Equipment Summary

Compressors:

Carbon steel W = 1167 W 80% adiabatic efficiency	D-401 A/B Electric/explosion proof W = 1180 W 99% efficiency

Heat Exchangers:

E-101 Carbon steel cw in shell, process fluid in tubes 1 shell-2 tube passes Q = 51616 kW A = 4019 m^2	E-104 Carbon steel Process fluid in shell, cooling water in tubes 1 shell-2 tube passes Q = 13261 kW A = 1636
E-102 Carbon steel Boiling in shell, process fluid in tubes 1 shell-2 tube passes Q = 5999 kW A = 672 m^2	E-105 Carbon steel Boiling in shell, steam condensing in tubes 1 shell-2 tube passes Q = 17040 kW A = 771
E-103 Carbon steel Boiling in shell, steam condensing in tubes 1 shell-2 tube passes Q = 19716 kW A = 1636 m^2	E-106 Carbon steel Process fluid in shell, cooling water in tubes 1 shell-2 tube passes Q = 17146 kW A = 718

Fired Heater:

H-101 Fired heater-refractory-lined, stainless steel Design Q = 41408 kW Maximum Q = 45000 kW

Pumps:

P-101 A/B	P-102 A/B
Centrifugal /electric drive	Centrifugal /electric drive
Carbon steel	Carbon steel
W = 8.1 kW	W = 3.1 kW
80% efficiency	80% efficiency

Reactors:

R-101
Carbon steel, packed bed
Cylindrical catalyst pellet
Void fraction = 0.4
V = 25
9.26 m tall, 1.85 m diameter

Towers:

T-101	T-102
Carbon steel	Carbon steel
D = 3 m	D = 6.9 m
18 sieve trays	40 sieve trays
100% efficient	100% efficient
Feed on tray 9	Feed on tray 40
12-in tray spacing	6-in tray spacing
1-in weirs	1-in weirs
Column height = 18.6 m	Column height = 24.1 m

Vessels:

V-101	V-102
Horizontal	Horizontal
L/D = 3 (Heuristic 4)	L/D = 3 (Heuristic 4)
V = 26.8 m^3	V = 5 m^3