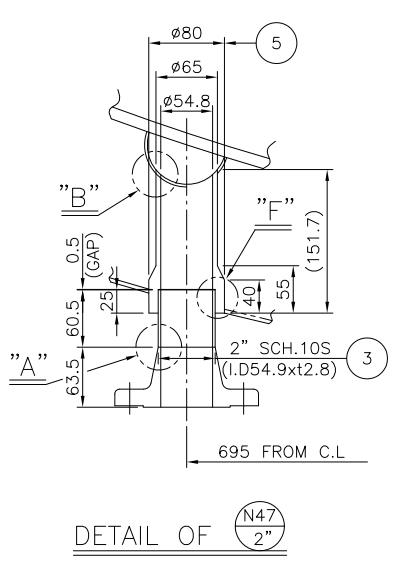
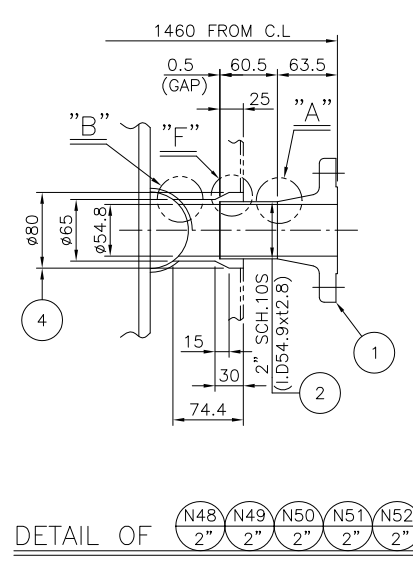
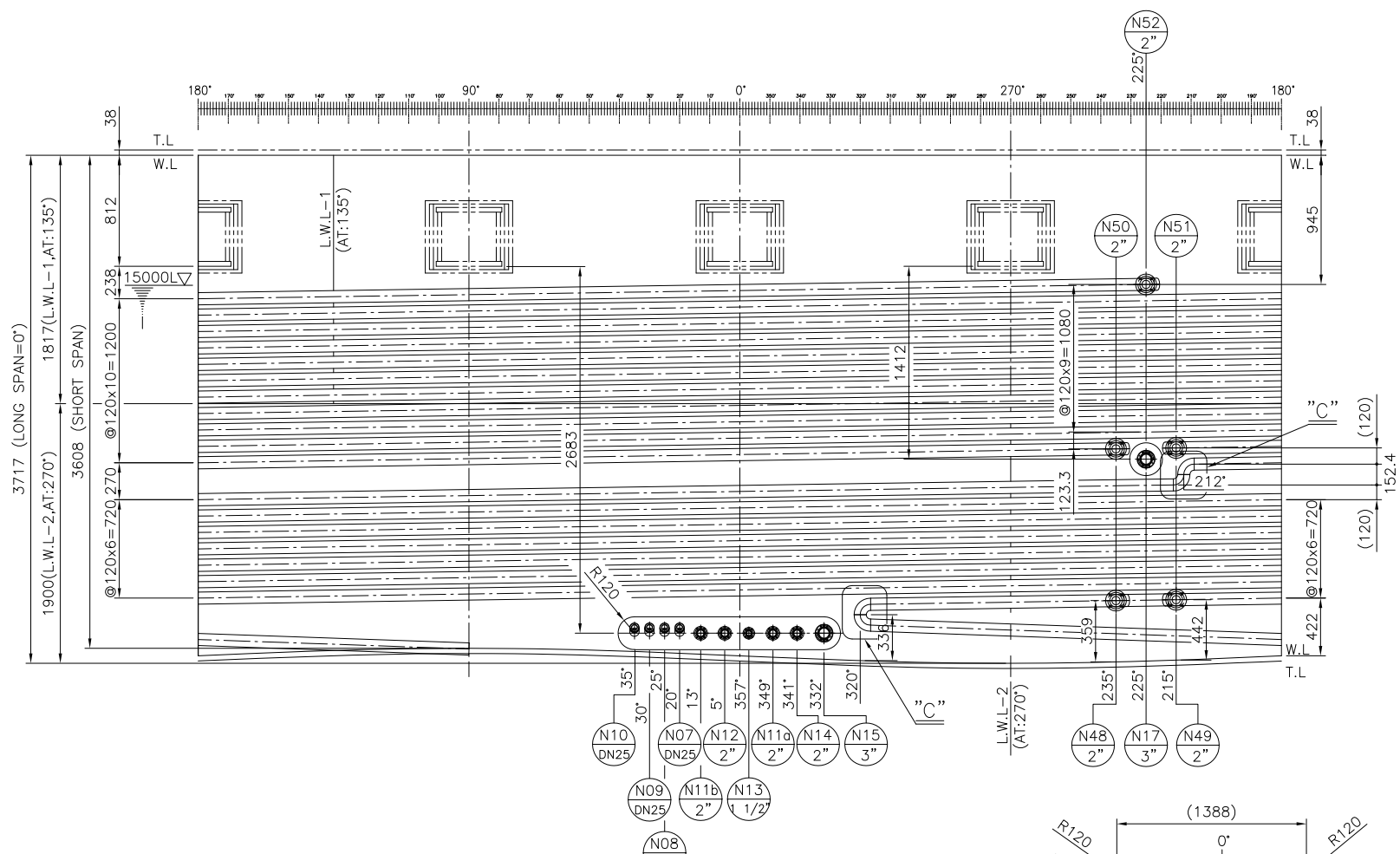


