


PROJECT :			DATE :	22-Apr-11
PROJ. NO.:			BY :	S. Rahimi
CLIENT:			REV :	A
UNIT :			DOC NO.:	

PSV Sizing for Supercritical Fluid - Fire Case

RV Tag Number:		
Equipment Tag No		
P&ID NO.		
Set Pressure	barg	55.17
Vessel Wetted Area	m2	28.26
Critical Temperature	C	151.79
Critical Pressure	bar	37.97
Relief Pressure	barg	66.76
Heat Input from Fire	kcal/hr	172569.60

Temp.	Mass Density	Mass Enthalpy	Molar Entropy	Specific Volume	Relief Rate	Max Mass Flux	Orifice Area
°C	kg/m3	kcal/kg	kcal/kgmol-C	m3/kg	kg/hr	kg/hr-in2	in2
179.6	303.9	-494.7	158.0	0.00329	2353.1	69225	0.0349
181.1	296.9	-493.0	158.9	0.00337	2285.7	67312	0.0348
182.6	290.0	-491.3	159.8	0.00345	2339.2	65502	0.0366
184.2	283.0	-489.5	160.8	0.00353	2384.0	63800	0.0383
185.7	276.2	-487.8	161.7	0.00362	2420.1	62041	0.0400
187.2	269.5	-486.1	162.6	0.00371	2447.5	60533	0.0415
188.7	262.9	-484.4	163.5	0.00380	2467.4	59128	0.0428
190.2	256.5	-482.6	164.4	0.00390	2479.8	57779	0.0440
191.7	250.2	-481.0	165.3	0.00400	2485.4	56510	0.0451
193.2	244.2	-479.3	166.2	0.00409	2485.0	55440	0.0460
194.7	238.4	-477.6	167.0	0.00419	2479.1	54334	0.0468
196.2	232.9	-475.9	167.9	0.00429	2468.1	53304	0.0475
197.7	227.5	-474.3	168.7	0.00440	2452.9	52453	0.0480
199.2	222.4	-472.7	169.6	0.00450	2433.8	51658	0.0483
200.8	217.5	-471.1	170.4	0.00460	2411.2	50829	0.0487
202.3	212.8	-469.5	171.2	0.00470	2386.0	50137	0.0488
203.8	208.3	-468.0	172.0	0.00480	2358.3	49477	0.0489
205.3	204.0	-466.4	172.8	0.00490	2328.6	48873	0.0489
206.8	200.0	-464.9	173.5	0.00500	2297.3	48373	0.0487
208.3	196.1	-463.4	174.3	0.00510	2264.7	47831	0.0486
209.8	192.3	-461.9	175.1	0.00520	2231.0	47381	0.0483
211.3	188.8	-460.4	175.8	0.00530	2196.5	46894	0.0480
212.8	185.4	-459.0	176.5	0.00539	2161.4	46488	0.0477
214.3	182.1	-457.5	177.2	0.00549	2126.0	46099	0.0473
215.9	179.0	-456.1	178.0	0.00559	2090.4	45727	0.0469
217.4	176.0	-454.7	178.7	0.00568	2054.7	45369	0.0464
218.9	173.2	-453.3	179.3	0.00577	2019.0	45026	0.0460
220.4	170.5	-451.9	180.0	0.00587	1983.6	44684	0.0455
221.9	167.8	-450.6	180.7	0.00596	1948.4	44370	0.0450
223.4	165.3	-449.2	181.4	0.00605	1913.6	44065	0.0445
224.9	162.9	-447.9	182.0	0.00614	1879.3	43822	0.0440
226.4	160.6	-446.5	182.7	0.00623	1845.5	43549	0.0435
227.9	158.4	-445.2	183.3	0.00631	1812.3	43320	0.0429
229.4	156.3	-443.9	184.0	0.00640	1779.6	43061	0.0424
230.9	154.2	-442.6	184.6	0.00648	1747.6	42845	0.0418
232.5	152.2	-441.3	185.2	0.00657	1716.4	42634	0.0413
234.0	150.3	-440.0	185.8	0.00665	1685.7	42428	0.0408
235.5	148.5	-438.7	186.4	0.00673	1655.8	42227	0.0402
237.0	146.7	-437.4	187.0	0.00681	1626.6	42030	0.0397
238.5	145.0	-436.2	187.6	0.00690	1598.1	41837	0.0392
240.0	143.4	-434.9	188.2				
					RV Orifice Area	in2	0.0489

