Kesler Iso

NOTE 1 : for separating the water from the feed to t
we use an inert gas that strips the wat

NOTE 2 : the input flowrate is controlled therefore we don't nee
owever th sensors of temperature and pressure will d

NOTE 3 : we have a controller for the output of the co-electrolyser be
production which might affect our unit seperations we want to lower t

NOTE 4 : the pressure control valve is applied to botl

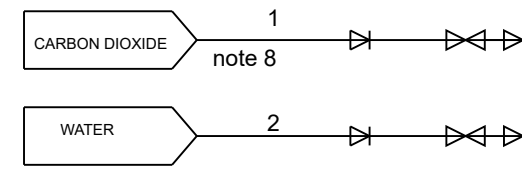
NOTE 5: we don't use a temperature controller because we control the v
that is mixed with the hydrocarbons coming from the hydrocracking, using pressure

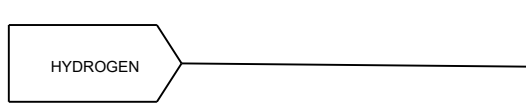
NOTE 6 : we use a 3 way valve in order to separate gasses and liquids as most streams
at the calculated operating conditions,
this is so that the gasses are directed towards the compressor and the liquids

NOTE 7: the temperature controller checks the temperature in the re
in order to control the flow of cooling water required

NOTE 8: the number on the streams correspond to the one in the strea

NOTE 9 : the T: n indicates the tray from which the stream comes out

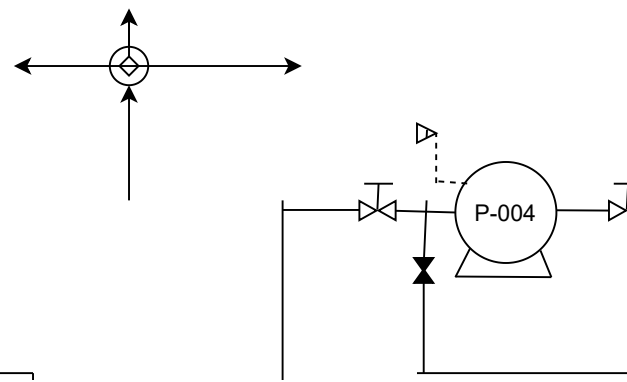




Equipment list

Co-electrolyser: CR-001
Fluidized Bed Reactor: FBR-001
Fractional Distillation Column: FCC-001
Cracking Unit: CU-001
Reboiler: RB-001
Compressor: C-001A C-001B C-002A C-002B C-003A C-003B C-004A C-004B
Pumps: P-001A P-001B P-002A P-002B P-003A P-003B
Reflux Drum: RD-001
Packed Bed Unit Separation: STR-001
Expander: E-001A E-001B

