
M	ER PLEASE SPECIFY WHEN OR	DERING
CR	R L7 STUDS & NUTS	

# 2.) 304 SS OR 316 SS SPIRAL SEAL GASKET

# 3" 600# TORF DATA SPECIFICATIONS

1.) CARBON EQUIVALENT OF 0.43% MAXIMUM USING I I W AND CSA FORMULAS (CUSTOM MATERIAL TYPES & GRADES AVAILABLE UPON REQUEST)

> AOP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSI

3.) FITTING IS DESIGNED TO -50°F

4.) A REPRESENTATIVE FITTING (EVERY 500TH UNIT PRODUCED ) WILL BE HYDRO TESTED AT 2220 PSI FOR 4.25 HOURS. CERTIFIED CHARTS PROVIDED FOR PRESSURE AND TEMPERATURE. THE TEMPERATURE WILL BE RECORDED EVERY 15 MINUTES.

5.) HARDNESS TESTING TO BE PREFORMED ON EACH FITTING.

SHED PRODUCT	το βε	E PAINTE	ED WO	<u>PRLD'</u>	WIDE	BLUE
		DRAWN -	DATE	TEG-	2-15-	2015
RF		CHECKED	– DATE	JA–	2-15-	2015
		APPROVED	– DATE	TEG-	2-15-	·2015
PREP		WORLDWIDE	405 JOHI SUPERIOR, www.wwmw	N AVE WI 54880		INC 394-6007



# **TORN FITTINGS**

(THREADED O-RING, NIPPLE)

WorldWide Machining & Welding, Inc., has developed a single bodied TORN (Threaded O-Ring, Nipple) fitting with integral reinforcement.

This NEW single body design reduces the number of welds required during the manufacturing process. The elimination of the weld between the main body and the weldo-let reduces manufacturing costs and increases the overall strength of the TORN.

# 

#### FIELD APPLICATION

TORN fittings can be used in a variety of applications, such as for purge and equalization during drain-up operations. TORN fittings are fully compatible with current hot tapping machines, thermometer wells, gauge adapters and other probe instrumentation devices.

#### FEATURES/SPECIFICATIONS

- Main body with integral reinforcement machined out of a solid piece of SA350 LF2 CL1 low temp material.
- Aluminum bronze plug.
- Viton o-ring.
- Teflon o-ring backer.
- Threaded pipe cap.
- Fitting main bodies and threaded caps stamped with size, rating/class, material grade and heat number.
- Material test reports provided for all fittings supplied.

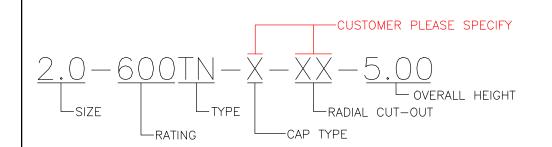
#### PROCUREMENT

Price and lead time quotes available upon request.



MODELS			
2.0"	ANSI	600	
3.0"	ANSI	600	

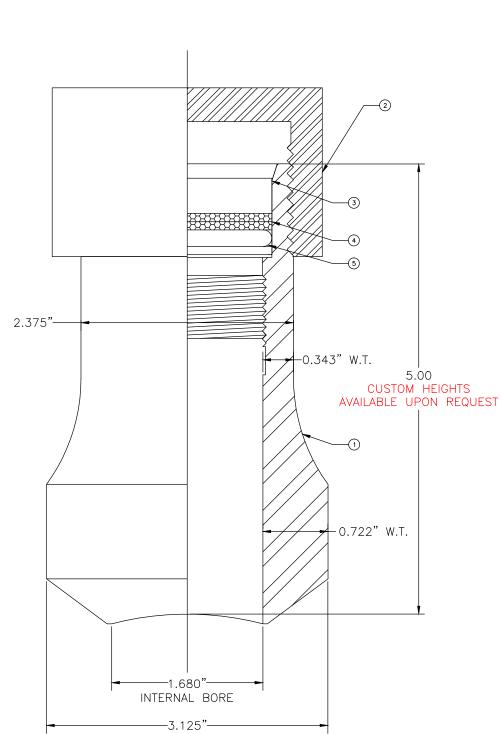
Custom sizes available upon request. 200 unit on-hand inventory maintained for the following: 2" 600# TORNs. Please reference the order drawings to designate fitting size, class rating and additional specifications.



	X – CAP TYPE
0	NO CAP
1	A105 2" 3000# STANDARD THREADED PIPE CAP (SHOWN)
2	SA350 2" 3000# OUT OF SERVICE CAP 3.50" HEIGHT
3	SA350 2" 3000# OUT OF SERVICE CAP 4.93" HEIGHT
4	SA350 2" 3000# STANDARD THREADED PIPE CAP

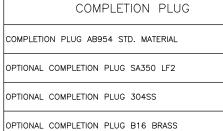
XX -	- RADIAL CUT-OUT FOR PIPE LINE SIZE
AA	6"
BB	8" (SHOWN)
сс	10"
DD	12"
EE	14"
FF	16" AND UP (NO RADIAL CUT OUT)

COMPLETION PLUG
COMPLETION PLUG AB954 STD. MATERIAL
OPTIONAL COMPLETION PLUG SA350 LF2
OPTIONAL COMPLETION PLUG 304SS
OPTIONAL COMPLETION PLUG B16 BRASS



F	IN	Ī

					REVISION HISTORY	
2" 600# TO		2.0-600TN-ASSEM	DATE	BY	DESCRIPTION	NO.
2 000#10		Z.U-OUUTN-ASSEM	4/7/15	TEG	ADDED CAP OPTION	А
			7/11/16	TEG	ADDED STD SA350 CAP OPTION	В
PREPARED FOR:	WORLDWIDE		9/21/18	TEG	ADDED COMPLETION PLUG OPTIONS	С
WORLDWIDE MACHINING & WELDI	MACHINING & WELDING, INC	1 OF 1				



		BILL OF MATERIAL	
MK #	QTY	DESCRIPTION	MAT'L
1	1	TORN MAIN BODY	SA 350 LF2 CLASS 1
2	1	2" 3000# CAP	A105/ SA350
3	1	COMPLETION PLUG (STD. MATERIAL)	AB954 / BRASS
4	1	TEFLON O-RING BACK UP	PTFE
5	1	LOW TEMP O-RING	VITON
	2" 6	00# TORN DATA SPECIFICATION	S
1.) C	ARBC	ON EQUIVALENT OF 0.43% MAXIM	UM

USING I I W AND CSA FORMULAS (CUSTOM MATERIAL TYPES & GRADES AVAILABLE UPON REQUEST)

2.) MAOP:

ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSI

3.) FITTING IS DESIGNED TO -50°F

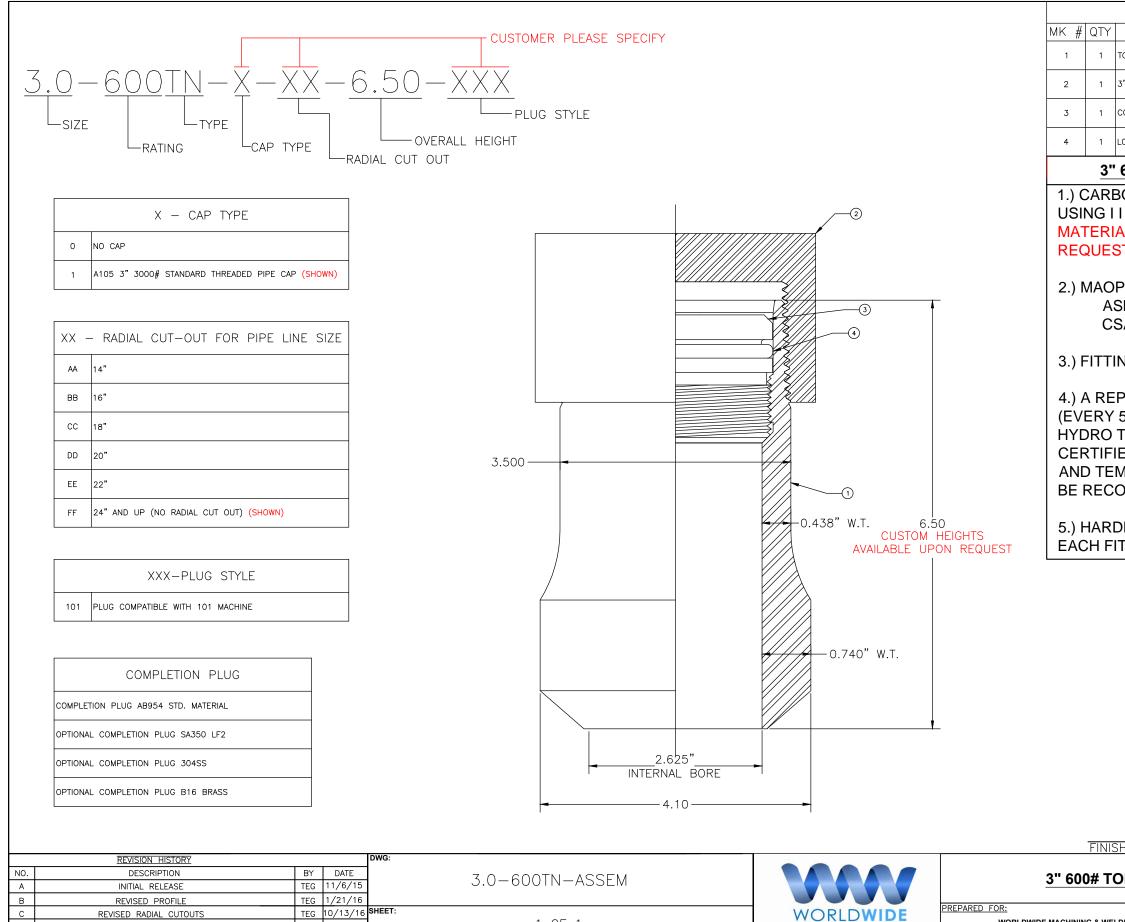
4.) A REPRESENTATIVE FITTING (EVERY 500TH UNIT PRODUCED ) WILL BE HYDRO

TESTED AT 2220 PSI FOR 4.25 HOURS. CERTIFIED CHARTS PROVIDED FOR PRESSURE

AND TEMPERATURE. THE TEMPERATURE WILL BE RECORDED EVERY 15 MINUTES.

## 5.) HARDNESS TESTING TO BE PREFORMED ON EACH FITTING.

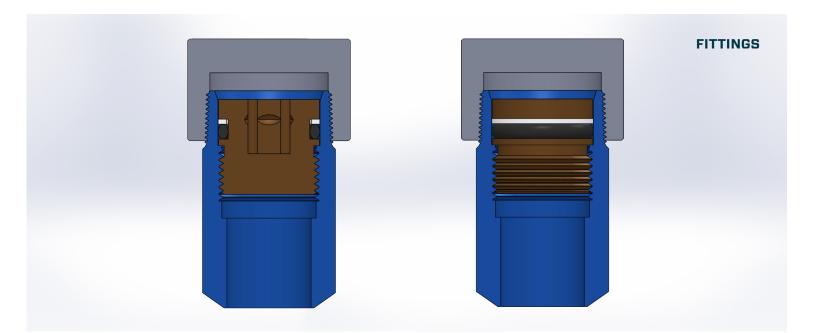
ISHED PROD	)UCT	to be	: PAINT	ED WO	DRLDV	NIDE	BLUE
			DRAWN	– DATE	BF- C	5-14-2	2014
FORN			CHECKED	– DATE	TEG –	05-15-	-2014
			APPROVED	- DATE	TEG –	05-15-	-2014
	PREPAR	RED BY:	WORLDWID	E MACHIN	ING & W	ELDING I	NC
ELDING				405 JOH			
		PH:	(715) 394-6006	SUPERIOR, www.wwmv		FX: (715) 3	394-6007
						( )	