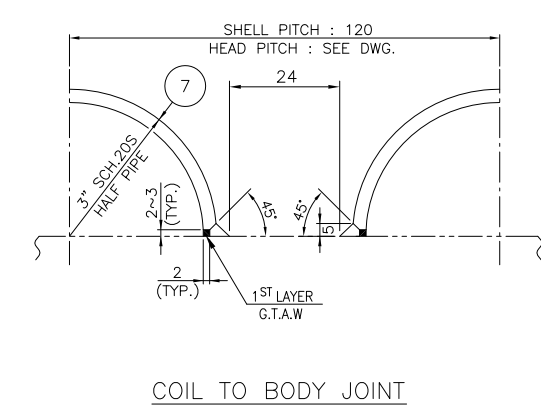
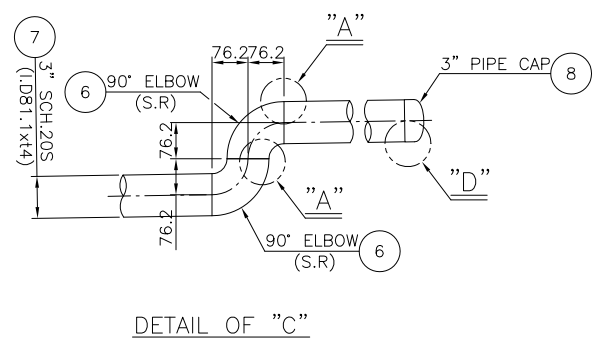
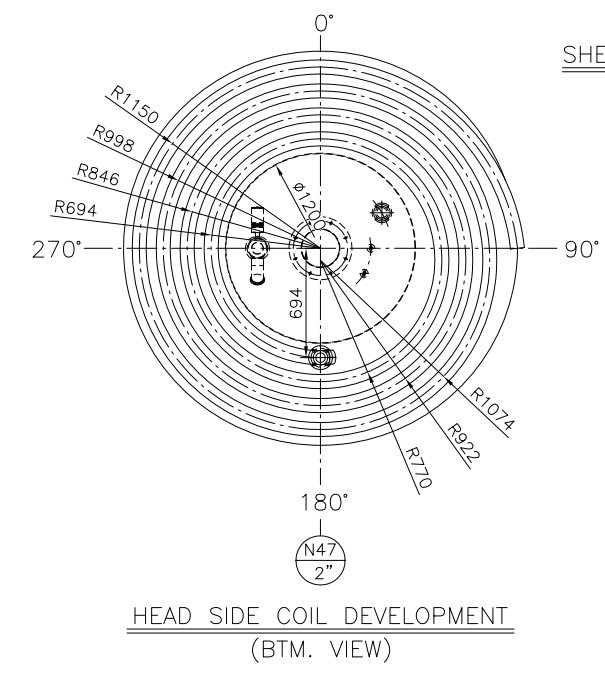
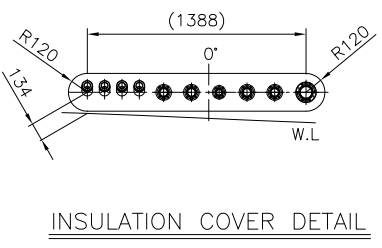
MARK	NO. REQ'D	(INCH) SIZE	SCH.	ASME RATING	TYPE & FACING	DESIGNATION	TO & PROJECTION	INSTRUCTION DWG. NO.
N52	1	2"	10S	ASME #150 W.N.R.F		JACKET OUTLET	SEE DWG.	-
N51	1	2"	10S	ASME #150 W.N.R.F		JACKET INLET	SEE DWG.	-
N50	1	2"	10S	ASME #150 W.N.R.F		JACKET OUTLET	SEE DWG.	-
N49	1	2"	10S	ASME #150 W.N.R.F		JACKET INLET	SEE DWG.	-
N48	1	2"	10S	ASME #150 W.N.R.F		JACKET OUTLET	SEE DWG.	-
N47	1	2"	10S	ASME #150 W.N.R.F		JACKET INLET	SEE DWG.	-
N45	1	3"	-	SPECIAL		CIP	SEE DWG.	207360
N44	1	3"	-	SPECIAL		CIP	SEE DWG.	207360
N43	1	3"	-	SPECIAL		CIP	SEE DWG.	207360
N42	1	3"	-	SPECIAL		CIP	SEE DWG.	207360
N41	1	3"	-	SPECIAL		GAS EXHAUST	SEE DWG.	207360
N40	1	3"	-	SPECIAL		파열판 설정압 4.1kg/cm2	SEE DWG.	207360
N39	1	DN50	-	SPECIAL		DIFF. PRESSURE MEASUREMENT(HEIGHT)	SEE DWG.	-
N38	1	1 1/2"	-	SPECIAL		PRESSURE MEASUREMENT	SEE DWG.	207357
N37	1	1 1/2"	-	SPECIAL		PRESSURE INDICATION	SEE DWG.	207357
N36	1	DN19	-	SPECIAL		SPARE (W/BLIND)	SEE DWG.	227091
N35	1	DN19	-	SPECIAL		ADDITION 3	SEE DWG.	227091
N34	1	DN19	-	SPECIAL		ADDITION 2	SEE DWG.	227091
N33	1	DN19	-	SPECIAL		ADDITION 1	SEE DWG.	227091
N32	1	4"	-	SPECIAL		LIGHTING	SEE DWG.	207361
N31	1	DN100	-	SPECIAL		VIEWING	SEE DWG.	-
N30	1	Ø1200	-	SPECIAL		MANWAY	SEE DWG.	JHP STD.
