

DRAWING / PROJECT APPROVAL

☐ ISSUED FOR APPROVAL DATE: \_\_\_\_\_ BY: \_\_\_\_\_

☐ REVISE AS NOTED AND RETURN FOR APPROVAL

☐ APPROVED FOR CONSTRUCTION AS DRAWN

PLEASE INDICATE ABOVE, SIGN AND RETURN

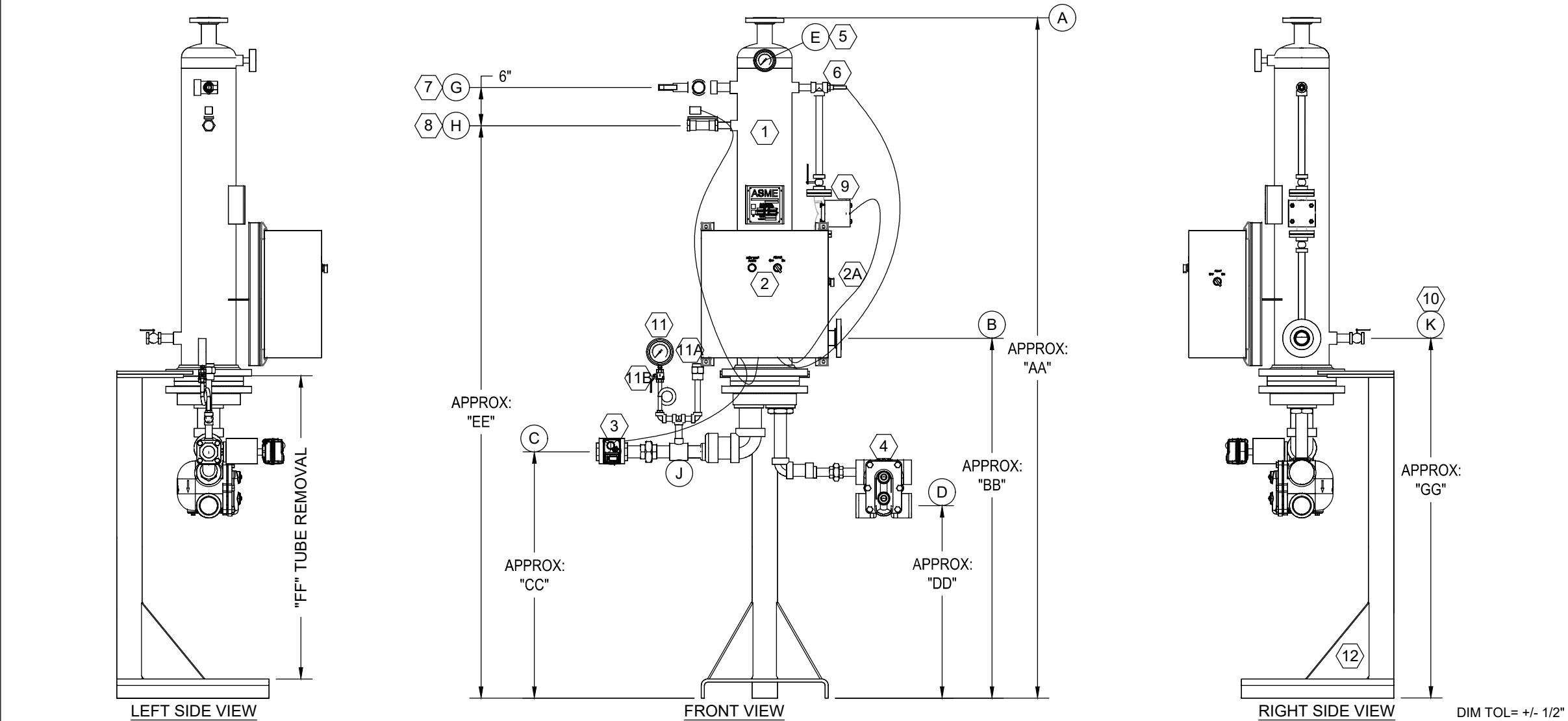
RETURNED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

It is the sole responsibility of the purchaser to assure that this drawing fully complies with any / all specifications and conditions of service when approving for construction. Approval for construction is an agreement that this system, as presented in this drawing fully complies.

Material procurement and construction will NOT begin until we receive your final drawing approved for construction without pending changes. Quoted delivery lead times are based from the end of the drawing approval process. If you require procurement to begin prior to drawing approval, make commitments and arrangements with your sales person.

