

INTEROFFICE COMMUNICATION

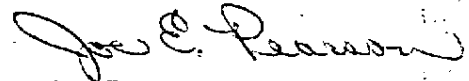
August 21, 1968
Westlake, Louisiana

TO: Mr. D. K. Peters
SUBJECT: Vertical Thermosyphon Reboiler for the Heavy Ends Column

As you requested we have roughly sized a vertical thermosyphon reboiler for the heavy ends column. Specifications are:

Shell I. D., ft.	5.75
Design Press., Psig	165.
Tube Length, ft.	10
I. D., in.	1
Gage	12 BWG
Pitch	1 1/4 in. triangular
Count (approx.)	2400
Area, ft. ²	6263
Dry Weight, lbs. (approx.)	47,000

This unit is sized to give the same area as the existing horizontal reboilers. Please advise us if you need an approximate price and detailed design.



Joe E. Pearson
Process Engineer
Process Engineering Dept.

JEP/bhs

CC: RHG/RSM

CCR 000032328

H-108 A + B

Shell - 105 test, 70 design at 375°F
tubes - 165 design, 250 test, at 450°F
 $\frac{1}{8}"$ Corrosion allowance on shell & tubes

$8"$ Steam inlet + outlet = $3"$ } all 150# flgs.
2 - $10"$ EDC inlets,
2 - $12"$ outlets + 1 - $18"$ outlet

tubes are 5B-163 - $1"$ O.D. - 14 BWG, on a $1\frac{1}{4}"$ Sq. Pn.
Area = 6263 ft^2
Shell is $51"$ I.D. $\times$ 26' long

Height of Unit = $40,000^{\text{th}}$ bundle = $27,900^{\text{th}}$

Est price on 14 BWG $1"$ Monel tubes - 10' long - 2400 tubes