FILEFAILED FOIL.			
WORLDWIDE MAC	HINING 8	<u>s</u> v	N

1 OF 1

BILL OF MATERIAL         Y       DESCRIPTION       MAT'L         TORN MAIN BODY       SA 350 LF2 CLASS 1         3" 3000# CAP       A105/ SA350         completion plug assembly (customer please specipy)       AB954/ BRASS         LOW TEMP O-RING       VITON         DEST 600# TORN DATA SPECIFICATIONS       VITON         BON EQUIVALENT OF 0.43% MAXIMUM       II W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST)         OP:       ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSI         TING IS DESIGNED TO -50°F       EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS.         FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES.         RDNESS TESTING TO BE PREFORMED ON EITTINC	YDESCRIPTIONMAT'LTORN MAIN BODYSA 350 LF2 CLASS 13" 3000# CAPA105/ SA350completion plug assembly (customer please specify)AB954/ BRASSLOW TEMP O-RINGVITONS" 600# TORN DATA SPECIFICATIONSRBON EQUIVALENT OF 0.43% MAXIMUM I I W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST)OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSITING IS DESIGNED TO -50°FEPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS.FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES.RDNESS TESTING TO BE PREFORMED ON	YDESCRIPTIONMAT'LTORN MAIN BODYSA 350 LF2 CLASS 13" 3000# CAPA105/ SA350completion plug assembly (customer please specify)AB954/ BRASSLOW TEMP O-RINGVITON3" 600# TORN DATA SPECIFICATIONSVITONBON EQUIVALENT OF 0.43% MAXIMUM I W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST)OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSITING IS DESIGNED TO -50°FEPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS.FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES.	YDESCRIPTIONMAT'LTORN MAIN BODYSA 350 LF2 CLASS 13" 3000# CAPA105/ SA350completion plug assembly (customer please specify)AB954/ BRASSLOW TEMP O-RINGVITONS" 600# TORN DATA SPECIFICATIONSRBON EQUIVALENT OF 0.43% MAXIMUM I I W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST)OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSITING IS DESIGNED TO -50°FEPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS.FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES.RDNESS TESTING TO BE PREFORMED ON							
Image: Construction of the image: Constructing of the image: Construction of the image: Constructi	Image: Contraction of the image: Contreal of the image: Contraction of the image: Contracti	Image: Contraction of the image: Contready and the image: Contraction of the image: Contrac	Image: Contraction of the image: Contready and the image: Contraction of the image: Contrac		BIL	L OF M	ATERIA	4L		
IORN MAIN BODT       cLASS 1         3" 3000# CAP       A105/ SA350         COMPLETION PLUG ASSEMBLY (CUSTOMER PLEASE SPECIFY)       AB954/ BRASS         LOW TEMP 0-RING       VITON         B" 600# TORN DATA SPECIFICATIONS       VITON         BON EQUIVALENT OF 0.43% MAXIMUM       I         I W AND CSA FORMULAS (CUSTOM       (CUSTOM         RIAL TYPES & GRADES AVAILABLE UPON       STONESTION         OP:       ASME B31.4/.6: 1480 PSI         CSA Z662 CAT II / .6: 1440 PSI       TING IS DESIGNED TO -50°F         EPRESENTATIVE FITTING       Y 500TH UNIT PRODUCED ) WILL BE         D TESTED AT 2220 PSI FOR 4.25 HOURS.       FIED CHARTS PROVIDED FOR PRESSURE         EMPERATURE. THE TEMPERATURE WILL <td< td=""><td>IORN MAIN BODT       CLASS 1         3" 3000# CAP       A105/ SA350         COMPLETION PLUG ASSEMBLY (CUSTOMER PLEASE SPECIFY)       AB954/ BRASS         LOW TEMP 0-RING       VITON         B" 600# TORN DATA SPECIFICATIONS       VITON         BON EQUIVALENT OF 0.43% MAXIMUM       I         I W AND CSA FORMULAS (CUSTOM       VITON         STD       OP:         ASME B31.4/.6: 1480 PSI       SI         CSA Z662 CAT I I / .6: 1440 PSI       TING IS DESIGNED TO -50°F         EPRESENTATIVE FITTING       Y 500TH UNIT PRODUCED ) WILL BE         D TESTED AT 2220 PSI FOR 4.25 HOURS.       FIED CHARTS PROVIDED FOR PRESSURE         EMPERATURE. THE TEMPERATURE WILL       CORDED EVERY 15 MINUTES.</td><td>IORN MAIN BODT       CLASS 1         3" 3000# CAP       A105/ SA350         COMPLETION PLUG ASSEMBLY (CUSTOMER PLEASE SPECIFY)       AB954/ BRASS         LOW TEMP 0-RING       VITON         B" 600# TORN DATA SPECIFICATIONS       VITON         BON EQUIVALENT OF 0.43% MAXIMUM       I WAND CSA FORMULAS (CUSTOM         CON       STONE       GRADES AVAILABLE UPON         STD       OP:       ASME B31.4/.6: 1480 PSI         CSA Z662 CAT II/.6: 1480 PSI       STONE         TING IS DESIGNED TO -50°F       EPRESENTATIVE FITTING         Y 500TH UNIT PRODUCED ) WILL BE       D TESTED AT</td><td>IORN MAIN BODT       CLASS 1         3" 3000# CAP       A105/ SA350         COMPLETION PLUG ASSEMBLY (CUSTOMER PLEASE SPECIFY)       AB954/ BRASS         LOW TEMP 0-RING       VITON         B" 600# TORN DATA SPECIFICATIONS       VITON         BON EQUIVALENT OF 0.43% MAXIMUM       I WAND CSA FORMULAS (CUSTOM         CON       STONE       GRADES AVAILABLE UPON         STD       OP:       ASME B31.4/.6: 1480 PSI         CSA Z662 CAT II/.6: 1480 PSI       STONE         TING IS DESIGNED TO -50°F       EPRESENTATIVE FITTING         Y 500TH UNIT PRODUCED ) WILL BE       D TESTED AT</td><td>Y</td><td></td><td>DESCRI</td><td>PTION</td><td></td><td></td><td>MAT'L</td></td<>	IORN MAIN BODT       CLASS 1         3" 3000# CAP       A105/ SA350         COMPLETION PLUG ASSEMBLY (CUSTOMER PLEASE SPECIFY)       AB954/ BRASS         LOW TEMP 0-RING       VITON         B" 600# TORN DATA SPECIFICATIONS       VITON         BON EQUIVALENT OF 0.43% MAXIMUM       I         I W AND CSA FORMULAS (CUSTOM       VITON         STD       OP:         ASME B31.4/.6: 1480 PSI       SI         CSA Z662 CAT I I / .6: 1440 PSI       TING IS DESIGNED TO -50°F         EPRESENTATIVE FITTING       Y 500TH UNIT PRODUCED ) WILL BE         D TESTED AT 2220 PSI FOR 4.25 HOURS.       FIED CHARTS PROVIDED FOR PRESSURE         EMPERATURE. THE TEMPERATURE WILL       CORDED EVERY 15 MINUTES.	IORN MAIN BODT       CLASS 1         3" 3000# CAP       A105/ SA350         COMPLETION PLUG ASSEMBLY (CUSTOMER PLEASE SPECIFY)       AB954/ BRASS         LOW TEMP 0-RING       VITON         B" 600# TORN DATA SPECIFICATIONS       VITON         BON EQUIVALENT OF 0.43% MAXIMUM       I WAND CSA FORMULAS (CUSTOM         CON       STONE       GRADES AVAILABLE UPON         STD       OP:       ASME B31.4/.6: 1480 PSI         CSA Z662 CAT II/.6: 1480 PSI       STONE         TING IS DESIGNED TO -50°F       EPRESENTATIVE FITTING         Y 500TH UNIT PRODUCED ) WILL BE       D TESTED AT	IORN MAIN BODT       CLASS 1         3" 3000# CAP       A105/ SA350         COMPLETION PLUG ASSEMBLY (CUSTOMER PLEASE SPECIFY)       AB954/ BRASS         LOW TEMP 0-RING       VITON         B" 600# TORN DATA SPECIFICATIONS       VITON         BON EQUIVALENT OF 0.43% MAXIMUM       I WAND CSA FORMULAS (CUSTOM         CON       STONE       GRADES AVAILABLE UPON         STD       OP:       ASME B31.4/.6: 1480 PSI         CSA Z662 CAT II/.6: 1480 PSI       STONE         TING IS DESIGNED TO -50°F       EPRESENTATIVE FITTING         Y 500TH UNIT PRODUCED ) WILL BE       D TESTED AT	Y		DESCRI	PTION			MAT'L
S 3000 (CAN       SA350         COMPLETION PLUG ASSEMBLY (CUSTOMER PLEASE SPECIFY)       AB954/ BRASS         LOW TEMP 0-RING       VITON         S" 600# TORN DATA SPECIFICATIONS       VITON         S" 600# TORN DATA SPECIFICATIONS       RBON EQUIVALENT OF 0.43% MAXIMUM         I W AND CSA FORMULAS (CUSTOM       RIAL TYPES & GRADES AVAILABLE UPON         ST)       OP:         ASME B31.4/.6: 1480 PSI       CSA Z662 CAT II/.6: 1440 PSI         TING IS DESIGNED TO -50°F       EPRESENTATIVE FITTING         Y 500TH UNIT PRODUCED ) WILL BE       D TESTED AT 2220 PSI FOR 4.25 HOURS.         FIED CHARTS PROVIDED FOR PRESSURE       EMPERATURE. THE TEMPERATURE WILL         CORDED EVERY 15 MINUTES.       RDNESS TESTING TO BE PREFORMED ON	S 3000 (CAN       SA350         COMPLETION PLUG ASSEMBLY (CUSTOMER PLEASE SPECIFY)       AB954/ BRASS         LOW TEMP O-RING       VITON         B" 600# TORN DATA SPECIFICATIONS       VITON         BON EQUIVALENT OF 0.43% MAXIMUM       I W AND CSA FORMULAS (CUSTOM         RIAL TYPES & GRADES AVAILABLE UPON       ST)         OP:       ASME B31.4/.6: 1480 PSI         CSA Z662 CAT I I / .6: 1440 PSI       TING IS DESIGNED TO -50°F         EPRESENTATIVE FITTING       Y 500TH UNIT PRODUCED ) WILL BE         D TESTED AT 2220 PSI FOR 4.25 HOURS.       FIED CHARTS PROVIDED FOR PRESSURE         EMPERATURE. THE TEMPERATURE WILL       CORDED EVERY 15 MINUTES.         RDNESS TESTING TO BE PREFORMED ON       SA350	S 3000 (CAN       SA350         COMPLETION PLUG ASSEMBLY (CUSTOMER PLEASE SPECIFY)       AB954/ BRASS         LOW TEMP O-RING       VITON         S" 600# TORN DATA SPECIFICATIONS       VITON         S" 600# TORN DATA SPECIFICATIONS       RBON EQUIVALENT OF 0.43% MAXIMUM         I I W AND CSA FORMULAS (CUSTOM       RIAL TYPES & GRADES AVAILABLE UPON         ST)       OP:         ASME B31.4/.6: 1480 PSI       CSA Z662 CAT I I / .6: 1440 PSI         TING IS DESIGNED TO -50°F       EPRESENTATIVE FITTING         Y 500TH UNIT PRODUCED ) WILL BE       D TESTED AT 2220 PSI FOR 4.25 HOURS.         FIED CHARTS PROVIDED FOR PRESSURE       EMPERATURE. THE TEMPERATURE WILL         CORDED EVERY 15 MINUTES.       RDNESS TESTING TO BE PREFORMED ON	S 3000 (CAN       SA350         COMPLETION PLUG ASSEMBLY (CUSTOMER PLEASE SPECIFY)       AB954/ BRASS         LOW TEMP O-RING       VITON         S" 600# TORN DATA SPECIFICATIONS       VITON         S" 600# TORN DATA SPECIFICATIONS       RBON EQUIVALENT OF 0.43% MAXIMUM         I I W AND CSA FORMULAS (CUSTOM       RIAL TYPES & GRADES AVAILABLE UPON         ST)       OP:         ASME B31.4/.6: 1480 PSI       CSA Z662 CAT I I / .6: 1440 PSI         TING IS DESIGNED TO -50°F       EPRESENTATIVE FITTING         Y 500TH UNIT PRODUCED ) WILL BE       D TESTED AT 2220 PSI FOR 4.25 HOURS.         FIED CHARTS PROVIDED FOR PRESSURE       EMPERATURE. THE TEMPERATURE WILL         CORDED EVERY 15 MINUTES.       RDNESS TESTING TO BE PREFORMED ON		TORN MAIN BOD	Υ				
Index reads a soluble (conduct reads of control of the solution)       BRASS         Index reads of control of the solution	DOWN LENKY FLOG ASSEMBLY (CONTOUCY FLOOR OF CONTOUR FLOOR OF	DOWN LEMON FLOOR ASSEMBLY (CONTOUCH TELECOTION)       BRASS         LOW TEMP 0-RING       VITON         S" 600# TORN DATA SPECIFICATIONS         RBON EQUIVALENT OF 0.43% MAXIMUM         I W AND CSA FORMULAS (CUSTOM         RIAL TYPES & GRADES AVAILABLE UPON         ST)         OP:         ASME B31.4/.6: 1480 PSI         CSA Z662 CAT I I / .6: 1440 PSI         TING IS DESIGNED TO -50°F         EPRESENTATIVE FITTING         Y 500TH UNIT PRODUCED ) WILL BE         D TESTED AT 2220 PSI FOR 4.25 HOURS.         FIED CHARTS PROVIDED FOR PRESSURE         EMPERATURE. THE TEMPERATURE WILL         CORDED EVERY 15 MINUTES.	DOWN LEMON FLOOR ASSEMBLY (CONTOUCH TELECOTION)       BRASS         LOW TEMP 0-RING       VITON         S" 600# TORN DATA SPECIFICATIONS         RBON EQUIVALENT OF 0.43% MAXIMUM         I W AND CSA FORMULAS (CUSTOM         RIAL TYPES & GRADES AVAILABLE UPON         ST)         OP:         ASME B31.4/.6: 1480 PSI         CSA Z662 CAT I I / .6: 1440 PSI         TING IS DESIGNED TO -50°F         EPRESENTATIVE FITTING         Y 500TH UNIT PRODUCED ) WILL BE         D TESTED AT 2220 PSI FOR 4.25 HOURS.         FIED CHARTS PROVIDED FOR PRESSURE         EMPERATURE. THE TEMPERATURE WILL         CORDED EVERY 15 MINUTES.		3" 3000# CAP					A105/ SA350
<b>3" 600# TORN DATA SPECIFICATIONS</b> RBON EQUIVALENT OF 0.43% MAXIMUM I W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST) OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSI TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES. RDNESS TESTING TO BE PREFORMED ON	<b>5" 600# TORN DATA SPECIFICATIONS</b> RBON EQUIVALENT OF 0.43% MAXIMUM I W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST) OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSI TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES. RDNESS TESTING TO BE PREFORMED ON	<b>5" 600# TORN DATA SPECIFICATIONS</b> RBON EQUIVALENT OF 0.43% MAXIMUM I W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST) OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSI TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES. RDNESS TESTING TO BE PREFORMED ON	<b>5" 600# TORN DATA SPECIFICATIONS</b> RBON EQUIVALENT OF 0.43% MAXIMUM I W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST) OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSI TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES. RDNESS TESTING TO BE PREFORMED ON		COMPLETION PLU	JG ASSEMBLY (	CUSTOMER	PLEASE SPE	ECIFY)	
RBON EQUIVALENT OF 0.43% MAXIMUM II W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST) OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT II/.6: 1440 PSI TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES.	RBON EQUIVALENT OF 0.43% MAXIMUM II W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST) OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT II/.6: 1440 PSI TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES.	RBON EQUIVALENT OF 0.43% MAXIMUM II W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST) OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT II/.6: 1440 PSI TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES.	RBON EQUIVALENT OF 0.43% MAXIMUM II W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST) OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT II/.6: 1440 PSI TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES.		LOW TEMP O-RI	ING				VITON
I I W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON ST) OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSI TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES.	I I W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON ST) OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSI TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES.	I I W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON ST) OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSI TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES.	I I W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON ST) OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSI TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES.	8"	600# TOF	RN DATA	SPEC	FICATI	ON	S
TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES. RDNESS TESTING TO BE PREFORMED ON	TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES. RDNESS TESTING TO BE PREFORMED ON	TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES. RDNESS TESTING TO BE PREFORMED ON	TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES. RDNESS TESTING TO BE PREFORMED ON	ן גו בג	I W AND ( AL TYPES ST) P:	CSA FOR S & GRAD	MULAS ES AV	G (CUS	TON	Л
EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES. RDNESS TESTING TO BE PREFORMED ON	EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES. RDNESS TESTING TO BE PREFORMED ON	EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES. RDNESS TESTING TO BE PREFORMED ON	EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES. RDNESS TESTING TO BE PREFORMED ON	23	SA Z662 C	AT I I / .6	: 1440	PSI		
Y 500TH UNIT PRODUCED ) WILL BE O TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES. RDNESS TESTING TO BE PREFORMED ON	Y 500TH UNIT PRODUCED ) WILL BE O TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES. RDNESS TESTING TO BE PREFORMED ON	Y 500TH UNIT PRODUCED ) WILL BE O TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES. RDNESS TESTING TO BE PREFORMED ON	Y 500TH UNIT PRODUCED ) WILL BE O TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES. RDNESS TESTING TO BE PREFORMED ON	τI	NG IS DE	SIGNED	ΓO -50°	Ϋ́F		
FITTING. I				FI E C <sup>1</sup> RI	ED CHAR MPERATU ORDED E DNESS TE	TS PROV JRE. THE VERY 15	(IDED I TEMP MINUT	FOR PF ERATU ES.	RES	SURE WILL
				115	HED PROD	UCT TO BE	e paint	ED WOR	LDWI	DE BLUE
IISHED PRODUCT TO BE PAINTED WORLDWIDE BLUE	IISHED PRODUCT TO BE PAINTED WORLDWIDE BUILE	IISHED PRODUCT TO BE PAINTED WORLDWIDE BUILE	ISHED PRODUCT TO BE PAINTED WORLDWIDE BUILE	T		<u></u>	DRAWN -	– DATE T – DATE A	EG – PX –	11/6/15 11/6/15
DRAWN - DATE TEG - 11/6/15	DRAWN - DATE         TEG - 11/6/15           TORN         CHECKED - DATE         APX - 11/6/15	DRAWN - DATE         TEG - 11/6/15           TORN         CHECKED - DATE         APX - 11/6/15	DRAWN - DATE         TEG - 11/6/15           TORN         CHECKED - DATE         APX - 11/6/15	VEI	DING	PREPARED BY:		405 JOHN AV SUPERIOR, WI 54	E 4880	
DRAWN - DATE         TEG - 11/6/15           CHECKED - DATE         APX - 11/6/15           APPROVED - DATE         TEG - 11/6/15	DRAWN - DATE         TEG - 11/6/15           CHECKED - DATE         APX - 11/6/15           APPROVED - DATE         TEG - 11/6/15           PREPARED BY:         worldwide machining & welding inc 405 JOHN AVE SUPERIOR, WI 54880	DRAWN - DATE         TEG - 11/6/15           CHECKED - DATE         APX - 11/6/15           APPROVED - DATE         TEG - 11/6/15           PREPARED BY:         worldwide machining & welding inc 405 JOHN AVE SUPERIOR, WI 54880	DRAWN - DATE         TEG - 11/6/15           CHECKED - DATE         APX - 11/6/15           APPROVED - DATE         TEG - 11/6/15           PREPARED BY:         worldwide machining & welding inc 405 JOHN AVE SUPERIOR, WI 54880			1	1	-	_	-