- GENERAL NOTES:
- 100% FACTORY TESTED BEFORE SHIPMENT
  - SINGLE SEATED SEGMENTED V CONTROL VALVE FOR DEAD TIGHT SHUTOFF ON NO LOAD CONDITIONS. 300:1 TURNDOWN
  - 316L STAINLESS STEEL SHELL CONSTRUCTION
  - FULL SELF TUNING PID DIGITAL CONTROLS
  - DOUBLE SAFETY SOLENOID SAFETY HIGH LIMIT SYSTEM FAIL SAFE TEMPERATURE CONTROLLER AND CONTROL VALVE
  - MOUNTING FRAME INCLUDED
- INSTALLATION NOTES:
- BLEND VALVE RECOMMENDED WITH 140F OR HIGHER SET POINT.
  - ALL DIMENSIONS TO HAVE  $\pm\frac{1}{2}$ " TOLERANCE
  - WHEN USING A FLOAT & THERMOSTATIC STEAM TRAP, THE CONDENSATE MUST DRAIN BY GRAVITY TO A VENTED RECEIVER. NO CONDENSATE LIFT OR BACK PRESSURE ALLOWED FROM TRAP OUTLET.
  - PROPERLY SIZED STRAINER WITH 100 MESH SCREEN MUST BE INSTALLED WITHIN 3FT OF THE CONTROL VALVE.
  - PIPE NOZZLES "G", "H", AND "K" TO A SUITABLE DRAIN BY OTHERS.
  - NOZZLES WILL NOT SUPPORT EXTERNAL LOADINGS. FIELD SUPPORT BY OTHERS.
  - CONTROL VALVE, STEAM TRAP AND GAUGES, SHIPPED LOOSE FIELD INSTALLED BY OTHERS.
  - STEAM SUPPLY TO THE CONTROL VALVE SHOULD BE SIZED FOR NO MORE THAN 10,000 FPM TO AVOID HIGH PRESSURE DROPS.
  - MAIN DRIP STEAM TRAP MUST BE LOCATED DIRECTLY AT THE CONTROL VALVE INLET.
  - CONTROL VALVE MUST BE INSTALLED, AS SHOWN, ON IT'S SIDE. VALVE CONTROL ELECTRONICS ARE NOT INSULATED.



THIS DRAWING AND INFORMATION THEREON ARE THE PROPERTY OF: THERMAFLO INCORPORATED AND SHALL NOT BE USED OR DISCLOSED, EXCEPT IN ACCORDANCE WITH PRIOR WRITTEN APPROVAL. THIS DRAWING AND BILL OF MATERIAL REPRESENTS THE ENTIRE CONTENT OF THERMAFLO'S SCOPE OF SUPPLY. THERMAFLO MAKES NO OTHER REPRESENTATION OF ADDITIONAL ITEMS, VALVES, OR EQUIPMENT OTHER THAN WHAT IS LISTED AND SHOWN HERE. THERMAFLO INCORPORATED RESERVES THE RIGHT TO MAKE DESIGN CHANGES AS NEEDED.

DESIGN DATA				
ASME CODE SECTION VIII, DIV. 1 STAMP UM				
SHELL RATED		150 PSI @ 375F		
TUBE RATED		150 PSI @ 375F		
CONDITION OF SERVICE AND PERFORMANCE DATA				
FLOW RATE (gpm)		GPM		
INLET TEMPERATURE (Deg. F)		°F		
OUTLET TEMPERATURE (Deg. F)		°F		
INLET STEAM PRESSURE (PSI)		PSIG		
STEAM CAPACITY REQ. (LBS/HR)		LBS/HR		
SEE QUOTE				
MATERIALS of CONSTRUCTION				
SHELL		316L STAINLESS STEEL		
TUBES				
TUBESHEET (OUTER)(DOUBLE WALL ONLY)				
TUBESHEET (INNER)				
STEAM HEAD		CAST IRON		
BILL of MATERIALS				
ITEM	SIZE SELECTION	DESCRIPTION		
1	BUNDLE	8"ø X 48" SHELL (ASME CODE STAMPED), 1 1/2" OF GLASS INSULATION & VINYL JACKET		
2		THERMAFLO ELECTRONIC CONTROLLER, UL LISTED, PID ELEC. TEMP. CONTROL, W/ SAFETY SHUTDOWN AND OPERATION INDICATOR LIGHTS		
2A	STANDARD	1/2" UL LIQUIDTIGHT FLEXIBLE STEEL CONDUIT, TYPE LFMC		
3		THERMAFLO JVV-VBALL STEAM CONTROL VALVE, STAINLESS, W/FAIL SAFE ACTUATOR		
4		THERMAFLO FLOAT AND THERMOSTATIC STEAM TRAP		
5	STANDARD	TEMPERATURE GAUGE, 0-250F, SS WELL		
6	STANDARD	1/2" RTD, 4-20ma OUTPUT FROM CONTROLLER		
7	STANDARD	1" 18C5225150 PRESSURE & TEMP. RELIEF VALVE, SET @ 150 PSI @ 210F, RATED @ 3,625,000 BTU.		
8	STANDARD	3/4" HIGH-TEMP. DUMP SOLENOID		
9	STANDARD	3/4" SHELL RE-CIRCULATION PUMP		
10	STANDARD	1" THERMAFLO 3700 BALL VALVE, FULL PORT, STAINLESS STEEL		
11	STANDARD	4.5" DIAL PRESSURE GAUGE 0-30 PSIG W/ SYPHON		
11A	STANDARD	3/4" THERMAFLO VACUUM BREAKER		
11B	STANDARD	1/4" THERMAFLO 3700 BALL VALVE, FULL PORT, STAINLESS STEEL		
12	STANDARD	THERMAFLO CARBON STEEL STAND		
NOZZLES & CONNECTIONS				
ITEM	SIZE (IN)	TYPE	SERVICE	
A	2	FLG	HOT WATER OUTLET	
B	2	FLG	COLD WATER INLET	
C		NPT	STEAM INLET	
D		NPT	CONDENSATE OUTLET	
E	3/4	NPT	GAUGE	
G	1	NPT	RELIEF VALVE	
H	3/4	NPT	DUMP SOLENOID	
J	3/4	NPT	GAUGE	
K	1	NPT	DRAIN	