Mass Flux Calculation

Molar Entropy	Press	Temp	Mass Enthalpy	Mass Density	Mass Enthalpy	Specific Volume	Mass Flux	Mass Flux	Max Mass Flux
kcal/kgmol°C	bara	°C	kcal/kg	kg/m3	Btu/lb	ft3/lb	lb/hr-in2	kg/hr-in2	kg/hr-in2
157.99	66.7	179.6	-494.7	303.79	-890.428	0.0527		0	
157.99	64.7	178.6	-494.8	299.22	-890.715	0.0535	56008	25412	
157.99	62.7	177.6	-495.0	294.37	-891.013	0.0544	78609	35667	
157.99	60.6	176.4	-495.2	289.16	-891.309	0.0554	94776	43002	
157.99	58.6	175.2	-495.3	283.61	-891.617	0.0565	107983	48994	
157.99	56.6	173.9	-495.5	277.64	-891.929	0.0577	118785	53895	
157.99	54.5	172.5	-495.7	271.22	-892.248	0.0591	127782	57977	
157.99	52.5	171.0	-495.9	264.30	-892.575	0.0606	135243	61363	
157.99	50.4	169.3	-496.1	256.81	-892.911	0.0624	141312	64116	
157.99	48.4	167.5	-496.3	248.70	-893.257	0.0644	146070	66275	
157.99	46.4	165.5	-496.5	239.90	-893.617	0.0668	149593	67874	69225
157.99	44.3	163.3	-496.7	230.31	-893.99	0.0696	151780	68866	
157.99	42.3	160.8	-496.9	219.81	-894.379	0.0729	152571	69225	
157.99	40.3	158.0	-497.1	208.27	-894.788	0.0769	151866	68905	
157.99	38.2	154.7	-497.3	195.22	-895.224	0.0821	149291	67736	
157.99	36.2	146.9	-497.5	184.50	-895.5	0.0868	145095	65833	
157.99	34.1	143.5	-497.8	153.50	-896.04	0.1044	126980	57613	
157.99	32.1	144.2	-498.2	132.50	-896.801	0.1209	116804	52997	
157.99	30.1	140.3	-498.6	120.86	-897.483	0.1326	112105	50864	
157.99	28.0	136.2	-499.0	108.98	-898.242	0.1470	106383	48268	
157.99	26.0	131.9	-499.5	97.04	-899.093	0.1651	99745	45256	
158.91	66.7	181.1	-493.0	296.99	-887.404	0.0539		0	
158.91	64.7	180.1	-493.2	292.22	-887.7	0.0548	55484	25174	
158.91	62.7	179.0	-493.3	287.14	-888.004	0.0558	77622	35219	
158.91	60.6	177.8	-493.5	281.72	-888.312	0.0569	93710	42518	
158.91	58.6	176.5	-493.7	275.93	-888.626	0.0581	106497	48320	
158.91	56.6	175.1	-493.9	269.72	-888.947	0.0594	116987	53080	
158.91	54.5	173.6	-494.0	263.07	-889.276	0.0609	125669	57019	
158.91	52.5	172.0	-494.2	255.90	-889.613	0.0626	132809	60258	
158.91	50.4	170.3	-494.4	248.18	-889.96	0.0646	138556	62866	
158.91	48.4	168.4	-494.6	239.84	-890.32	0.0668	143008	64886	
158.91	46.4	166.3	-494.8	230.81	-890.691	0.0694	146117	66296	67312
158.91	44.3	164.0	-495.0	221.00	-891.079	0.0725	147940	67124	
158.91	42.3	161.4	-495.3	210.31	-891.485	0.0762	148356	67312	
158.91	40.3	158.4	-495.5	198.57	-891.914	0.0807	147246	66809	
158.91	38.2	155.0	-495.8	185.23	-892.372	0.0865	144162	65409	
158.91	36.2	151.4	-496.1	165.98	-892.941	0.0965	136378	61878	
158.91	34.1	147.8	-496.4	146.68	-893.481	0.1092	126260	57287	
158.91	32.1	144.2	-496.7	127.38	-894.021	0.1258	114415	51912	
158.91	30.1	140.3	-497.1	116.56	-894.73	0.1374	110158	49981	
158.91	28.0	136.2	-497.5	105.34	-895.515	0.1521	104765	47534	
158.91	26.0	131.9	-498.0	93.98	-896.395	0.1705	98401	44646	
159.83	66.7	182.6	-491.3	290.19	-884.37	0.0552		0	
159.83	64.7	181.5	-491.5	285.23	-884.677	0.0562	55211	25050	
159.83	62.7	180.3	-491.7	279.95	-884.987	0.0572	76810	34850	
159.83	60.6	179.1	-491.8	274.33	-885.303	0.0584	92556	41994	
159.83	58.6	177.8	-492.0	268.33	-885.626	0.0597	105028	47654	
159.83	56.6	176.3	-492.2	261.91	-885.957	0.0612	115210	52273	
159.83	54.5	174.8	-492.4	255.05	-886.296	0.0628	123589	56075	
159.83	52.5	173.1	-492.6	247.68	-886.644	0.0647	130425	59177	
159.83	50.4	171.3	-492.8	239.76	-887.004	0.0668	135874	61649	
159.83	48.4	169.3	-493.0	231.24	-887.378	0.0693	140054	63545	
159.83	46.4	167.1	-493.2	222.03	-887.763	0.0722	142809	64796	65502
159.83	44.3	164.7	-493.4	212.07	-888.166	0.0755	144291	65468	
159.83	42.3	162.0	-493.7	201.24	-888.59	0.0796	144366	65502	
159.83	40.3	158.9	-493.9	189.35	-889.04	0.0846	142889	64832	
159.83	38.2	155.4	-494.2	175.94	-889.518	0.0911	139405	63251	
159.83	36.2	151.4	-494.5	160.76	-890.04	0.0997	133669	60648	
159.83	34.1	154.9	-494.8	141.20	-890.64	0.1135	123465	56019	
159.83	32.1	144.2	-495.1	122.64	-891.241	0.1306	112258	50934	
159.83	30.1	140.3	-495.5	112.54	-891.976	0.1424	108383	49176	
159.83	28.0	136.2	-496.0	101.94	-892.788	0.1572	103283	46862	
159.83	26.0	131.9	-496.5	91.11	-893.696	0.1758	97162	44085	