one the diagram the following symbol represents the arrange



ko

the distillation column
er away

ed a controller before this unit
etermine the flow in

ecause in case of excess gas
he temperature and flowrates

h streams

alve of the stream
and temperature controllers

could potentially contain both

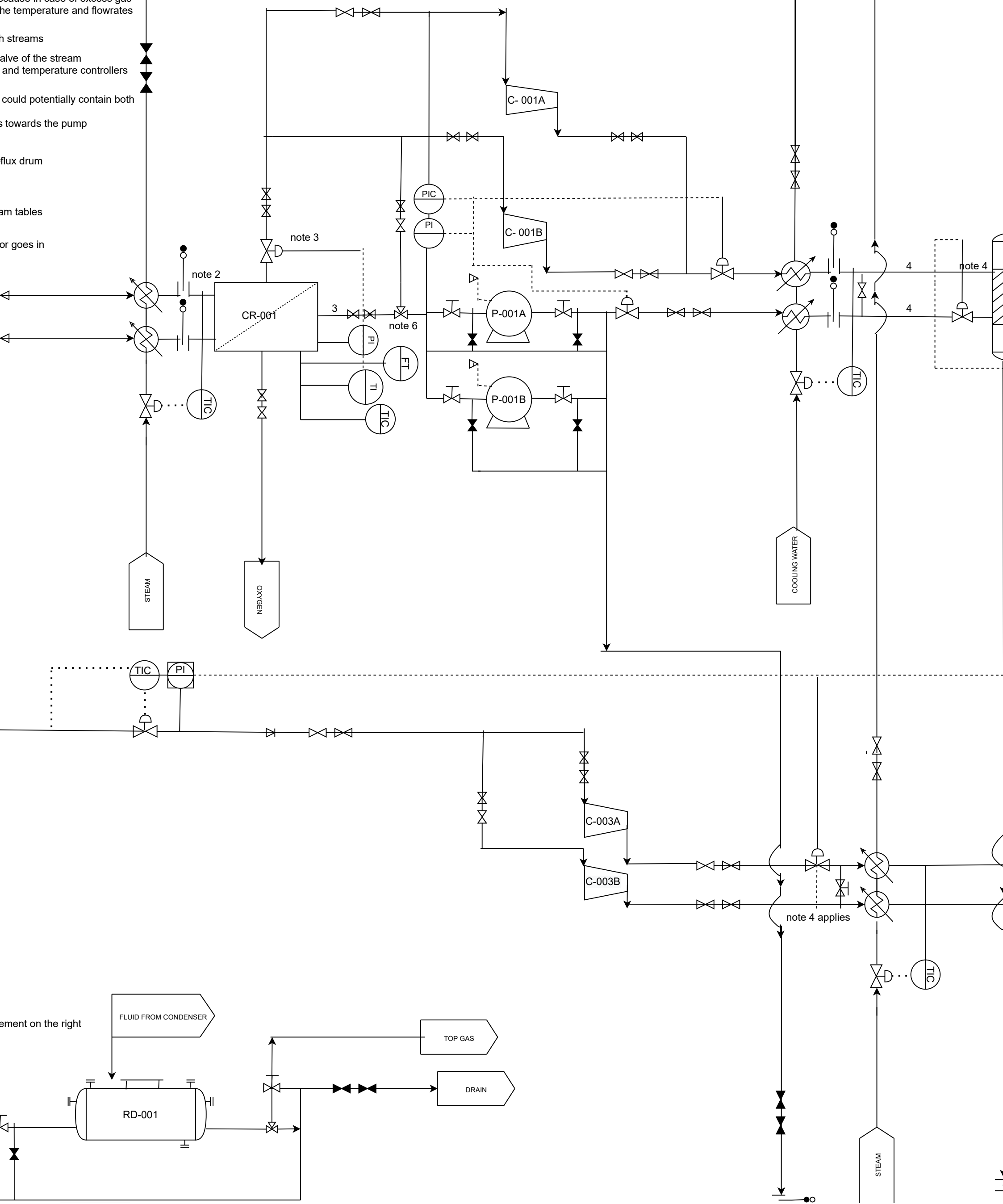
s towards the pump

flux drum

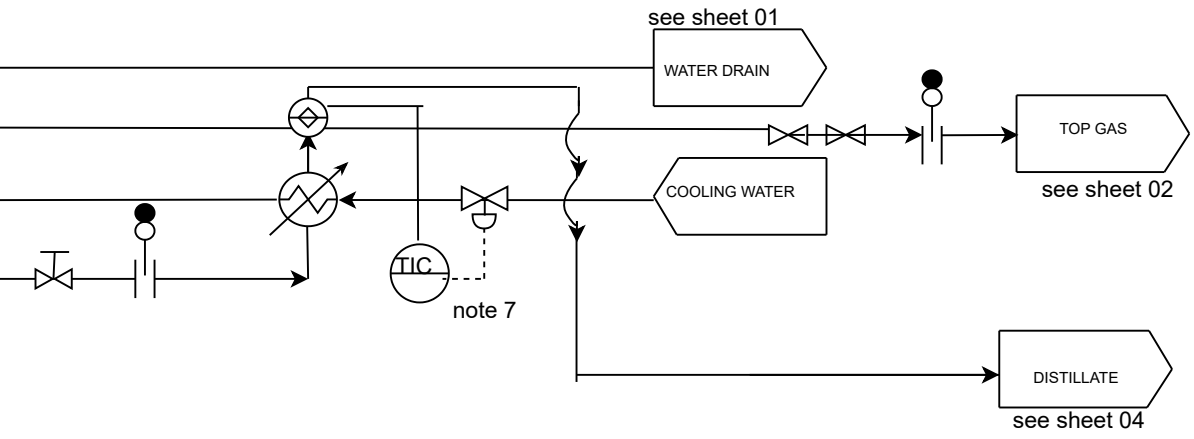
am tables

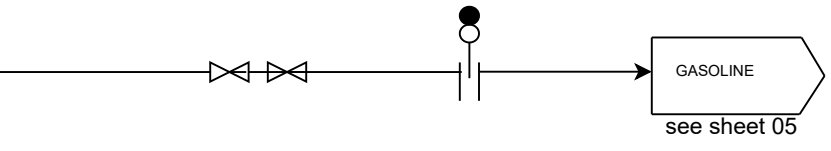
or goes in

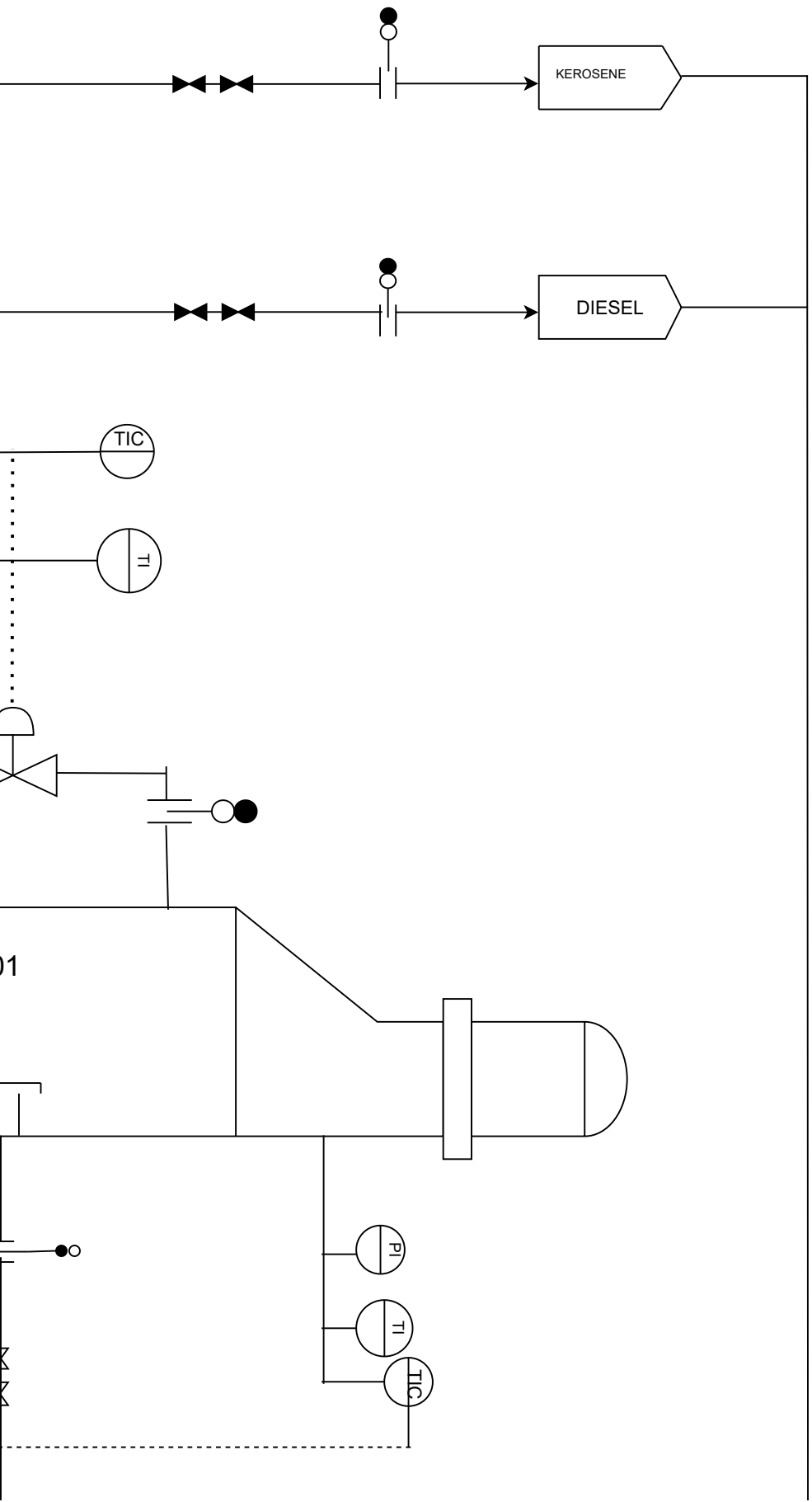
ement on the right

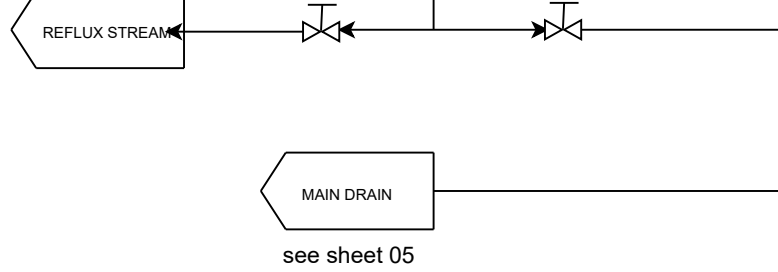


note 9
T:1
FCC-001
T:5
T:10
T:15
T:25
T:30
