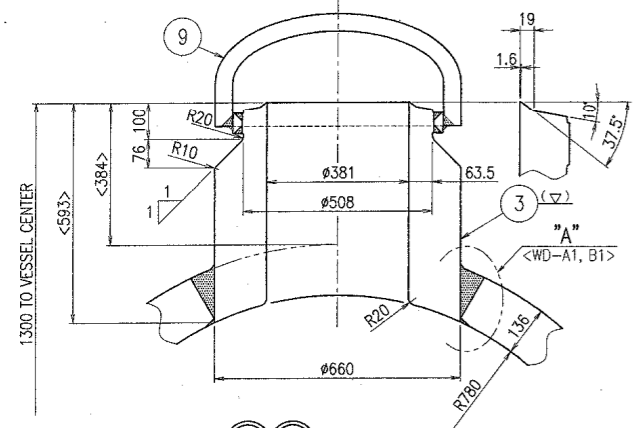
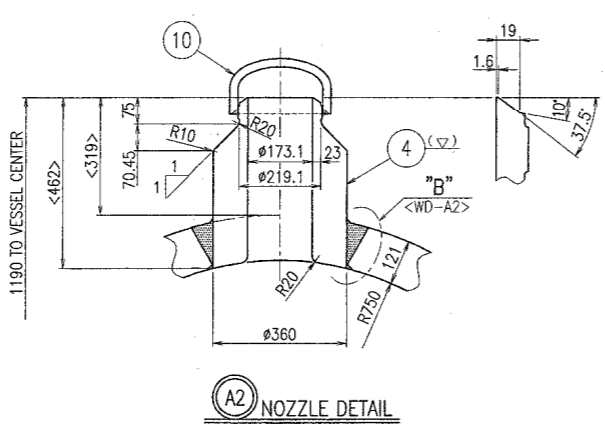