Mass Flux Calculation

Molar Entropy	Press	Temp	Mass Enthalpy	Mass Density	Mass Enthalpy	Specific Volume	Mass Flux	Mass Flux	Max Mass Flux
kcal/kgmol°C	bara	°C	kcal/kg	kg/m3	Btu/lb	ft3/lb	lb/hr-in2	kg/hr-in2	kg/hr-in2
160.75	66.7	184.1	-489.6	283.42	-881.332	0.0565		0	63800
160.75	64.7	182.9	-489.8	278.28	-881.644	0.0576	54278	24627	
160.75	62.7	181.7	-490.0	272.82	-881.962	0.0587	75617	34309	
160.75	60.6	180.4	-490.2	267.01	-882.286	0.0600	91101	41334	
160.75	58.6	179.0	-490.3	260.83	-882.618	0.0614	103313	46875	
160.75	56.6	177.5	-490.5	254.24	-882.958	0.0630	113233	51376	
160.75	54.5	175.9	-490.7	247.20	-883.308	0.0648	121345	55057	
160.75	52.5	174.2	-490.9	239.66	-883.668	0.0668	127914	58037	
160.75	50.4	172.3	-491.1	231.57	-884.037	0.0692	133011	60350	
160.75	48.4	170.2	-491.3	222.91	-884.426	0.0719	136914	62121	
160.75	46.4	168.0	-491.6	213.57	-884.826	0.0750	139419	63257	
160.75	44.3	165.4	-491.8	203.51	-885.247	0.0787	140615	63800	
160.75	42.3	162.6	-492.0	192.59	-885.689	0.0832	140391	63699	
160.75	40.3	159.4	-492.3	180.65	-886.162	0.0887	138639	62903	
160.75	38.2	155.8	-492.6	167.40	-886.663	0.0957	134969	61238	
160.75	36.2	151.8	-492.9	153.12	-887.212	0.1046	129658	58829	
160.75	34.1	147.9	-493.3	135.50	-887.94	0.1182	121634	55188	
160.75	32.1	144.2	-493.6	118.24	-888.461	0.1355	110245	50020	
160.75	30.1	140.3	-494.0	108.80	-889.222	0.1472	106717	48420	
160.75	28.0	136.2	-494.5	98.75	-890.061	0.1622	101882	46226	
160.75	26.0	131.9	-495.0	88.41	-890.998	0.1812	95985	43551	
161.67	66.7	185.7	-487.7	275.96	-877.941	0.0581		0	62041
161.67	64.7	184.5	-487.9	270.64	-878.262	0.0592	53513	24280	
161.67	62.7	183.3	-488.1	265.00	-878.589	0.0605	74480	33793	
161.67	60.6	181.9	-488.3	259.02	-878.924	0.0618	89642	40672	
161.67	58.6	180.5	-488.5	252.67	-879.266	0.0634	101549	46075	
161.67	56.6	178.9	-488.7	245.91	-879.618	0.0651	111172	50441	
161.67	54.5	177.2	-488.9	238.70	-879.979	0.0671	118990	53988	
161.67	52.5	175.4	-489.1	231.01	-880.351	0.0693	125228	56818	
161.67	50.4	173.5	-489.3	222.80	-880.737	0.0719	130086	59023	
161.67	48.4	171.3	-489.5	214.02	-881.14	0.0749	133651	60640	
161.67	46.4	169.0	-489.8	204.59	-881.556	0.0783	135823	61626	
161.67	44.3	166.3	-490.0	194.46	-881.996	0.0824	136739	62041	
161.67	42.3	163.4	-490.3	183.53	-882.461	0.0873	136244	61817	
161.67	40.3	160.2	-490.5	171.65	-882.957	0.0933	134232	60904	
161.67	38.2	156.5	-490.8	158.79	-883.485	0.1009	130560	59238	
161.67	36.2	152.5	-491.1	145.42	-884.064	0.1102	125646	57008	
161.67	34.1	148.2	-491.6	130.00	-884.88	0.1232	119577	54254	
161.67	32.1	144.2	-491.9	113.70	-885.372	0.1409	108235	49108	
161.67	30.1	140.3	-492.3	104.92	-886.162	0.1527	105045	47661	
161.67	28.0	136.2	-492.8	95.43	-887.032	0.1679	100469	45585	
161.67	26.0	131.9	-493.3	85.59	-888	0.1872	94792	43009	
162.58	66.7	187.2	-486.0	269.32	-874.88	0.0595		0	60533
162.58	64.7	186.0	-486.2	263.86	-875.209	0.0607	52825	23968	
162.58	62.7	184.7	-486.4	258.09	-875.544	0.0621	73463	33332	
162.58	60.6	183.3	-486.6	251.98	-875.888	0.0636	88341	40082	
162.58	58.6	181.8	-486.8	245.49	-876.24	0.0653	99982	45364	
162.58	56.6	180.2	-487.0	238.61	-876.602	0.0671	109349	49614	
162.58	54.5	178.4	-487.2	231.29	-876.975	0.0693	116901	53040	
162.58	52.5	176.6	-487.4	223.50	-877.36	0.0717	122911	55767	
162.58	50.4	174.5	-487.6	215.21	-877.76	0.0744	127535	57865	
162.58	48.4	172.3	-487.9	206.35	-878.175	0.0776	130811	59352	
162.58	46.4	169.9	-488.1	196.89	-878.61	0.0814	132796	60252	
162.58	44.3	167.2	-488.4	186.76	-879.065	0.0858	133415	60533	
162.58	42.3	164.2	-488.6	175.88	-879.55	0.0911	132725	60220	
162.58	40.3	160.9	-488.9	164.18	-880.066	0.0976	130565	59240	
162.58	38.2	157.2	-489.2	151.79	-880.62	0.1055	126992	57619	
162.58	36.2	153.3	-489.6	139.16	-881.223	0.1151	122384	55528	
162.58	34.1	149.5	-489.9	115.00	-881.82	0.1393	105792	48000	
162.58	32.1	144.2	-490.3	109.91	-882.592	0.1458	106591	48362	
162.58	30.1	140.3	-490.8	101.66	-883.408	0.1576	103667	47036	
162.58	28.0	136.2	-491.3	92.63	-884.305	0.1730	99298	45054	
162.58	26.0	131.9	-491.8	83.21	-885.301	0.1925	93798	42558	