note 1
FBR-001
5
STR-001
6
note 5
PIC
PI
E- 001A
E- 001B
10
7
7
P-002A
P-002B
PI
TI
PIC
PIC
TIC
INERT GAS
9
COOLING WATER
C-004A
C-004B
CU-001
PIC
TI
PI
P-003A
P-003B
8
RB-00

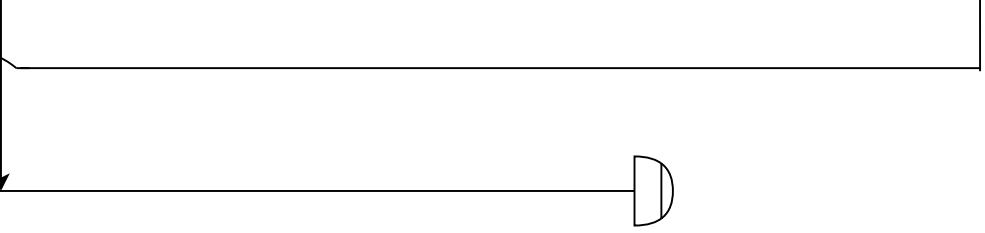

see sheet 01
WATER DRAIN
TOP GAS
see sheet 02
COOLING WATER
TIC
note 7
DISTILLATE
see sheet 04