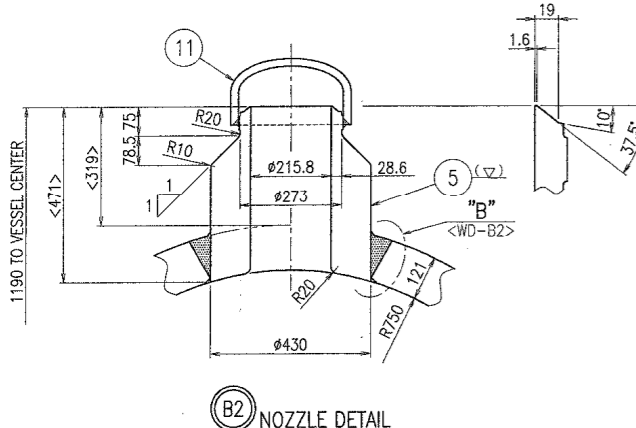
**FOR CONSTRUCTION**



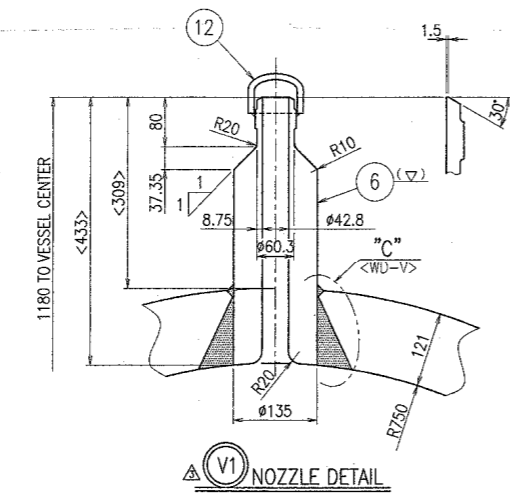
**A1 B1 NOZZLE DETAIL**



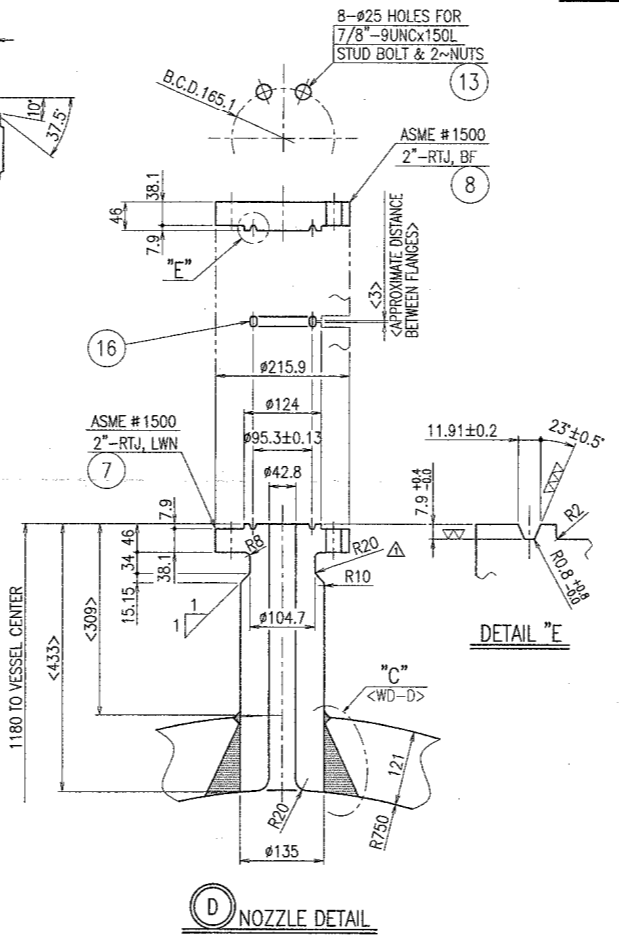
**A2 NOZZLE DETAIL**



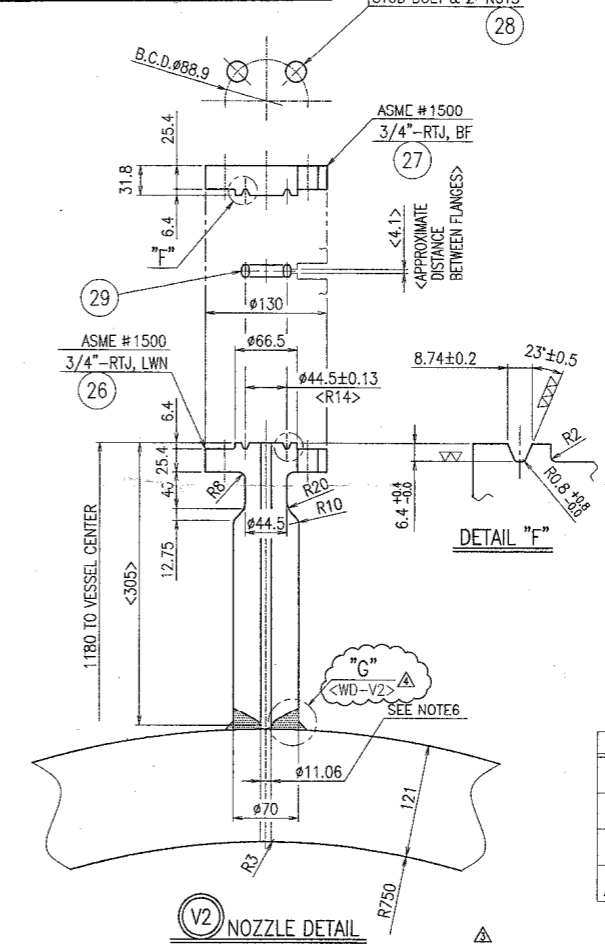
**B2 NOZZLE DETAIL**



**V1 NOZZLE DETAIL**

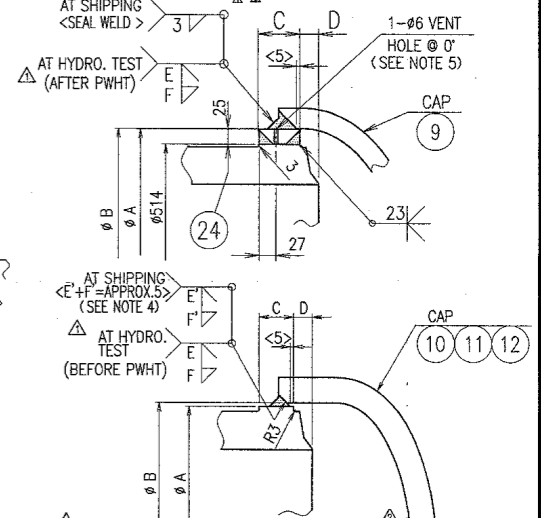


**D NOZZLE DETAIL**



**V2 NOZZLE DETAIL**

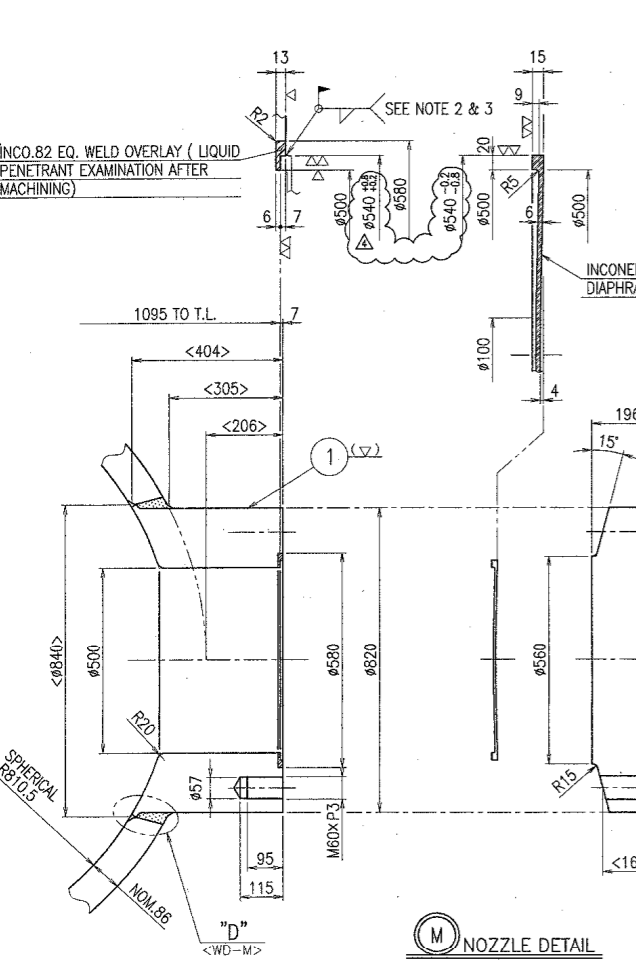
- NOTES**
- <math>\langle \rangle</math> DIMENSIONS ARE REFERENCE. (<math>\langle \rangle</math>寸法は参考寸法を示す。)
  - <math>\triangle</math> FIELD NOTE
  - THE SEAL WELDING FOR DIAPHRAGM GASKET SHALL BE CARRIED OUT AFTER FIXING THE GASKET BY USING INSTALLATION JIG (REFER TO DWG NO. : 871A-22-03-01)
  - THE INCONEL SEAL WELDING SHALL BE CHECKED BY LIQUID PENETRANT EXAMINATION AFTER AIR LEAK TEST (5 kg/cm<sup>2</sup>)
  - WELDING ROD FOR THE SITE SEAL WELD SHALL BE SUPPLIED BY HITZ.
  - WHEN THE CAP REMOVED AFTER HYDRO. TEST, VENT HOLE SHALL BE EXPOSED BY GRINDER.
  - HOLE OF V2 NOZZLE SHALL BE MADE AFTER WELDED V2 NOZZLE.