Mass Flux Calculation

Molar Entropy	Press	Temp	Mass Enthalpy	Mass Density	Mass Enthalpy	Specific Volume	Mass Flux	Mass Flux	Max Mass Flux
kcal/kgmol°C	bara	°C	kcal/kg	kg/m3	Btu/lb	ft3/lb	lb/hr-in2	kg/hr-in2	kg/hr-in2
163.49	66.7	188.7	-484.3	262.79	-871.808	0.0610		0	59128
163.49	64.7	187.4	-484.5	257.21	-872.145	0.0623	52142	23658	
163.49	62.7	186.1	-484.7	251.32	-872.49	0.0637	72456	32875	
163.49	60.6	184.6	-484.9	245.09	-872.843	0.0654	87056	39499	
163.49	58.6	183.1	-485.1	238.50	-873.205	0.0672	98439	44664	
163.49	56.6	181.4	-485.3	231.51	-873.577	0.0692	107529	48788	
163.49	54.5	179.7	-485.5	224.11	-873.963	0.0715	114868	52118	
163.49	52.5	177.7	-485.8	216.25	-874.359	0.0741	120593	54715	
163.49	50.4	175.6	-486.0	207.90	-874.774	0.0771	125027	56727	
163.49	48.4	173.4	-486.2	199.02	-875.204	0.0805	128069	58107	
163.49	46.4	170.9	-486.5	189.57	-875.656	0.0845	129846	58914	
163.49	44.3	168.1	-486.7	179.49	-876.131	0.0893	130319	59128	
163.49	42.3	165.1	-487.0	168.72	-876.634	0.0950	129426	58723	
163.49	40.3	161.8	-487.3	157.31	-877.172	0.1018	127215	57720	
163.49	38.2	158.1	-487.6	145.44	-877.751	0.1102	123804	56173	
163.49	36.2	154.3	-488.0	133.51	-878.381	0.1200	119524	54230	
163.49	34.1	150.2	-488.4	121.85	-879.067	0.1315	114640	52014	
163.49	32.1	144.2	-488.8	106.36	-879.813	0.1506	105082	47678	
163.49	30.1	140.9	-489.3	98.74	-880.652	0.1623	102530	46520	
163.49	28.0	137.0	-489.8	89.98	-881.576	0.1780	98204	44557	
163.49	26.0	132.6	-490.3	80.90	-882.602	0.1980	92813	42111	
164.39	66.7	190.2	-482.6	256.37	-868.727	0.0625		0	57779
164.39	64.7	188.9	-482.8	250.68	-869.072	0.0639	51464	23350	
164.39	62.7	187.5	-483.0	244.69	-869.426	0.0655	71460	32423	
164.39	60.6	186.0	-483.2	238.37	-869.789	0.0672	85789	38924	
164.39	58.6	184.4	-483.4	231.69	-870.16	0.0691	96875	43954	
164.39	56.6	182.7	-483.6	224.64	-870.545	0.0713	105792	48000	
164.39	54.5	180.9	-483.9	217.18	-870.941	0.0738	112864	51209	
164.39	52.5	178.9	-484.1	209.28	-871.353	0.0766	118441	53739	
164.39	50.4	176.8	-484.3	200.91	-871.78	0.0797	122602	55627	
164.39	48.4	174.5	-484.6	192.04	-872.225	0.0834	125431	56911	
164.39	46.4	171.9	-484.8	182.63	-872.694	0.0877	127031	57636	
164.39	44.3	169.1	-485.1	172.64	-873.189	0.0928	127344	57779	
164.39	42.3	166.1	-485.4	162.07	-873.711	0.0988	126358	57331	
164.39	40.3	162.7	-485.7	151.01	-874.27	0.1061	124153	56331	
164.39	38.2	159.1	-486.0	139.68	-874.875	0.1147	120935	54871	
164.39	36.2	155.3	-486.4	128.39	-875.529	0.1248	116929	53053	
164.39	34.1	151.4	-486.8	117.41	-876.243	0.1365	112398	50997	
164.39	32.1	145.9	-487.2	103.82	-877.02	0.1543	104409	47373	
164.39	30.1	142.6	-487.7	96.16	-877.885	0.1666	101617	46106	
164.39	28.0	138.7	-488.2	87.47	-878.838	0.1831	97128	44069	
164.39	26.0	134.3	-488.8	78.70	-879.893	0.2036	91838	41669	
165.28	66.7	191.7	-480.9	250.08	-865.635	0.0641		0	56510
165.28	64.7	190.4	-481.1	244.31	-865.989	0.0656	50794	23046	
165.28	62.7	189.0	-481.3	238.23	-866.35	0.0672	70368	31927	
165.28	60.6	187.4	-481.5	231.84	-866.725	0.0691	84543	38359	
165.28	58.6	185.8	-481.7	225.10	-867.109	0.0712	95427	43297	
165.28	56.6	184.1	-481.9	218.00	-867.504	0.0735	104072	47220	
165.28	54.5	182.2	-482.2	210.50	-867.911	0.0761	110896	50316	
165.28	52.5	180.2	-482.4	202.59	-868.338	0.0791	116303	52769	
165.28	50.4	178.0	-482.7	194.23	-868.779	0.0825	120266	54567	
165.28	48.4	175.6	-482.9	185.39	-869.239	0.0864	122906	55765	
165.28	46.4	173.0	-483.2	176.07	-869.726	0.0910	124355	56422	
165.28	44.3	170.2	-483.5	166.23	-870.239	0.0964	124548	56510	
165.28	42.3	167.1	-483.8	155.91	-870.782	0.1028	123520	56044	
165.28	40.3	163.8	-484.1	145.24	-871.364	0.1103	121398	55081	
165.28	38.2	160.3	-484.4	134.44	-871.991	0.1192	118354	53700	
165.28	36.2	156.5	-484.8	123.75	-872.67	0.1295	114622	52006	
165.28	34.1	152.7	-485.2	113.38	-873.41	0.1413	110397	50089	
165.28	32.1	148.7	-485.7	103.44	-874.22	0.1549	105832	48018	
165.28	30.1	144.4	-486.2	93.64	-875.107	0.1711	100638	45661	
165.28	28.0	140.4	-486.7	85.08	-876.088	0.1883	96053	43581	
165.28	26.0	136.1	-487.3	76.68	-877.173	0.2089	90958	41270	

