

**INTERFACE & SERVICE LEGEND**

INTERFACE	CONNECTION - SIZE (TYPE)	SERVICE
A RADWASTE INFLUENT	2" ST. STL. - 150° ANS I. E. FL.	BODIC ACID @ 70°F @ 10 PSIG
B CONCENTRATE DISCHARGE	2" ST. STL. - 150° ANS I. E. FL.	80 GPM @ 30 PSIG (CONTINUAL)
C CONCENTRATOR DRAIN	3/4" ST. STL. - SDC WELD	LOCAL
D STEAM SUPPLY	10" C.S. - 150° ANS I. E. FL.	10 PSIG SAT. STEAM @ 12900 LB/HR
E CONDENSATE RETURN	1 1/2" C.S. - 150° ANS I. E. FL.	12900 LB/HR @ 212° F
F CONDENSER WATER IN	8" ST. STL. - 150° ANS I. E. FL.	30°F IN @ 150 PSIG 484000 LB/HR
G CONDENSER WATER OUT	8" ST. STL. - 150° ANS I. E. FL.	113°F OUT @ 135 PSIG 484000 LB/HR
H CONDENSATE FLOW LINE	1" ST. STL. - 150° ANS I. E. FL.	CONDENSATE WATER 80000 MAX AT LOCAL
I DISTILLATE SAMPLE	3/4" ST. STL. - SDC WELD	LOCAL
J COOLERS COOLING WATER INLET	3" ST. STL. - 150° ANS I. E. FL.	30°F IN @ 150 PSIG 30000 LB/HR
K COOLERS COOLING WATER OUTLET	3" ST. STL. - 150° ANS I. E. FL.	105°F OUT @ 135 PSIG 30000 LB/HR
L DISTILLATE DISCHARGE TO FACILITY	2" ST. STL. - 150° ANS I. E. FL.	20 GPM @ 150°F @ 30 PSIG
M PNEUMATIC FACILITY SUPPLY (LOCAL)	1" N.P.T. (FEMALE)	80-100 PSIG NOT AIR SUPPLY DRY TO SIGNAL
N CONCENTRATE SAMPLE	1" N.P.T. (FEMALE)	100 PSIG NITROGEN LOCAL
O NITROGEN SUPPLY	1/2" C.S. - 150° ANS I. E. FL.	100 PSIG NITROGEN
P VACUUM BREAKER	3/4" N.P.T. (FEMALE)	STEAM HEATER BUNDLE
Q NON-CONDENSIBLE VENT	3/4" N.P.T. (FEMALE)	STEAM HEATER BUNDLE
R RADIATION DISC	3" ST. STL. - BUTT WELD	RADIATION GAS VENT SYSTEM
S CHEMICAL FEED	1/4" ST. STL. - 150° ANS I. E. FL.	LOCAL
T THERMAL RELIEF DRAIN	1/2" ST. STL. - 150° ANS I. E. FL.	FACILITY EQUIP. DRAIN
U VACUUM PUMP SEAL WATER DRAIN	1" ST. STL. - 150° ANS I. E. FL.	FACILITY EQUIPMENT DRAIN
V SUPERHEATER WATER	2" C.S. - 300° ANS I. E. FL.	3-5 GPM @ 115°F @ 20 PSIG
W PW SENSOR CONNECTION	1/4" ST. STL. - SDC WELD	LOCAL

**NOTES:**

- FOR MAIN ASSEMBLY SEE AMF DWS 154-001-E-005
- UNLESS OTHERWISE SPECIFIED ELECTRONIC INSTRUMENTATION OUTPUT SIGNAL TO BE 4 TO 20 MA D.C.
- (P.S.) POWER SUPPLIES TO LOCAL MOUNTED (ON PROCESS SKID) INSTRUMENTATION (ASSOCIATED WITH INDICATORS ETC) TO BE PROVIDED BY OTHERS.

**REVISIONS CON'T**

ZONE	LTN	DESCRIPTION	DATE	APPROVED
A	154-003-E-008-A	SEE DCM 154-003-E-008-A	1-10-71	[Signature]
B	154-003-E-008-B	SEE DCM 154-003-E-008-B	1-10-71	[Signature]
C	154-003-E-008-C	SEE DCM 154-003-E-008-C	1-10-71	[Signature]
D	154-003-E-008-D	SEE DCM 154-003-E-008-D	1-10-71	[Signature]
E	154-003-E-008-E	SEE DCM 154-003-E-008-E	1-10-71	[Signature]
F	154-003-E-008-F	SEE DCM 154-003-E-008-F	1-10-71	[Signature]

