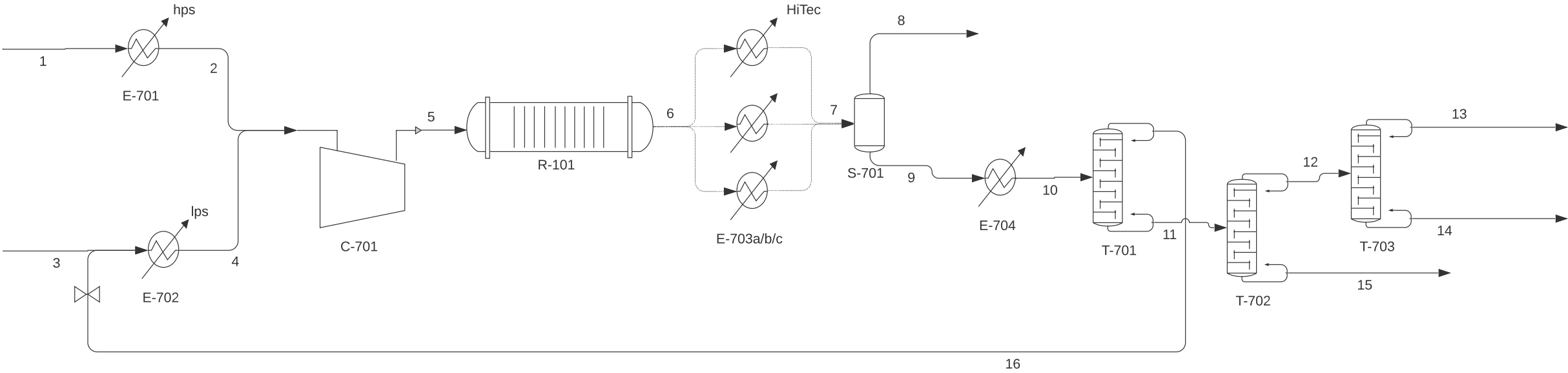


PROJECT C.4 PFD

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E-701	E-702	C-701	R-101	E-703a/b/c	S-701	E-704	T-701	T-702	T-703
Air heat exchanger	Phthalic heat exchanger	Reactor feed compressor	Fluidized bed reactor	Product condensor	V/L Separation Vessel	Organic proutc exchanger	O-xylene separator	Phthalic separator	Maleic Separator



Stream Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Temperature [C]	25	292	100	147.7	353.8	400	155	155	155	180	186.4	157	155.2	162.1	238.5	154.7
Pressure [atm]	1.09	1.09	1.09	1.09	2.8	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Vapor Fraction	1	1	0	1	1	1	0.984	1	0	0.543	0	0	0	0	0	0
Mass Flow [kg/hr]	110239	110239	21233.5	43599.9	153841	153842	153842	109851	43990.4	43990.4	21624	4979.04	3666.4	1312.9	16644.9	22366.5
Mole Flow [kmol/hr]	3800	3800	200	410.678	4210.69	4269.05	4269.05	3889.54	379.51	379.51	168.832	47.051	34.585	12.467	121.781	210.678
Component Flowrates [kmol/hr]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen	2964	2964	0	0	2964	2964	2964	2964	0	0	0	0	0	0	0	0
Oxygen	798	798	0	0	798	0	0	0	0	0	0	0	0	0	0	0
Carbon Dioxide	38	38	0	0	38	384.747	384.747	384.747	0	0	0	0	0	0	0	0
O-xylene	0	0	200	410.593	410.593	259.642	259.642	0	259.642	259.642	49.049	42.835	33.891	8.944	6.213	210.593
Maleic Anhydride	0	0	0	0.085	0.085	26.832	26.832	0.268	26.563	226.563	26.478	3.858	0.694	3.165	22.62	0.085
Phthalic Anhydride	0	0	0	trace	trace	94.247	94.247	0.942	93.305	93.305	93.305	0.358	trace	0.358	92.947	trace
H2O	0	0	0	0	0	539.579	539.579	539.579	0	0	0	0	0	0	0	0