Mass Flux Calculation

Molar Entropy	Press	Temp	Mass Enthalpy	Mass Density	Mass Enthalpy	Specific Volume	Mass Flux	Mass Flux	Max Mass Flux
kcal/kgmol°C	bara	°C	kcal/kg	kg/m3	Btu/lb	ft3/lb	lb/hr-in2	kg/hr-in2	kg/hr-in2
166.16	66.7	193.1	-479.4	244.61	-862.878	0.0655		0	55440
166.16	64.7	191.7	-479.6	238.77	-863.24	0.0671	50180	22768	
166.16	62.7	190.3	-479.8	232.64	-863.612	0.0689	69616	31586	
166.16	60.6	188.7	-480.0	226.20	-863.994	0.0708	83447	37862	
166.16	58.6	187.0	-480.2	219.42	-864.387	0.0730	94134	42711	
166.16	56.6	185.3	-480.4	212.29	-864.793	0.0755	102571	46539	
166.16	54.5	183.4	-480.7	204.79	-865.214	0.0782	109291	49587	
166.16	52.5	181.3	-480.9	196.88	-865.65	0.0814	114465	51935	
166.16	50.4	179.1	-481.2	188.55	-866.104	0.0850	118267	53660	
166.16	48.4	176.7	-481.4	179.78	-866.578	0.0891	120761	54792	
166.16	46.4	174.1	-481.7	170.56	-867.081	0.0939	122099	55399	
166.16	44.3	171.2	-482.0	160.89	-867.608	0.0996	122190	55440	
166.16	42.3	168.1	-482.3	150.84	-868.175	0.1062	121218	54999	
166.16	40.3	164.8	-482.7	140.53	-868.774	0.1140	119153	54062	
166.16	38.2	161.4	-483.0	130.18	-869.422	0.1231	116283	52760	
166.16	36.2	157.7	-483.4	119.98	-870.123	0.1335	112774	51168	
166.16	34.1	153.9	-483.8	110.10	-870.885	0.1455	108790	49360	
166.16	32.1	150.0	-484.3	100.63	-871.718	0.1592	104472	47401	
166.16	30.1	146.0	-484.8	91.61	-872.63	0.1749	99901	45327	
166.16	28.0	141.9	-485.4	83.07	-873.635	0.1929	95142	43168	
166.16	26.0	137.7	-486.0	75.01	-874.745	0.2136	90236	40942	
167.03	66.7	194.7	-477.6	238.60	-859.767	0.0671		0	54334
167.03	64.7	193.3	-477.9	232.71	-860.139	0.0688	49567	22490	
167.03	62.7	191.8	-478.1	226.53	-860.52	0.0707	68665	31155	
167.03	60.6	190.2	-478.3	220.05	-860.913	0.0728	82259	37323	
167.03	58.6	188.5	-478.5	213.25	-861.317	0.0751	92710	42064	
167.03	56.6	186.7	-478.7	206.10	-861.733	0.0777	100926	45792	
167.03	54.5	184.7	-479.0	198.61	-862.168	0.0807	107477	48765	
167.03	52.5	182.6	-479.2	190.73	-862.618	0.0840	112472	51031	
167.03	50.4	180.4	-479.5	182.46	-863.088	0.0878	116111	52682	
167.03	48.4	177.9	-479.8	173.79	-863.578	0.0922	118467	53751	
167.03	46.4	175.3	-480.1	164.72	-864.098	0.0973	119704	54312	
167.03	44.3	172.4	-480.4	155.27	-864.645	0.1032	119752	54334	
167.03	42.3	169.4	-480.7	145.53	-865.229	0.1101	118779	53892	
167.03	40.3	166.1	-481.0	135.65	-865.854	0.1181	116868	53025	
167.03	38.2	162.7	-481.4	125.78	-866.525	0.1274	114186	51809	
167.03	36.2	159.1	-481.8	116.10	-867.249	0.1380	110900	50318	
167.03	34.1	155.5	-482.2	106.72	-868.034	0.1501	107151	48617	
167.03	32.1	151.7	-482.7	97.72	-868.894	0.1640	103088	46773	
167.03	30.1	147.8	-483.2	89.13	-869.832	0.1797	98745	44803	
167.03	28.0	143.8	-483.8	80.98	-870.861	0.1978	94185	42733	
167.03	26.0	139.7	-484.4	73.26	-872.002	0.2187	89482	40600	
167.88	66.7	196.3	-475.9	232.74	-856.645	0.0688		0	53304
167.88	64.7	194.8	-476.1	226.81	-857.027	0.0706	48907	22190	
167.88	62.7	193.3	-476.3	220.60	-857.417	0.0726	67693	30714	
167.88	60.6	191.7	-476.6	214.10	-857.821	0.0748	81074	36785	
167.88	58.6	189.9	-476.8	207.29	-858.236	0.0773	91307	41428	
167.88	56.6	188.1	-477.0	200.16	-858.664	0.0800	99317	45062	
167.88	54.5	186.1	-477.3	192.69	-859.114	0.0831	105717	47966	
167.88	52.5	184.0	-477.5	184.87	-859.578	0.0867	110550	50159	
167.88	50.4	181.7	-477.8	176.69	-860.062	0.0907	114046	51745	
167.88	48.4	179.2	-478.1	168.13	-860.568	0.0953	116291	52764	
167.88	46.4	176.6	-478.4	159.24	-861.106	0.1006	117449	53289	
167.88	44.3	173.7	-478.7	150.05	-861.673	0.1068	117482	53304	
167.88	42.3	170.7	-479.0	140.64	-862.275	0.1139	116530	52872	
167.88	40.3	167.5	-479.4	131.17	-862.922	0.1221	114750	52064	
167.88	38.2	164.2	-479.8	121.75	-863.615	0.1316	112246	50928	
167.88	36.2	160.7	-480.2	112.54	-864.362	0.1424	109164	49530	
167.88	34.1	157.1	-480.7	103.61	-865.174	0.1546	105661	47941	
167.88	32.1	153.4	-481.1	95.04	-866.061	0.1686	101833	46204	
167.88	30.1	149.6	-481.7	86.84	-867.022	0.1845	97683	44321	
167.88	28.0	145.7	-482.3	79.03	-868.08	0.2027	93324	42343	
167.88	26.0	141.7	-482.9	71.62	-869.245	0.2237	88777	40280	