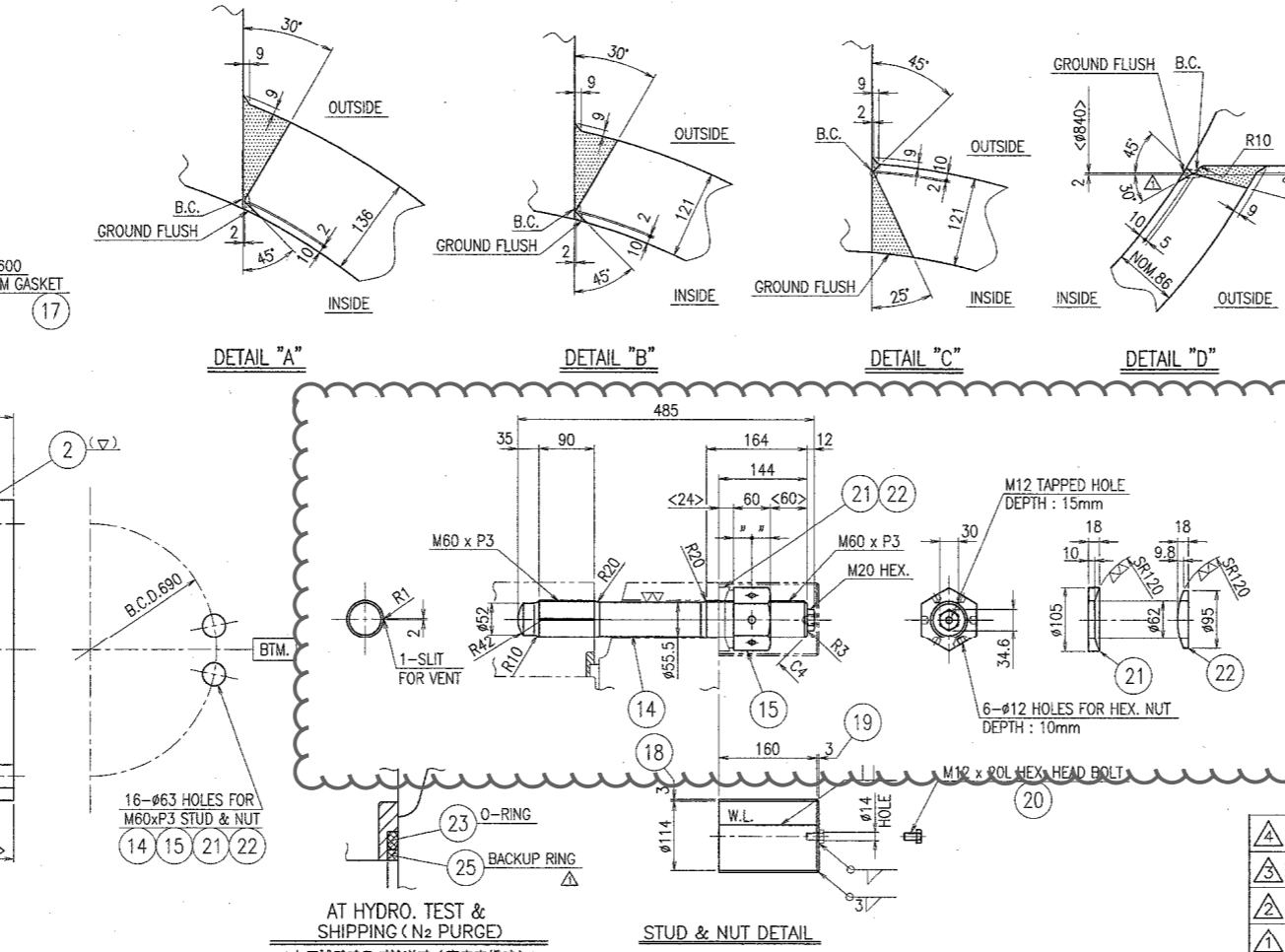
NOZ. NO.	CAP SIZE	CAP THICKNESS	PART NO.	A	B	C	D	E	F
A1 B1	NPS 26	46.5	⑨	564	<math>\langle 567 \rangle</math>	55	30	35	12
A2	NPS 10	22.45	⑩	225.1	<math>\langle 228.1 \rangle</math>	35	25	16	9
B2	NPS 12	20.9	⑪	279	<math>\langle 282 \rangle</math>	35	25	16	9
V1	NPS 3	9.8	⑫	66.3	<math>\langle 69.3 \rangle</math>	30	20	-	12