INITIATED MANUALLY FROM REMOTE CONTROL BOARD VIA CONTROL SWITCH

**SYMBOL LEGEND**

FCV	PRESSURE CONTROL VALVE
LCV	LEVEL CONTROL VALVE
RCV	FLOW CONTROL VALVE
HCV	HAND(ACTUATED) CONTROL VALVE
FC	FLOW CONTROL
LC	LEVEL CONTROL
PC	PRESSURE CONTROL
VC	VACUUM CONTROL
TI	TEMPERATURE INDICATOR
VI	VACUUM INDICATOR
PI	PRESSURE INDICATOR
FI	FLOW INDICATOR CONTROL
CE	CONDUCTIVITY ELEMENT (CELL)
TE	TEMPERATURE ELEMENT (THERMO)
LE	LEVEL ELEMENT
CIC	CONDUCTIVITY INDICATING CONTROL
AKC	PRESSURE INDICATING CONTROL (FILTER-REGULATOR IN RANGE)
TIC	TEMPERATURE INDICATING CONTROL
LIC	LEVEL INDICATING CONTROL
VT	VACUUM TRANSMITTER
LT	LEVEL TRANSMITTER
FT	FLOW TRANSMITTER

**SYMBOL LEGEND (CON'T)**

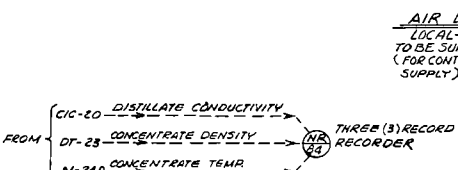
PT	PRESSURE TRANSMITTER
FC	FAIL CLOSED
CV	CHECK VALVE
LSC	LIMIT SWITCH - CLOSED
LSO	LIMIT SWITCH - OPEN
RV	RELIEF VALVE
Y	STEAMER
---	PROCESS PIPING (BY AMF)
---	PROCESS PIPING (BY OTHERS)
---	PNEUMATIC TUBING
---	ELECTRICAL CONTROL LINE
---	AIR SUPPLY LINE
---	PNEUMATIC INSTRUMENT LINE
---	ELECTRICAL HEAT TRACING
○	LOCALLY MOUNTED
○	REMOTE MOUNTED
○	LOCALLY MOUNTED TRANSMITTER
○	INDICATING LIGHT
○	NORMALLY OPEN VALVE
○	NORMALLY CLOSED VALVE
○	RADIATION DISC
○	CHECK VALVE

**SYMBOL LEGEND (CON'T)**

○	FLOW CONTROL VALVE AIR OPERATED DIAPHRAGM TYPE
○	PRESSURE REGULATOR VALVE (BUTTERFLY)
○	HAND(ACTUATED) DIAPHRAGM VALVE
○	HAND OPERATED NEEDLE VALVE
○	HAND OPERATED GLOBE VALVE
○	PRESSURE CONTROL VALVE ELECTRICALLY OPERATED SOLENOID-FAILED CLOSED
○	THREE-WAY VALVE ENERGIZED
○	THREE-WAY VALVE DE-ENERGIZED
○	MODULATING VALVE AIR OPERATED COMPARTMENT TYPE
○	CENTRIFUGAL PUMP
○	CANNED PUMP
○	FUNNEL
○	ORIFICE PLATE
○	TEMPERATURE CONTROL
○	FLOW ELEMENT (ORIFICE PLATE)
○	MISCELLANEOUS (LABELED IN FIG)
○	LEVEL GAGE (LONG GAGE)
○	REMOTE MOUNTED HAND CONTROL VALVE
○	IMMERSION HEATER (ELECTRICAL)
○	FLOW TOTALIZER
○	VACUUM ALARM LOW

**SYMBOL LEGEND (CON'T)**

○	LCV LEVEL CONTROL HIGH
○	LCL LEVEL CONTROL LOW
○	LHM LEVEL ALARM HIGH
○	LHL LEVEL ALARM LOW
○	TAL TEMPERATURE ALARM LOW
○	HTR HEATER
○	DT DENSITY TRANSMITTER
○	DI DENSITY INDICATOR
○	DAH DENSITY ALARM HIGH
○	CAH CAPILLARY LINE (FILLED)
○	HO HAND OPERATED GATE VALVE
○	CF CONSTANT FLOW ORIFICE
○	N" STAMP BOUNDARY



5935-004-M-307-

**AMF BEIRD**  
20 GPM RADWASTE EVAPORATOR SYSTEM FLOW DIAGRAM

BY	DATE
AMF	11-30-71
AMF	12-31-71
AMF	1-10-72
AMF	1-10-72

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES; BREAK EDGES; DIA'S CONCENTRIC WITHIN; MACHINED FILLETS; CAST & FORGED FILLETS; TOLERANCES: CAST & FORGED DIA'S & FILS. DECIMAL DIM'S - .010; FILS. FRACTIONAL DIM'S - 1/64; OVER 6" - 1/32; ANGLES - 1°; MACH. SURFACE FINISH PER MIL-STD-10

LAST TRG NO. USED: 84  
JOB NO. 186426

SCALE: NONE

SHEET 1 OF 2