Mass Flux Calculation

Molar Entropy	Press	Temp	Mass Enthalpy	Mass Density	Mass Enthalpy	Specific Volume	Mass Flux	Mass Flux	Max Mass Flux
kcal/kgmol°C	bara	°C	kcal/kg	kg/m3	Btu/lb	ft3/lb	lb/hr-in2	kg/hr-in2	kg/hr-in2
168.73	66.7	197.7	-474.4	227.68	-853.861	0.0704		0	52453
168.73	64.7	196.2	-474.6	221.72	-854.251	0.0723	48332	21929	
168.73	62.7	194.7	-474.8	215.50	-854.652	0.0743	66916	30361	
168.73	60.6	193.0	-475.0	208.99	-855.065	0.0767	80053	36322	
168.73	58.6	191.3	-475.3	202.19	-855.49	0.0792	90099	40880	
168.73	56.6	189.4	-475.5	195.09	-855.933	0.0821	98040	44483	
168.73	54.5	187.4	-475.8	187.66	-856.39	0.0854	104211	47283	
168.73	52.5	185.2	-476.0	179.90	-856.867	0.0891	108912	49416	
168.73	50.4	182.9	-476.3	171.81	-857.365	0.0932	112298	50952	
168.73	48.4	180.5	-476.6	163.39	-857.886	0.0981	114463	51934	
168.73	46.4	177.8	-476.9	154.68	-858.44	0.1036	115569	52436	
168.73	44.3	175.0	-477.2	145.72	-859.023	0.1099	115606	52453	
168.73	42.3	172.0	-477.6	136.61	-859.644	0.1173	114714	52048	
168.73	40.3	168.8	-477.9	127.48	-860.307	0.1257	113024	51281	
168.73	38.2	165.5	-478.3	118.45	-861.021	0.1353	110670	50213	
168.73	36.2	162.1	-478.8	109.61	-861.79	0.1462	107778	48901	
168.73	34.1	158.6	-479.2	101.06	-862.622	0.1585	104447	47390	
168.73	32.1	155.0	-479.7	92.82	-863.528	0.1726	100776	45724	
168.73	30.1	151.2	-480.3	84.94	-864.515	0.1886	96811	43925	
168.73	28.0	147.4	-480.9	77.42	-865.595	0.2069	92605	42017	
168.73	26.0	143.5	-481.5	70.25	-866.782	0.2280	88182	40010	
169.56	66.7	199.1	-472.8	222.75	-851.069	0.0719		0	51658
169.56	64.7	197.6	-473.0	216.78	-851.468	0.0739	47815	21695	
169.56	62.7	196.1	-473.3	210.55	-851.878	0.0761	66127	30003	
169.56	60.6	194.4	-473.5	204.05	-852.3	0.0785	79061	35872	
169.56	58.6	192.6	-473.7	197.27	-852.735	0.0812	88927	40348	
169.56	56.6	190.7	-474.0	190.20	-853.19	0.0842	96727	43887	
169.56	54.5	188.7	-474.3	182.83	-853.66	0.0876	102761	46625	
169.56	52.5	186.5	-474.5	175.15	-854.149	0.0915	107342	48703	
169.56	50.4	184.2	-474.8	167.17	-854.661	0.0958	110630	50195	
169.56	48.4	181.7	-475.1	158.89	-855.197	0.1008	112732	51149	
169.56	46.4	179.1	-475.4	150.37	-855.766	0.1065	113800	51634	
169.56	44.3	176.3	-475.8	141.66	-856.366	0.1131	113853	51658	
169.56	42.3	173.3	-476.1	132.86	-857.005	0.1206	113029	51283	
169.56	40.3	170.2	-476.5	124.06	-857.687	0.1291	111447	50566	
169.56	38.2	167.0	-476.9	115.38	-858.419	0.1389	109232	49561	
169.56	36.2	163.6	-477.3	106.90	-859.208	0.1499	106495	48319	
169.56	34.1	160.2	-477.8	98.67	-860.061	0.1624	103323	46880	
169.56	32.1	156.6	-478.3	90.76	-860.988	0.1765	99810	45286	
169.56	30.1	153.0	-478.9	83.16	-861.996	0.1926	95992	43554	
169.56	28.0	149.2	-479.5	75.90	-863.099	0.2111	91923	41707	
169.56	26.0	145.4	-480.2	68.96	-864.311	0.2323	87628	39759	
170.38	66.7	200.8	-471.1	217.37	-847.916	0.0737		0	50829
170.38	64.7	199.3	-471.3	211.39	-848.323	0.0758	47113	21376	
170.38	62.7	197.7	-471.5	205.18	-848.747	0.0781	65296	29626	
170.38	60.6	196.0	-471.8	198.70	-849.18	0.0806	78002	35391	
170.38	58.6	194.2	-472.0	191.95	-849.627	0.0835	87672	39779	
170.38	56.6	192.3	-472.3	184.93	-850.095	0.0866	95320	43249	
170.38	54.5	190.2	-472.5	177.64	-850.578	0.0902	101208	45920	
170.38	52.5	188.0	-472.8	170.06	-851.082	0.0942	105666	47943	
170.38	50.4	185.7	-473.1	162.22	-851.609	0.0988	108860	49392	
170.38	48.4	183.2	-473.4	154.13	-852.162	0.1039	110905	50320	
170.38	46.4	180.6	-473.7	145.84	-852.748	0.1099	111946	50792	
170.38	44.3	177.8	-474.1	137.41	-853.367	0.1166	112027	50829	
170.38	42.3	174.9	-474.5	128.93	-854.025	0.1243	111278	50489	
170.38	40.3	171.8	-474.8	120.49	-854.728	0.1330	109813	49824	
170.38	38.2	168.6	-475.3	112.17	-855.482	0.1428	107742	48885	
170.38	36.2	165.4	-475.7	104.05	-856.293	0.1540	105163	47715	
170.38	34.1	162.0	-476.2	96.18	-857.168	0.1666	102156	46350	
170.38	32.1	158.5	-476.7	88.58	-858.119	0.1809	98802	44829	
170.38	30.1	154.9	-477.3	81.28	-859.152	0.1971	95142	43168	
170.38	28.0	151.3	-477.9	74.28	-860.279	0.2157	91207	41382	
170.38	26.0	147.5	-478.6	67.59	-861.516	0.2370	87036	39490	