**HYDRO. TEST COVER DETAIL**  
1A+1B : WORKING. T.W. = 4,751.4 kg

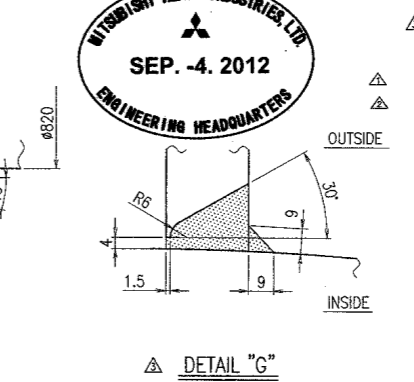
SET NO.	QTY	DESCRIPTION	MATERIAL	UNIT	REMARK
1	1	RING JOINT GASKET	SOFT IRON / HB # 120	0.5	PPY6205
2	4	STUD BOLT & 2-NUTS	SA194 Gr.7	2	PPY6205
1	27	BLIND FLANGE	SA105	2.5	PPY6201
1	26	FORGED NOZZLE	SA105	18.5	PPY6201
1	25	BACKUP RING	TEFLON	-	PPY6208
2	24	HOOP	SA516 Gr.60	125	PPY6208
1	23	O-RING	RUBBER	-	PPY6208
2	16	22 SPHERICAL WASHER	SA194 Gr.4 EQ.	0.0.95	PPY6201
2	16	21 SPHERICAL WASHER	SA194 Gr.4 EQ.	0.0.105	PPY6201
1	16	20 HEX. HEAD BOLT	C.STEEL	M12x20L	0.6
1	16	19 THREAD PROTECTOR	C.STEEL	t.3	0.2
1	16	18 THREAD PROTECTOR	C.STEEL	t.3	1.7
1	1	17 DIAPHRAGM GASKET	INCONEL 600	t.15	PPY6190
1	1	16 RING JOINT GASKET	SOFT IRON / HB # 120	0.4	PPY6202
2	16	15 NUT	SA194 Gr.7	M60xP3	2
2	16	14 STUD	SA193 Gr. B16	M60xP3	13
1	13	13 STUD BOLT & 2-NUTS	SA194 Gr.7	7/8-9UNC	0.8
1	12	12 HYDRO. TEST COVER	SA234 Gr. WPB	NPS 3	2
1	11	11 HYDRO. TEST COVER	SA234 Gr. WPB	NPS 12	4
1	10	10 HYDRO. TEST COVER	SA234 Gr. WPB	NPS 10	30
2	9	9 HYDRO. TEST COVER	SA234 Gr. WPB	NPS 26	231
1	8	8 BLIND FLANGE	SA105	10	PPY6197
1	7	7 FORGED NOZZLE	SA105	46	PPY6197
1	5	5 STUB END (2")	ASME #1500	33	PPY6195
1	5	5 STUB END (10")	ASME #1500	291	PPY6195
1	4	4 STUB END (8")	SA105	208	PPY6197
2	3	3 STUB END (20")	SA182 Gr.F22 CL.3	602	PPY6195
1	2	2 BLIND FLANGE	SA182 Gr.F22 CL.3	1196	670
1	1	1 FORGED NOZZLE	SA182 Gr.F22 CL.3	1023	PPY6195



**M NOZZLE DETAIL**



**STUD & NUT DETAIL**



**DETAIL G**

**MITSUBISHI HEAVY INDUSTRIES, LTD. ENGINEERING HEADQUARTERS**  
SEP. -4. 2012

ORDER NO.	565739	DISTRIBUTION	CUSTOMER	EC
PROJECT TEAM	TAF	CC1	PM	DPM
APPROVED	<i>[Signature]</i>	SEM	QA/QC	PROCURE
SECTION	EQUIPMENT ENG'G Group	SUBCONV	COST	SCHEDULE
APPROVED	<i>[Signature]</i>	PROCESS	PIPING	INF
DATE	4/23/2012	MACHINE	ELECT	CIVIL
DWG. No.	6417 V322-150200-03	CONST	PURCHASE	MIS-R&D
Rev.		MIS-RC&D	MIS-RC&D	VENDOR

Rev.	Prepared by	Reviewed by	Approved by	Description
1	N.Mitamura	R.Nakashima	R.Nakashima	ADDED WELD JOINT NO.
2	N.Mitamura	R.Nakashima	R.Nakashima	ADDED V2 NOZZLE.
3	N.Mitamura	R.Nakashima	R.Nakashima	DELETED NOTE 6 & etc...
4	N.Mitamura	R.Nakashima	R.Nakashima	FOLLOWED CUSTOMER'S COMMENT & etc...

**W16P00198** MITSUBISHI HEAVY INDUSTRIES, LTD. MCEC AMMONI, REPUBLIC OF TATARSTAN

P.O. No. : 563410-0035  
PROJECT NAME : TAF PROJECT  
ITEM NO. & NAME : 1-E-1502 SG BFW PREHEATER

**HITZ**  
HITACHI ZOSEN CORPORATION  
ARIAKE WORKS

Drawn By : Y. Tabata 6/17 '11  
Prepared By : N. Mitamura 7/13 '11  
Reviewed By : R. Shiotou 7/13 '11  
Approved By : R. Nakashima 7/13 '11  
Reviewed By : GAE

DATE : 6/17 '11 RELATED SECTION :  
MANUF. No. : W16P00198-01 SHEET No. :  
CODE No. : DRAWING No. : 871A-22-03-01 4