N28	1	1 1/2"	-	SPECIAL		GLUCOSE	SEE DWG.	207357
N27	1	1 1/2"	-	SPECIAL		ANTIFOAM	SEE DWG.	207357
N26	1	1 1/2"	-	SPECIAL		BASE	SEE DWG.	207357
N25	1	2"	-	SPECIAL		FEED MEDIA	SEE DWG.	207358
N24	1	1 1/2"	-	SPECIAL		PEPTONE	SEE DWG.	207357
N23	1	1 1/2"	-	SPECIAL		NUTRIENT 1	SEE DWG.	207357
N22	1	3"	-	SPECIAL		INOCULUM	SEE DWG.	207360
N21	1	3"	-	SPECIAL		BASAL MEDIA	SEE DWG.	207360
N20	1	1 1/2"	-	SPECIAL		SPARE (W/BLIND)	SEE DWG.	207357
N19	1	1 1/2"	-	SPECIAL		SPARE (W/BLIND)	SEE DWG.	207357
N18	1	2"	-	SPECIAL		HEAD SPACE AERATION	SEE DWG.	207358
N17	1	3"	-	SPECIAL		CIP	SEE DWG.	207360
N15	1	3"	-	SPECIAL		CIP	SEE DWG.	207360
N14	1	2"	-	SPECIAL		BOTTOM AERATION	SEE DWG.	207358
N13	1	1 1/2"	-	SPECIAL		SAMPLING	SEE DWG.	207357
N12	1	2"	-	SPECIAL		SPARE FOR SAMPLING	SEE DWG.	207358
N11b	1	2"	-	SPECIAL		SPARE (W/BLIND)	SEE DWG.	207358
N11a	1	2"	-	SPECIAL		SPARE (W/BLIND)	SEE DWG.	207358
N10	1	DN25	-	INGOLD		O2 MEASUREMENT	SEE DWG.	207444
N09	1	DN25	-	INGOLD		O2 MEASUREMENT	SEE DWG.	207444
N08	1	DN25	-	INGOLD		PH MEASUREMENT	SEE DWG.	207444
N07	1	DN25	-	INGOLD		PH MEASUREMENT	SEE DWG.	207444
N05	1	DN50	-	SPECIAL		DIFF. PRESSURE MEASUREMENT(LOW)	SEE DWG.	-
N04	1	DN12	-	SPECIAL		THERMOWELL	SEE DWG.	216180
N03	1	DN12	-	SPECIAL		THERMOWELL	SEE DWG.	216180
N02	1	DN240	-	SPECIAL		AGITATOR FLANGE	SEE DWG.	230921
N01	1	3"	-	SPECIAL		BOTTOM VALVE	SEE DWG.	BY ASPECO