Mass Flux Calculation

Molar Entropy	Press	Temp	Mass Enthalpy	Mass Density	Mass Enthalpy	Specific Volume	Mass Flux	Mass Flux	Max Mass Flux
kcal/kgmol°C	bara	°C	kcal/kg	kg/m3	Btu/lb	ft3/lb	lb/hr-in2	kg/hr-in2	kg/hr-in2
171.19	66.7	202.3	-469.5	212.73	-845.105	0.0753		0	
171.19	64.7	200.8	-469.7	206.76	-845.522	0.0775	46594	21141	
171.19	62.7	199.1	-470.0	200.56	-845.955	0.0799	64554	29289	
171.19	60.6	197.4	-470.2	194.11	-846.399	0.0825	77096	34980	
171.19	58.6	195.6	-470.5	187.41	-846.855	0.0855	86564	39276	
171.19	56.6	193.7	-470.7	180.45	-847.335	0.0888	94088	42690	
171.19	54.5	191.6	-471.0	173.24	-847.83	0.0925	99860	45308	
171.19	52.5	189.4	-471.3	165.77	-848.347	0.0966	104224	47288	
171.19	50.4	187.1	-471.6	158.06	-848.888	0.1014	107348	48706	
171.19	48.4	184.6	-471.9	150.14	-849.456	0.1067	109357	49618	
171.19	46.4	182.0	-472.3	142.05	-850.055	0.1128	110358	50072	50137
171.19	44.3	179.2	-472.6	133.87	-850.693	0.1197	110503	50137	
171.19	42.3	176.3	-473.0	125.67	-851.368	0.1275	109824	49829	
171.19	40.3	173.3	-473.4	117.53	-852.089	0.1363	108458	49210	
171.19	38.2	170.2	-473.8	109.52	-852.862	0.1463	106506	48324	
171.19	36.2	167.0	-474.3	101.69	-853.692	0.1575	104058	47213	
171.19	34.1	163.7	-474.8	94.10	-854.587	0.1702	101183	45909	
171.19	32.1	160.3	-475.3	86.77	-855.558	0.1846	97958	44446	
171.19	30.1	156.8	-475.9	79.71	-856.613	0.2010	94424	42842	
171.19	28.0	153.2	-476.5	72.93	-857.761	0.2197	90597	41106	
171.19	26.0	149.4	-477.2	66.43	-859.019	0.2412	86526	39259	
171.98	66.7	203.8	-467.9	208.23	-842.286	0.0769		0	
171.98	64.7	202.3	-468.2	202.28	-842.711	0.0792	46088	20911	
171.98	62.7	200.6	-468.4	196.10	-843.154	0.0817	63811	28952	
171.98	60.6	198.9	-468.7	189.69	-843.608	0.0845	76178	34564	
171.98	58.6	197.0	-468.9	183.04	-844.079	0.0875	85583	38831	
171.98	56.6	195.1	-469.2	176.15	-844.566	0.0909	92893	42147	
171.98	54.5	193.0	-469.5	169.03	-845.074	0.0948	98563	44720	
171.98	52.5	190.8	-469.8	161.67	-845.604	0.0991	102842	46662	
171.98	50.4	188.5	-470.1	154.11	-846.159	0.1040	105909	48053	
171.98	48.4	186.0	-470.4	146.37	-846.742	0.1095	107891	48953	
171.98	46.4	183.4	-470.8	138.49	-847.356	0.1157	108902	49411	49477
171.98	44.3	180.7	-471.1	130.55	-848.007	0.1227	109046	49477	
171.98	42.3	177.9	-471.5	122.62	-848.702	0.1306	108465	49213	
171.98	40.3	174.9	-471.9	114.76	-849.441	0.1396	107193	48635	
171.98	38.2	171.8	-472.4	107.03	-850.232	0.1497	105351	47800	
171.98	36.2	168.7	-472.8	99.48	-851.078	0.1610	103002	46734	
171.98	34.1	165.4	-473.3	92.15	-851.995	0.1739	100269	45494	
171.98	32.1	162.1	-473.9	85.06	-852.986	0.1883	97161	44084	
171.98	30.1	158.6	-474.5	78.23	-854.062	0.2048	93742	42533	
171.98	28.0	155.1	-475.1	71.65	-855.23	0.2236	90014	40841	
171.98	26.0	151.4	-475.8	65.32	-856.509	0.2452	86030	39034	
172.77	66.7	205.3	-466.4	203.87	-839.457	0.0786		0	
172.77	64.7	203.8	-466.6	197.94	-839.892	0.0809	45594	20687	
172.77	62.7	202.1	-466.9	191.80	-840.344	0.0835	63085	28623	
172.77	60.6	200.4	-467.1	185.43	-840.809	0.0864	75286	34159	
172.77	58.6	198.5	-467.4	178.85	-841.29	0.0896	84551	38363	
172.77	56.6	196.6	-467.7	172.03	-841.789	0.0931	91745	41626	
172.77	54.5	194.5	-467.9	165.01	-842.309	0.0971	97311	44152	
172.77	52.5	192.3	-468.3	157.77	-842.851	0.1015	101505	46055	
172.77	50.4	190.0	-468.6	150.36	-843.421	0.1065	104539	47432	
172.77	48.4	187.5	-468.9	142.80	-844.019	0.1122	106503	48323	
172.77	46.4	184.9	-469.2	135.14	-844.649	0.1185	107527	48787	
172.77	44.3	182.2	-469.6	127.44	-845.316	0.1257	107716	48873	48873
172.77	42.3	179.4	-470.0	119.76	-846.025	0.1338	107171	48626	
172.77	40.3	176.5	-470.4	112.16	-846.781	0.1428	105987	48089	
172.77	38.2	173.5	-470.9	104.69	-847.59	0.1530	104251	47301	
172.77	36.2	170.4	-471.4	97.40	-848.458	0.1645	102035	46296	
172.77	34.1	167.2	-471.9	90.31	-849.393	0.1774	99406	45102	
172.77	32.1	163.9	-472.4	83.45	-850.403	0.1920	96406	43741	
172.77	30.1	160.5	-473.1	76.82	-851.501	0.2086	93092	42238	
172.77	28.0	157.0	-473.7	70.43	-852.688	0.2275	89454	40587	
172.77	26.0	153.4	-474.4	64.27	-853.992	0.2493	85567	38824	