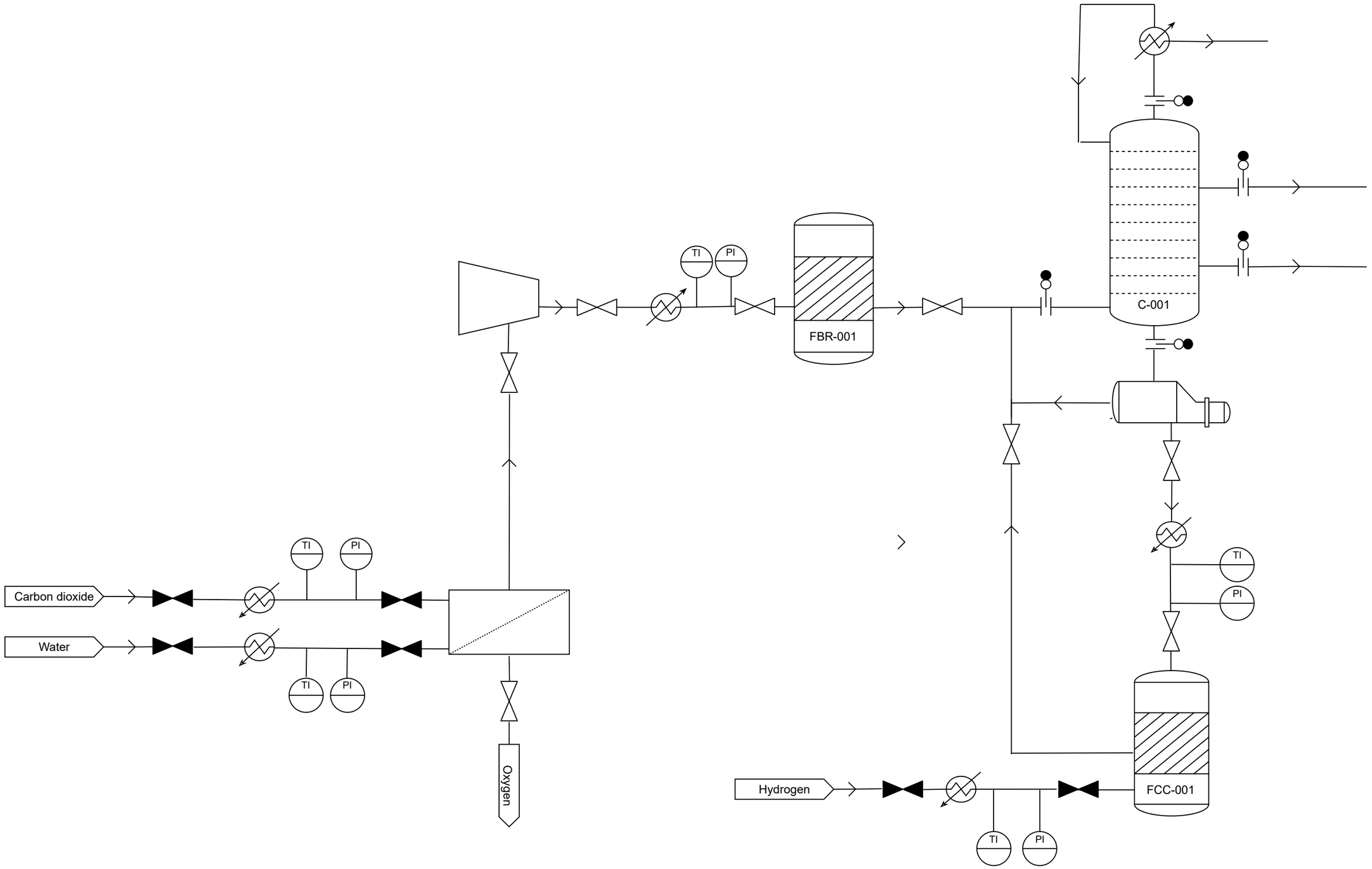

GASOLINE
see sheet 05


KEROSENE
DIESEL
TIC
TI
01
PI
TI
TIC


REFLUX STREAM
MAIN DRAIN
see sheet 05

DISTILLATE PRODUCT




TI
PI
FBR-001
C-001
TI
PI
Carbon dioxide
Water
TI
PI
Oxygen
TI
PI
Hydrogen
FCC-001
TI
PI