NOTE: TWO TIE RODS 3/8"-16 TPI X 3/4" LG T.S. END & 2'-2" LG OPP END.

PART NO.	QTY.	DESCRIPTION	MAT'L
2A	4	TIE RODS 3/8 DIA X 5'-7" LG	STEEL
2B	2	7'-2 3/4" LG	
3A	10	3/8 SCH 40 PIPE SPACERS X 2 1/2" LG	
3B	6	5/8 LG	
3C			
3D			

NOZ	SIZE	FLG TYPE	FLG RATING	NOZ NECK MAT.	FLG MAT.	REMARKS
A	6"	LAP	150#	SCH 40 S/S 304	SA-182 GR F304	
B	6"	LAP	"	" " "	"	
C	10"	S.O.	"	SCH 80 C/S	"	
D	4"	S.O.	"	" " "	"	
E,F	1"	S.O.	"	" " "	"	

13'-5 1/16" F/F GASKETS

28" 3 Eq. Sp. @ 28 3/8" = 7'-1 1/8"

INSIDE FACE T.S.

LIFTING LUG

IMPINGMT. PL. SEE DET.

EXP. JT.

2 HEX NUTS EA. TIE ROD

LIFTING LUG

BAFFLE CUTS

PARTN.

TYP. SUPPT. LUG C/S

ORIENTATION

2 SLOTTED HOLES 7/8" x 1 3/4" THIS SUPPT. LUG

2-7/8" DIA HOLES THIS SUPPT. LUG

14'-2 3/4" O/AL.

SPIRAL SEPERATED

NOZ. "A" & "B"

NOZ. "C" "D" "E" & F

VIEW X-X

PARTN.

B.P.F. NO. 41780	DATE 5/11/71
SHEET 3	APPARATUS NO. E-514-2
PROJECT & ACCOUNT	26019 2004
ORDER NO.	336-026-19395
PLANT APPROVED	HANOVER

37-5/8" DIA HOLES FOR 3/4" DIA X 7" LG STUDS W/ 2 NUTS EA SIDE OF ALLOY ST

BETWEEN HOLES 8 PLACES

GASKET E-846

BEV. FLG 5" x 45°

1/4" TK. 304 S/S

FOD ST

3/4" LINER 304 S/S

PARTNS.

COVER

568 TUBES 3/4" O.D. x 16 BWG (AVG WALL) x 12'-0" LG WELDED TYPE S.T.-CA2 304 S/S

TUBE-TUBE SHEET JOINT
1) LIGHTLY ROLL TUBES TO HOLD
2) WELD TUBE TO T.S. NO FILLER METAL ADDED

DIMENSIONS NOT SHOWN SAME AS INLET CHANNEL

6 TNK ST BACK UP STRIP

568 TUBES 3/4" O.D. x 16 BWG (AVG WALL) x 12'-0" LG WELDED TYPE S.T.-CA2 304 S/S

SUPPT. BAFFLES

CUT 2 SUPPTS.

568 HOLES 25/32" DIA. To MATCH T.S.

6 HOLES 13/32" DIA. FOR TIE RODS

CUT 2 SUPPTS.

26.55" OD

3/8" TK.

568 HOLES FOR 3/4" O.D. TUBES ON 15/16" TRI PITCH

TUBE SHEET LAYOUT

TYPICAL TUBE SHEET DETAILS

RETURN CHANNEL COVER TYP.

LONGL SEAM WELD DETL SHELL & CHANNEL

SHELL

IMPINGMT. PL DET.
12" x 18 1/4" x 3/8" TK. C/S PL CENTERED ON NOZ. "C"

2" DIA HOLE

1" x 45°

LIFTING LUG
5" SQ x 1/2" TK. C/S
2 REQ'D

NOTE: SPARE GASKETS TO BE FURNISHED IN ACCORD WITH ORDER SPEC.

HERC, INC. ORD. NO. 336-026-19395-11-001-FED
TWO VESSELS REQ'D.

GENERAL NOTES

DESIGN FABRICATION & INSPECTION IN ACCORD WITH ASME U.P.V. CODE (1968) & TEMA SPECS CLASS "C"
ASME CODE STAMP REQ'D
SEPT. RADIOGRAPHIC EXAM. REQ'D
PAINT SUPPORT & PTD. C.L.U.G.S ONLY PER HERC. INC SPEC. PROJ.

	TUBE SIDE	SHELL SIDE
DESIGN PRESS.	FULL VAC. & 120 PSIG	150 PSIG
DESIGN TEMP.	250°F	366°F
HYDRO TEST	180 PSIG	225 PSIG
CORROSION ALLOW.	NONE	.0625"
FLUID	METHANOL	STEAM

	MAT'L	ASME SPEC
TUBES	304 S/S	SA-249
TUBE SHEETS	304 S/S	SA-240
TIE RODS	STEEL	
SPACERS		
BAFFLES		
CHANNELS	304 S/S	SA-240
CHANNEL COVERS	C/S & 304 S/S	SA-515-70/240
SHELL	STEEL	SA-515-70
EXP. JOINT	STEEL	SA-515-70
CHANNEL FLG	FOD ST.	SA-181-II
NOZ. NECK (CHANNEL)	304 S/S	
NOZ. NECK (SHELL)	STEEL	SA-53-B
NOZ. FLGS	FOD ST.	SA-181-I
EXP. STUDS	AL. ST.	SA-193-B7
EXP. NUTS	AL. ST.	SA-194-2H
GASKETS	SPIRAL WOUND S/S & GRAS	

WT. OF UNIT DRY 12600#, FLOODED 16100#

THOROUGHLY CLEAN INSIDE & OUTSIDE OF UNIT TO BE FREE OF ALL MILL SCALE, RUST, GREASE, DIRT, SLAG OR OTHER FOREIGN MATTER.

No.	DATE	REVISION	APPROVED
3	5-4-71	DELETED 6 COUP. ADDED 2 NOZ. E&F. CORRECTED MATERIAL	HVW
2	5-26-71	CORRECTED T.S. LAYOUT	HVW
1	2-8-71	MISC. FLGS. WERE SA-181-II & CORRECTED NOZ. MATL.	HVW

SCALE	AS NOTED
DRAWN	H.V.W.
DATE	2-8-70
REF. DRGS	E-846
ABBTT. SHEET	

CAMDEN ALLOY FAB

PREHEATER
4 PASS 11005 SQ FT
FIRST MADE FOR HERC INC 5247

CHECKED:
TRACED:
APPROVED:
DRAWING NO. A-951