# **STRAIGHT TORN FITTINGS**

(THREADED O-RING, NIPPLE)

WorldWide Machining & Welding, Inc., is now manufacturing straight bodied TORN (Threaded O-Ring, Nipple) fittings.

#### FIELD APPLICATION

Straight TORN fittings can be used in a variety of applications, such as for purge and equalization during drain-up operations. TORN fittings are fully compatible with current hot tapping machines, thermometer wells, gauge adapters and other probe instrumentation devices.

#### FEATURES/SPECIFICATIONS

- Main body machined out of a solid piece of SA350 LF2 CL1 low temp material.
- Aluminum bronze plug.
- Viton o-ring.
- Teflon o-ring backer.
- Threaded pipe cap.
- Fitting main bodies and threaded caps stamped with size, rating/class, material grade and heat number.
- Fittings available in additional material types and grades upon request.
- Material test reports provided for all fittings supplied.

#### PROCUREMENT

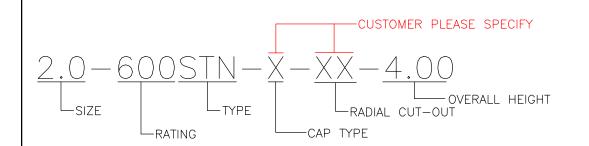
Price and lead time quotes available upon request.



MODELS		
2.0"	ANSI	600
3.0"	ANSI	600

Please reference the order drawings to designate fitting size, class rating and additional specifications.