NOZZLE SCHEDULE

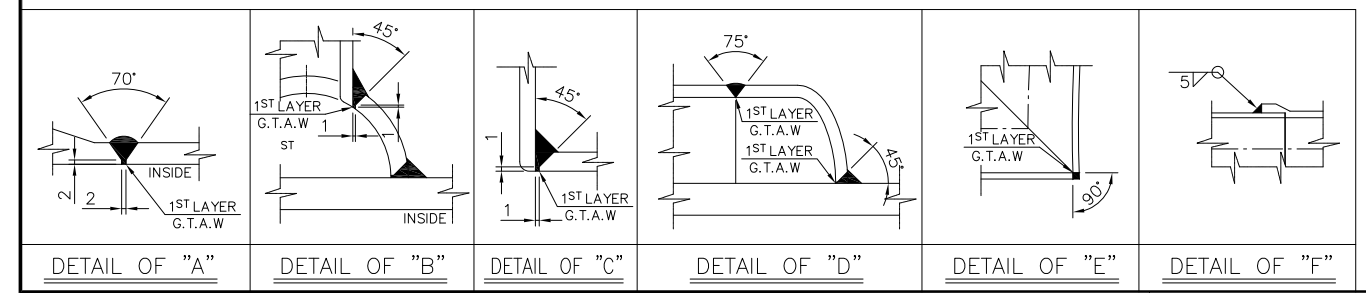
DESIGN DATA				MATERIAL SPECIFICATION				NOTES			
DESIGN CODE				SHELL, HEAD							
				INTERNAL PIPE WORK							
FLUID				SPEC. GR.				DIP TUBES			
DESIGN PRESS. $\frac{\text{bar(Mpa)}}{\text{kg/cm}^2}$				CORRO. ALLOW. (mm)				MISC. WETTED PARTS			
TEMP. (°C)				REGULATION				SHEATHING(INSULATION COVER)			
OPER. PRESS. $\frac{\text{bar(Mpa)}}{\text{kg/cm}^2}$				TYPE OF HEAD				NOZZLES / FLANGES			
TEMP. (°C)				CAPACITY TOTAL VOLUME				COIL			
HYDRO. TEST PRESS. $\frac{\text{bar(Mpa)}}{\text{kg/cm}^2}$				(M ³) WORKING VOLUME				SUPPORT LUGS / LEGS			
PNEUM. TEST PRESS. bar				WIND VELOCITY (m/SEC)				WELDED EXTERNAL TO THE VESSEL			
SAFE. EXT. PRESS. bar				SEISMIC ZONE				INSULATION			
M.D.M.T (°C)				INSULATION (mm)				GASKET			
STRESS RELIEF.				EMPTY (KG)				BOLTS/ NUTS			
JOINT EFFICIENCY (S/H)				WEIGHT OPER. (KG)							
RADIOGRAPHY (S/H)				FULL WATER (KG)							