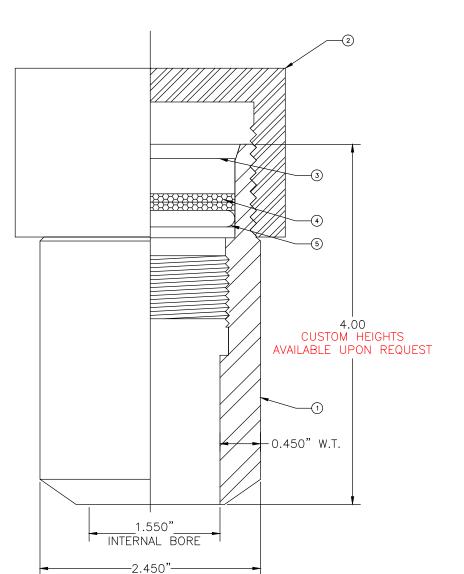


	X – CAP TYPE
0	NO CAP
1	A105 2" 3000# STANDARD THREADED PIPE CAP (SHOWN)
2	SA350 2" 3000# OUT OF SERVICE CAP 3.50" HEIGHT
3	SA350 2" 3000# STANDARD THREADED PIPE CAP

XX -	- RADIAL CUT-OUT FOR PIPE LINE SIZE
AA	6"
BB	8"
сс	10"
DD	12"
EE	14"
FF	16" AND UP (NO RADIAL CUT OUT) (SHOWN)

COMPLETION PLUG
COMPLETION PLUG AB954 STD. MATERIAL
OPTIONAL COMPLETION PLUG SA350 LF2 / A105
OPTIONAL COMPLETION PLUG 304SS

OPTIONAL COMPLETION PLUG B16 BRASS



1 11 11 5							
			DWG:			REVISION HISTORY	
2" 600# STRAIG		2.0-600STN-ASSEM		DATE	BY	DESCRIPTION	NO.
2 000# STRAIC		2.0-0003TN-A33LM	5	10/8/15	TEG	INITIAL RELEASE	А
			8	9/21/18	TEG	ADDED COMPLETION PLUG OPTIONS	В
PREPARED FOR:	WORLDWIDE		SHEET:				
WORLDWIDE MACHINING & WE	MACHINING & WELDING, INC	1 OF 1					

FIN

	BILL OF MATERIAL						
MK #	QTY	DESCRIPTION	MAT'L				
1	1	TORN MAIN BODY	SA350 / A105				
2	1	2" 3000# CAP	A105 OR SA350				
3	1	COMPLETION PLUG (STD. MATERIAL)	AB954 / BRASS				
4	1	TEFLON O-RING BACK UP	PTFE				
5	1	LOW TEMP O-RING	VITON				
2" 600# STRAIGHT TORN DATA SPECIFICATIONS							

1.) CARBON EQUIVALENT OF 0.43% MAXIMUM USING I I W AND CSA FORMULAS (CUSTOM MATERIAL TYPES & GRADES AVAILABLE UPON REQUEST)

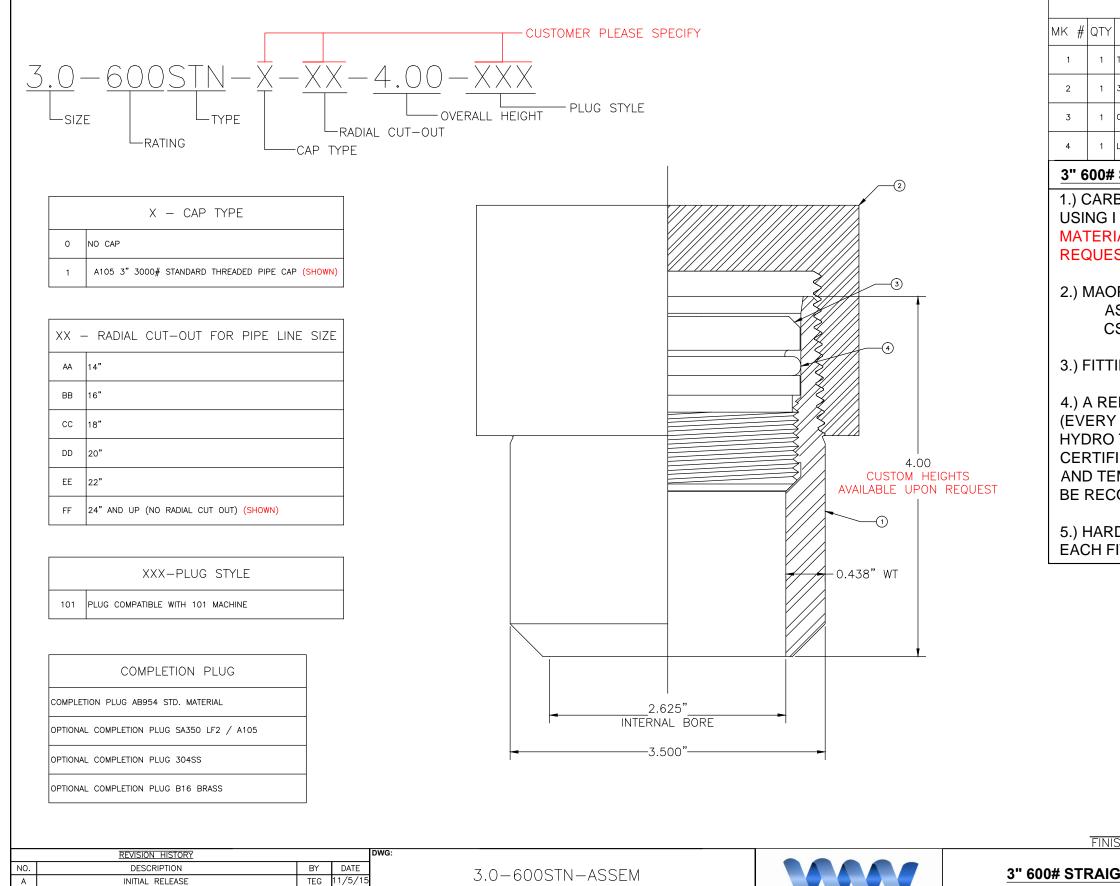
2.) MAOP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSI

3.) FITTING IS DESIGNED TO -50°F

4.) A REPRESENTATIVE FITTING (EVERY 500TH UNIT PRODUCED ) WILL BE HYDRO TESTED AT 2220 PSI FOR 4.25 HOURS. CERTIFIED CHARTS PROVIDED FOR PRESSURE AND TEMPERATURE. THE TEMPERATURE WILL BE RECORDED EVERY 15 MINUTES.

### 5.) HARDNESS TESTING TO BE PREFORMED ON EACH FITTING.

ISHED PRODU	JCT TO BE	. PAINTED V	VORLDWI	DE BLUE
		DRAWN – DATE	TEG –	10/8/15
GHT TORN		CHECKED – DAT	E APX -	10/8/15
	-	APPROVED – DAI	TE TEG -	10/8/15
/ELDING		SUPERIC	OHN AVE DR, WI 54880	
	PH:	(715) 394-6006 www.ww	mwinc.com F	X: (715) 394-6007



PREPARED FOR: WORLDWIDE MACHINING & W

1 OF 1

SHEET:

3" 600# STRAI



BILL OF MATERIAL         Y       DESCRIPTION       MAT'L         TORN MAIN BODY       SA 350 CLASS 1       SA 350 CLASS 1         3" 3000# CAP       A105/ SA350         completion plug assembly (customer please specify)       AB954 / BRASS         LOW TEMP 0-RING       VITON         # STRAIGHT TORN DATA SPECIFICATIONS         RBON EQUIVALENT OF 0.43% MAXIMUM         I W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST)         OP:         ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSI         TING IS DESIGNED TO -50°F         EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS.         FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL CORDED EVERY 15 MINUTES.							
TORN MAIN BODY       SA 350 LF2 CLASS 1         3" 3000# CAP       A105/ SA350         cOMPLETION PLUG ASSEMBLY (CUSTOMER PLEASE SPECIFY)       AB954 / BRASS         LOW TEMP O-RING       VITON         # STRAIGHT TORN DATA SPECIFICATIONS       RBON EQUIVALENT OF 0.43% MAXIMUM         I W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST)       VITON         OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT 11/.6: 1440 PSI       SI         TING IS DESIGNED TO -50°F       EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE O TESTED AT 2220 PSI FOR 4.25 HOURS.         FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL		BIL	L OF M	ATERIA	4L		
IORN MAIN BODT       CLASS 1         3" 3000# CAP       A105/ SA350         completion plug assembly (customer please specify)       AB954 / BRASS         LOW TEMP 0-RING       VITON         # STRAIGHT TORN DATA SPECIFICATIONS       VITON         # STRAIGHT TORN DATA SPECIFICATIONS       RBON EQUIVALENT OF 0.43% MAXIMUM         I W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST)       OP:         OP:       ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSI         TING IS DESIGNED TO -50°F       EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS.         FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL	Y		DESCRIF	NOIT			MAT'L
S 3000 ON       SA350         COMPLETION PLUG ASSEMBLY (CUSTOMER PLEASE SPECIFY)       AB954 / BRASS         LOW TEMP 0-RING       VITON         # STRAIGHT TORN DATA SPECIFICATIONS       VITON         # STRAIGHT TORN DATA SPECIFICATIONS       RBON EQUIVALENT OF 0.43% MAXIMUM         I W AND CSA FORMULAS (CUSTOM       I WAND CSA FORMULAS (CUSTOM         RIAL TYPES & GRADES AVAILABLE UPON       ST)         OP:       ASME B31.4/.6: 1480 PSI         CSA Z662 CAT I I / .6: 1440 PSI       TING IS DESIGNED TO -50°F         EPRESENTATIVE FITTING       Y 500TH UNIT PRODUCED ) WILL BE         O TESTED AT 2220 PSI FOR 4.25 HOURS.       FIED CHARTS PROVIDED FOR PRESSURE         EMPERATURE. THE TEMPERATURE WILL       VITON		TORN MAIN BODY	,				
BRASS         LOW TEMP 0-RING         WITON         # STRAIGHT TORN DATA SPECIFICATIONS         RBON EQUIVALENT OF 0.43% MAXIMUM         I I W AND CSA FORMULAS (CUSTOM         RIAL TYPES & GRADES AVAILABLE UPON         ST)         OP:         ASME B31.4/.6: 1480 PSI         CSA Z662 CAT I I / .6: 1440 PSI         TING IS DESIGNED TO -50°F         EPRESENTATIVE FITTING         Y 500TH UNIT PRODUCED ) WILL BE       D TESTED AT 2220 PSI FOR 4.25 HOURS.         FIED CHARTS PROVIDED FOR PRESSURE         EMPERATURE. THE TEMPERATURE WILL		3" 3000# CAP					
# STRAIGHT TORN DATA SPECIFICATIONS RBON EQUIVALENT OF 0.43% MAXIMUM I I W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST) OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSI TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL		COMPLETION PLU	G ASSEMBLY (C	USTOMER F	PLEASE SF	PECIFY)	
RBON EQUIVALENT OF 0.43% MAXIMUM II W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST) OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT II / .6: 1440 PSI TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL		LOW TEMP O-RIN	١G				VITON
I I W AND CSA FORMULAS (CUSTOM RIAL TYPES & GRADES AVAILABLE UPON EST) OP: ASME B31.4/.6: 1480 PSI CSA Z662 CAT I I / .6: 1440 PSI TING IS DESIGNED TO -50°F EPRESENTATIVE FITTING Y 500TH UNIT PRODUCED ) WILL BE D TESTED AT 2220 PSI FOR 4.25 HOURS. FIED CHARTS PROVIDED FOR PRESSURE EMPERATURE. THE TEMPERATURE WILL	#	STRAIGH	T TORN I	ΟΑΤΑ S	SPECI	FICA	TIONS
RDNESS TESTING TO BE PREFORMED ON FITTING.		I W AND ( AL TYPES ST) PP: SME B31.4 SA Z662 C ING IS DES PRESENT 500TH UN TESTED A IED CHAR MPERATU ORDED E DNESS TE	CSA FOR & GRAD 4/.6: 1480 AT 11/.6 SIGNED 1 TATIVE FI NIT PROD AT 2220 F TS PROV JRE. THE VERY 15	MULAS ES AV PSI : 1440 TO -50° TTING PUCED PSI FOR TEMP MINUT	S (CUS AILAB PSI ?F ?F =OR P ERAT "ES.	L BE HOU RES URE	M JPON JRS. SURE WILL
DRAWN – DATE TEG – $11/5/15$	0	GHT TORN	-	CHECKED	– DATE	APX – TEG –	11/5/15 11/5/15
APPROVED – DATE TEG – 11/5/15	VE				405 JOHN SUPERIOR, W	AVE /I 54880	LDING INC
APPROVED – DATE TEG – 11/5/15 PREPARED BY: WORLDWIDE MACHINING & WELDING INC 405 JOHN AVE SUPERIOR, WI 54880			in.	,			



# **ADAPTER FITTINGS**

WorldWide Machining & Welding, Inc., is now manufacturing adapter fittings.

#### FIELD APPLICATION

Adapter fittings can be used in a variety of applications to prevent thread damage and deformation of an existing, in-service threaded o-ring fitting.

Installation of an adapter fitting onto a threaded o-ring fitting, prior to installation of the valve, tapping machine or other attachment, will also ensure the ability to extract and insert the internal plug while preventing damage to the o-ring.

#### FEATURES/SPECIFICATIONS: d out of a

solid piece of hot rolled 4140 alloy steel and then heat treated to a designated Rockwell hardness.

- Adapter fittings are reusable and are stamped with size, rating/class, material grade and heat number.
- Material test reports provided for all fittings supplied.

#### PROCUREMENT

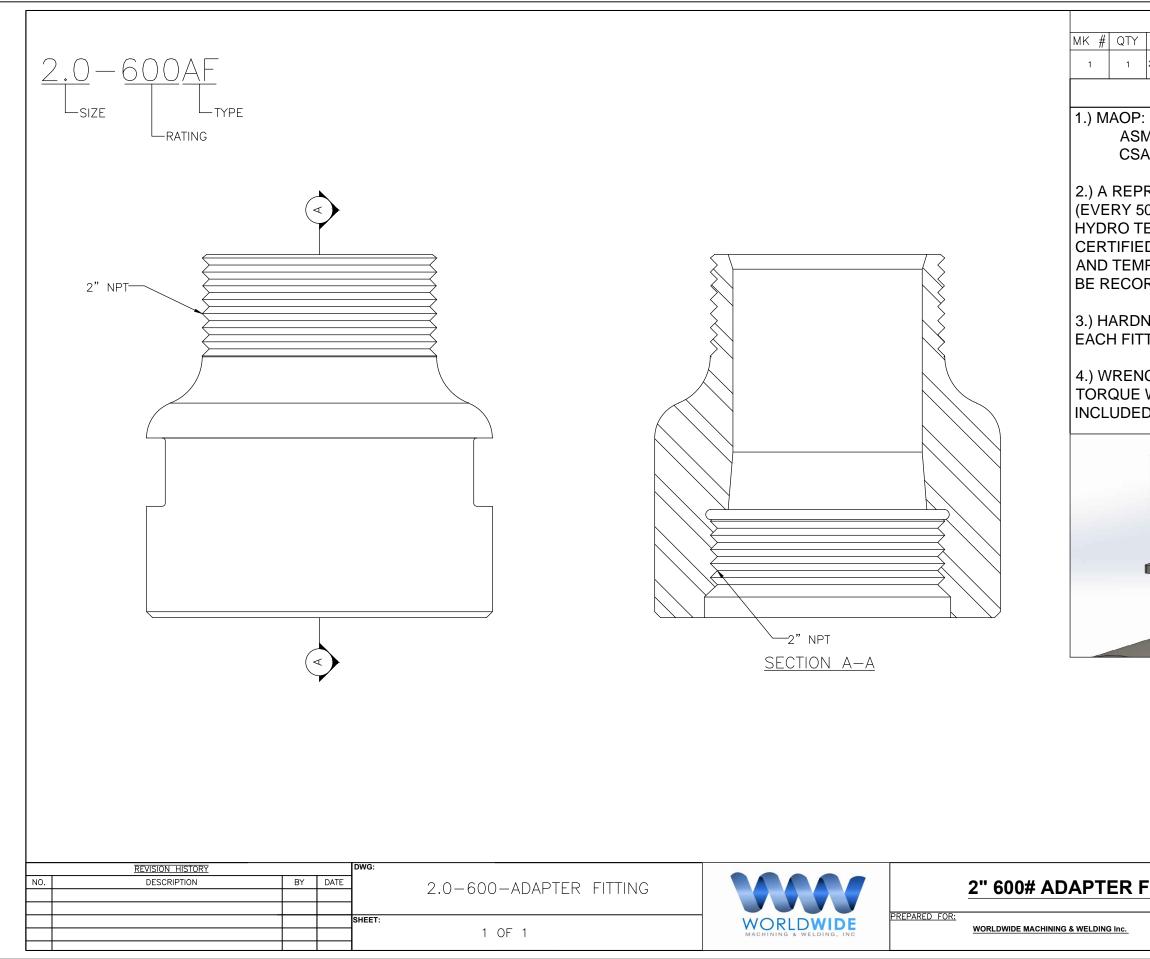
Price and lead time quotes available upon request.