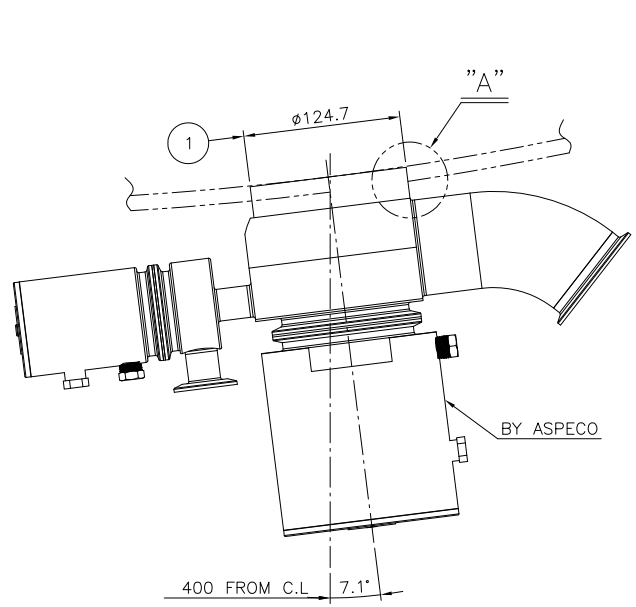


SHELL SIDE COIL DEVELOPMENT
(OUT SIDE VIEW)

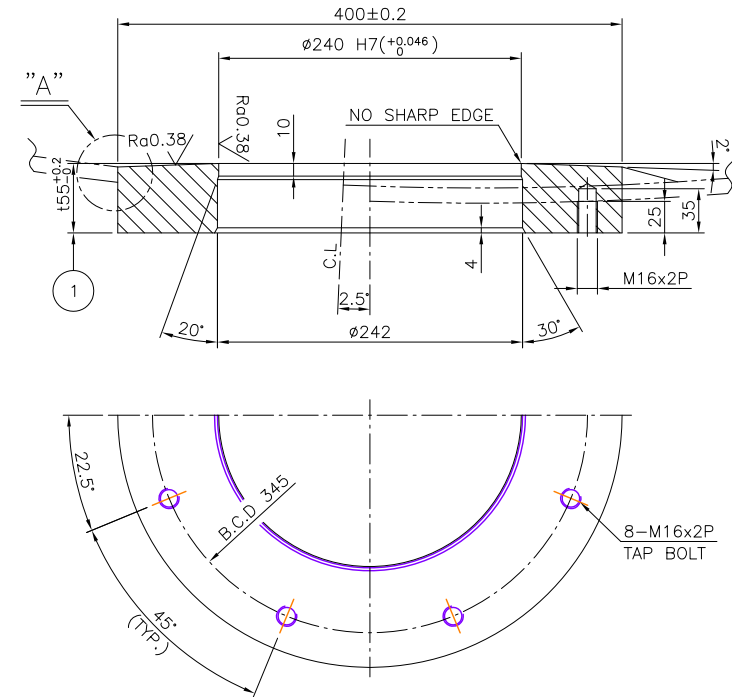


PART NO.	NAME OF PART PART CODE	MATERIAL	NO. REQ'D	SPARE	UNIT	REMARK
8	PIPE CAP					
7	HALF PIPE					
6	90° ELBOW(S.R)					
5	BOSS					
4	BOSS					
3	NOZZLE NECK					
2	NOZZLE NECK					
1	FLANGE					