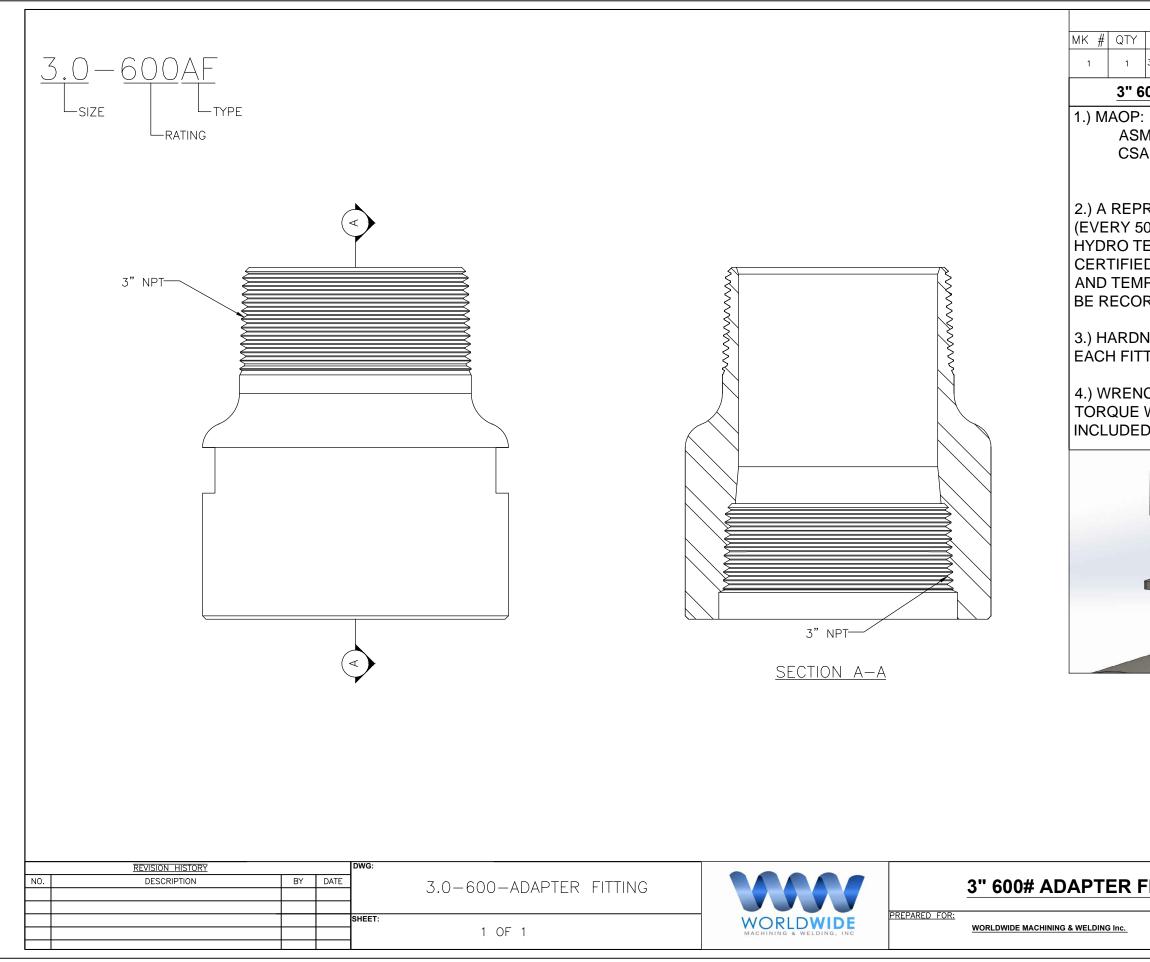
MODELS			
2.0"	ANSI	600	
3.0"	ANSI	600	

Custom sizes available upon request. Please reference the order drawings to designate fitting size, class rating and additional specifications.





BILL OF MATERIAL	
Y DESCRIPTION	MAT'L
2" 600# ADAPTER FITTING	4140
2" 600# ADAPTER FITTING	
P: SME B31.4/.6: 1480 PSI SA Z662 CAT I I / .6: 1440 PSI	
PRESENTATIVE FITTING 500TH UNIT PRODUCED) WILL BE TESTED AT 2220 PSI FOR 4.25 HO IED CHARTS PROVIDED FOR PRES MPERATURE. THE TEMPERATURE ORDED EVERY 15 MINUTES. DNESS TESTING TO BE PREFORM	SURE
ITTING.	
NCH INCLUDED FOR TIGHTING WI E WRENCH. (TORQUE WRENCH NO ED).	
	0
FITTING CHECKED - DATE TEG -	
APPROVED – DATE JA – C PREPARED BY: WORLDWIDE MACHINING & WE 405 JOHN AVE SUPERICR, WI 54860 PH: (715) 394-6006 www.www.inc.com	



BILL OF M	1ATERIAL		
	RIPTION		MAT'L
3" 600# ADAPTER FITTING			4140
600# TORF DATA	SPECIFICA	TIONS	<u> </u>
⊃: SME B31.4/.6: 1480 SA Z662 CAT I I / .6			
PRESENTATIVE FI 500TH UNIT PROD TESTED AT 2220 F ED CHARTS PROV MPERATURE. THE ORDED EVERY 15	UCED) WIL PSI FOR 4.29 IDED FOR 1 TEMPERAT	5 HOU PRES	SURE
DNESS TESTING T TTING.	O BE PREF	ORME	D ON
NCH INCLUDED FO E WRENCH. (TORG ED.)			
			<b>C</b> O
FITTING	DRAWN – DATE CHECKED – DATE		-10-2020 -10-2020
	APPROVED – DATE	JA – 01-	-13-2020
	WORLDWIDE MACHIN 405 JOH SUPERIOR,	N AVE WI 54880	
PH:	(715) 394-6006 <u>www.wwm</u> y	vinc.com F	K: (715) 394-6007



# **OUT OF SERVICE CAPS**

WorldWide Machining & Welding, Inc., has developed and is now manufacturing out of service caps.

#### **FIELD APPLICATION**

Out of service caps can be used to effectively take a threaded o-ring fitting permanently out of service.

Once an out of service cap is installed on an in-service threaded o-ring fitting, a weld should be applied to the bottom lip of the cap and the main body of the fitting, which will effectively and permanently take the fitting out of service.

Out of service caps are engineered for weld placement to be a sufficient distance from plug sealing components to prevent distortion and/or heat damage.

#### FEATURES/SPECIFICATIONS

- Each out of service cap is machined out of a solid piece of SA350 LF2 CL1 low temp material.
- Out of service caps are stamped with size, rating/class, material grade and heat number.
- Material test reports are provided for all fittings and caps supplied.

#### PROCUREMENT

Price and lead time quotes available upon request.