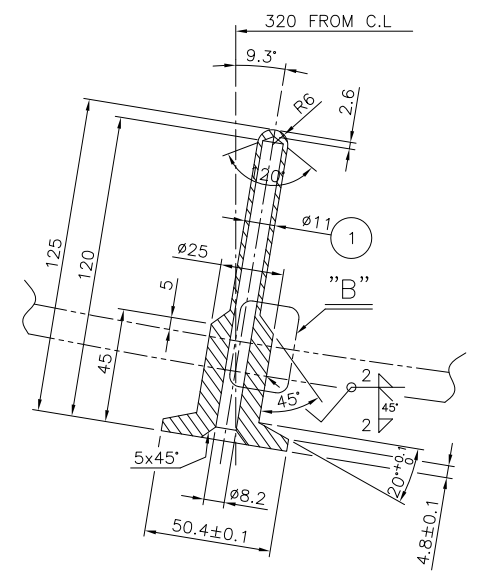




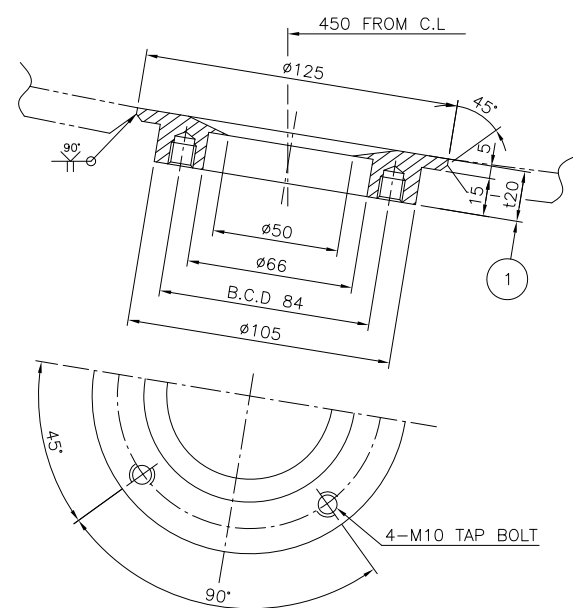
DETAIL OF N01
3"
(SEE THE ASSEMBLY DWG.)



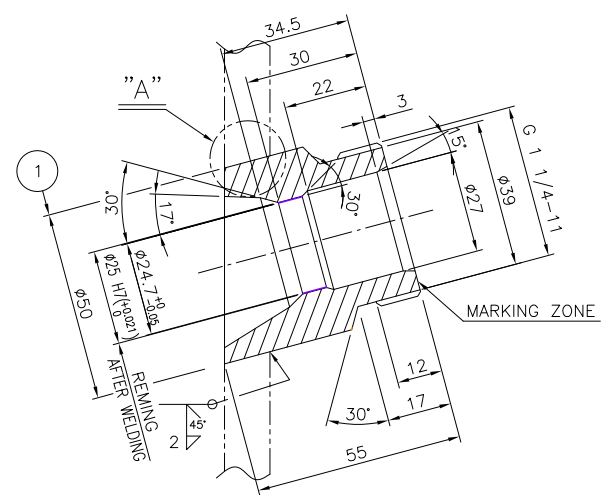
DETAIL OF N02
DN240
(SEE 230921)



DETAIL OF N03 N04
DN12 DN12
(SEE 216180)

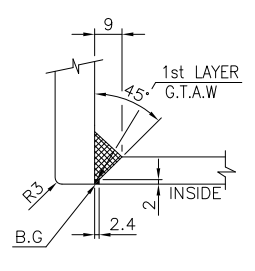


DETAIL OF N05
DN50

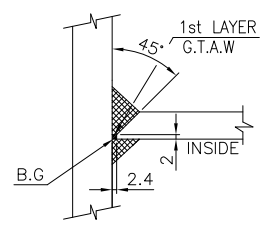


DETAIL OF N07 N08 N09 N10
DN25 DN25 DN25 DN25

N10						
N09						
N08						
N07	1	INGOLD NOZZLE				
N05	1	SPECIAL FLANGE				
N04						
N03	1	SPECIAL FLANGE				
N02	1	SPECIAL FLANGE				
N01	1	SPECIAL FLANGE				
PART NO.	NAME OF PART	MATERIAL	NO. REQ'D	SPARE	UNIT	REMARK
PART CODE						



DETAIL OF "A"



DETAIL OF "B"