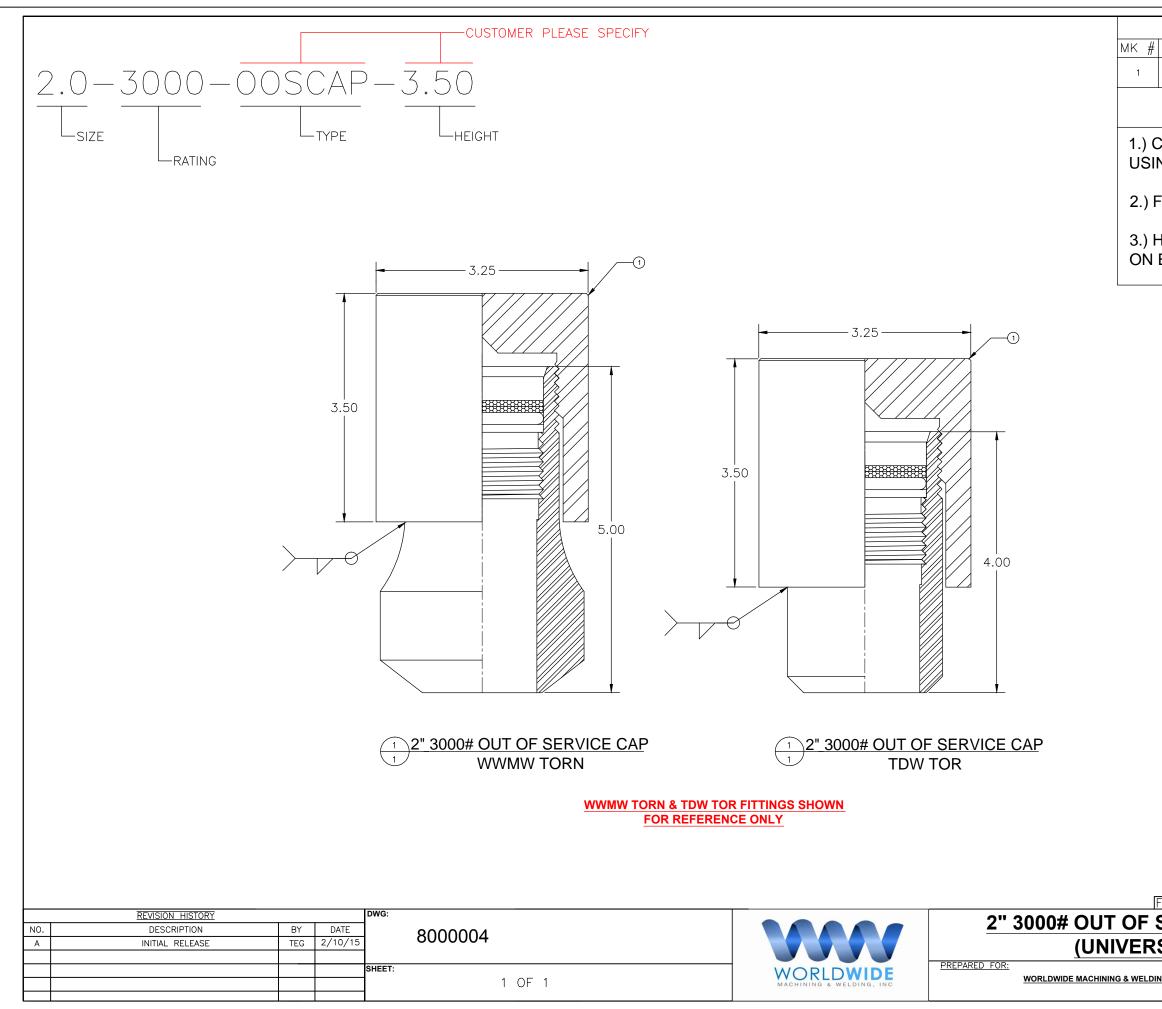


#### MODELS

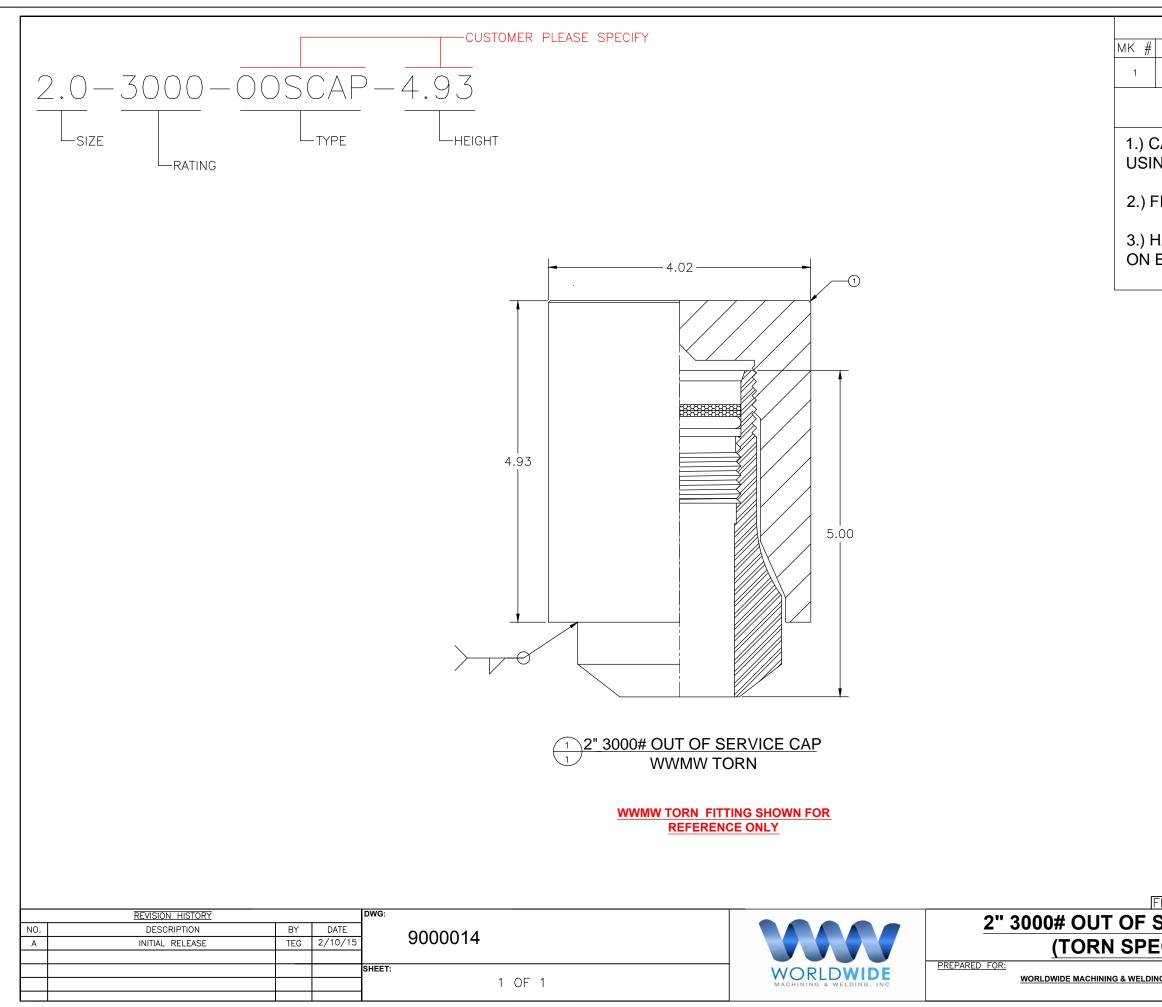
2.0" ANSI 3000 3.5"(Universal)
2.0" ANSI 3000 4.93"(TORN Specific)

Please reference the order drawings to designate fitting size, class rating and additional specifications.





BII	L OF MATERIAL
# QTY	DESCRIPTION MAT'L
1 2" 3000# 01	JT OF SERVICE CAP SA 350 LF2 CLASS 1
2" 3000# OL	IT OF SERVICE CAP DATA
c.	SPECIFICATIONS
	IIVALENT OF 0.43% MAXIMUM
SING I I W AND	CSA FORMULAS
FITTING IS DE	ESIGNED TO -50°F
HARDNESS T	ESTING TO BE PREFORMED
NEACH FITTIN	
FINISHED PROD	UCT TO BE PAINTED WORLDWIDE BLUE
SERVICE O	DRAWN         DATE         TEG-         2-10-2015           OUFO/(ED
RSAL)	CHECKED – DATE APX– 2–10–2015 APPROVED – DATE TEG– 2–10–2015
	PREPARED BY: WORLDWIDE MACHINING & WELDING INC
DING	405 JOHN AVE SUPERIOR, WI 54880 PH: (715) 394-6006 www.wmm/mic.com FX: (715) 394-6007
	та. (715) 554-6000 <u>www.wwinwinc.com</u> FA. (715) 594-600/



_		BIL	L OF I				
#	QTY						MAT'L SA 350
	1				0.15	<b>D A T A</b>	LF2 CLASS 1
	<u>2" 3</u>	000# OL	SPECIFI			DATA	
С	ARB	ON EQU				MAXIML	JM
SII	NG I I	W AND	CSA FC	RMULA	S		
F		NG IS DE	ESIGNE	) TO -50	)°F		
L	חסער	NESS T	ESTING				
		H FITTIN		IU DE	r rei	URIVIEL	
٦							
		ED PROD		<u>BE PAINT</u> drawn –		DRLDWIDE TEG- 2-10	<u>BLUE</u> -2015
						APX- 2-10	
-		<u></u>	PREPARED BY		– DATE E MACHIN	TEG- 2-10	
DIM	NG			H: (715) 394-6006	405 JOH SUPERIOR,	N AVE WI 54880	5) 394-6007