Mass Flux Calculation

Molar Entropy	Press	Temp	Mass Enthalpy	Mass Density	Mass Enthalpy	Specific Volume	Mass Flux	Mass Flux	Max Mass Flux
kcal/kgmol°C	bara	°C	kcal/kg	kg/m3	Btu/lb	ft3/lb	lb/hr-in2	kg/hr-in2	kg/hr-in2
173.54	66.7	206.7	-465.0	200.17	-836.975	0.0800		0	48373
173.54	64.7	205.1	-465.2	194.26	-837.418	0.0825	45171	20495	
173.54	62.7	203.5	-465.5	188.16	-837.878	0.0851	62466	28342	
173.54	60.6	201.7	-465.8	181.84	-838.352	0.0881	74527	33814	
173.54	58.6	199.8	-466.0	175.31	-838.843	0.0914	83676	37965	
173.54	56.6	197.9	-466.3	168.57	-839.352	0.0950	90773	41186	
173.54	54.5	195.8	-466.6	161.64	-839.883	0.0991	96263	43676	
173.54	52.5	193.6	-466.9	154.52	-840.437	0.1037	100402	45555	
173.54	50.4	191.3	-467.2	147.24	-841.017	0.1088	103382	46906	
173.54	48.4	188.9	-467.6	139.84	-841.627	0.1146	105333	47792	
173.54	46.4	186.3	-467.9	132.36	-842.272	0.1210	106386	48270	
173.54	44.3	183.6	-468.3	124.86	-842.954	0.1283	106613	48373	
173.54	42.3	180.8	-468.7	117.39	-843.677	0.1365	106127	48152	
173.54	40.3	178.0	-469.1	110.01	-844.448	0.1456	105016	47648	
173.54	38.2	175.0	-469.6	102.76	-845.272	0.1559	103361	46897	
173.54	36.2	171.9	-470.1	95.67	-846.156	0.1675	101233	45931	
173.54	34.1	168.8	-470.6	88.78	-847.108	0.1804	98689	44777	
173.54	32.1	165.5	-471.2	82.10	-848.135	0.1951	95776	43456	
173.54	30.1	162.2	-471.8	75.64	-849.247	0.2118	92532	41984	
173.54	28.0	158.7	-472.5	69.40	-850.455	0.2308	88982	40373	
173.54	26.0	155.2	-473.2	63.39	-851.777	0.2527	85168	38642	
174.30	66.7	208.3	-463.4	196.06	-834.129	0.0817		0	47831
174.30	64.7	206.7	-463.7	190.19	-834.582	0.0842	44699	20281	
174.30	62.7	205.0	-463.9	184.13	-835.048	0.0870	61667	27979	
174.30	60.6	203.3	-464.2	177.88	-835.536	0.0901	73683	33431	
174.30	58.6	201.4	-464.5	171.42	-836.038	0.0935	82706	37525	
174.30	56.6	199.4	-464.8	164.78	-836.559	0.0972	89701	40699	
174.30	54.5	197.3	-465.1	157.96	-837.102	0.1014	95109	43153	
174.30	52.5	195.1	-465.4	150.97	-837.669	0.1061	99197	45008	
174.30	50.4	192.8	-465.7	143.85	-838.263	0.1114	102140	46343	
174.30	48.4	190.4	-466.0	136.63	-838.888	0.1173	104086	47226	
174.30	46.4	187.9	-466.4	129.35	-839.547	0.1238	105144	47706	
174.30	44.3	185.3	-466.8	122.07	-840.245	0.1312	105420	47831	
174.30	42.3	182.5	-467.2	114.83	-840.984	0.1395	104997	47639	
174.30	40.3	179.7	-467.7	107.69	-841.772	0.1488	103964	47170	
174.30	38.2	176.8	-468.1	100.66	-842.614	0.1591	102396	46459	
174.30	36.2	173.7	-468.6	93.80	-843.516	0.1708	100359	45535	
174.30	34.1	170.6	-469.2	87.12	-844.486	0.1839	97908	44423	
174.30	32.1	167.4	-469.7	80.64	-845.532	0.1987	95087	43143	
174.30	30.1	164.1	-470.4	74.36	-846.663	0.2154	91931	41711	
174.30	28.0	160.7	-471.1	68.29	-847.891	0.2346	88461	40136	
174.30	26.0	157.2	-471.8	62.42	-849.235	0.2566	84724	38441	
175.05	66.7	209.7	-462.0	192.58	-831.631	0.0832		0	47381
175.05	64.7	208.1	-462.3	186.75	-832.092	0.0858	44294	20097	
175.05	62.7	206.4	-462.5	180.73	-832.568	0.0886	61097	27721	
175.05	60.6	204.6	-462.8	174.53	-833.064	0.0918	72965	33106	
175.05	58.6	202.8	-463.1	168.15	-833.575	0.0953	81884	37153	
175.05	56.6	200.8	-463.4	161.59	-834.107	0.0991	88795	40288	
175.05	54.5	198.7	-463.7	154.87	-834.661	0.1034	94138	42712	
175.05	52.5	196.5	-464.0	148.01	-835.239	0.1082	98181	44547	
175.05	50.4	194.2	-464.4	141.02	-835.846	0.1136	101105	45873	
175.05	48.4	191.8	-464.7	133.96	-836.483	0.1196	103048	46755	
175.05	46.4	189.3	-465.1	126.86	-837.155	0.1263	104120	47241	
175.05	44.3	186.7	-465.5	119.76	-837.866	0.1338	104428	47381	
175.05	42.3	184.0	-465.9	112.72	-838.62	0.1421	104061	47215	
175.05	40.3	181.2	-466.3	105.76	-839.423	0.1515	103089	46774	
175.05	38.2	178.3	-466.8	98.93	-840.279	0.1619	101593	46095	
175.05	36.2	175.4	-467.3	92.25	-841.197	0.1737	99631	45205	
175.05	34.1	172.3	-467.9	85.74	-842.182	0.1868	97255	44127	
175.05	32.1	169.1	-468.5	79.42	-843.244	0.2017	94509	42881	
175.05	30.1	165.9	-469.1	73.29	-844.393	0.2186	91425	41481	
175.05	28.0	162.5	-469.8	67.35	-845.637	0.2379	88019	39936	
175.05	26.0	159.0	-470.6	61.61	-847	0.2600	84346	38270	

Mass Flux Calculation

Molar Entropy	Press	Temp	Mass Enthalpy	Mass Density	Mass Enthalpy	Specific Volume	Mass Flux	Mass Flux	Max Mass Flux
kcal/kgmol°C	bara	°C	kcal/kg	kg/m3	Btu/lb	ft3/lb	lb/hr-in2	kg/hr-in2	kg/hr-in2
175.79	66.7	211.3	-460.4	188.73	-828.767	0.0849		0	46894
175.79	64.7	209.7	-460.7	182.94	-829.238	0.0876	43843	19892	
175.79	62.7	208.0	-461.0	176.98	-829.724	0.0905	60461	27432	
175.79	60.6	206.2	-461.2	170.85	-830.23	0.0938	72169	32745	
175.79	58.6	204.4	-461.5	164.56	-830.753	0.0974	80975	36740	
175.79	56.6	202.4	-461.8	158.10	-831.296	0.1013	87796	39835	
175.79	54.5	200.3	-462.1	151.50	-831.862	0.1057	93072	42229	
175.79	52.5	198.1	-462.5	144.77	-832.454	0.1107	97068	44042	
175.79	50.4	195.9	-462.8	137.95	-833.074	0.1161	99968	45358	
175.79	48.4	193.5	-463.2	131.06	-833.725	0.1222	101910	46239	
175.79	46.4	191.0	-463.6	124.15	-834.412	0.1290	103007	46736	
175.79	44.3	188.4	-464.0	117.26	-835.138	0.1366	103355	46894	
175.79	42.3	185.8	-464.4	110.42	-835.908	0.1451	103041	46752	
175.79	40.3	183.0	-464.8	103.67	-836.727	0.1545	102140	46343	
175.79	38.2	180.2	-465.3	97.04	-837.601	0.1651	100718	45698	
175.79	36.2	177.2	-465.9	90.56	-838.536	0.1769	98836	44844	
175.79	34.1	174.2	-466.4	84.23	-839.539	0.1902	96540	43802	
175.79	32.1	171.1	-467.0	78.08	-840.62	0.2052	93874	42593	
175.79	30.1	167.9	-467.7	72.11	-841.788	0.2222	90866	41228	
175.79	28.0	164.6	-468.4	66.32	-843.055	0.2415	87544	39720	
175.79	26.0	161.1	-469.1	60.72	-844.434	0.2639	83924	38078	
176.52	66.7	212.8	-459.0	185.46	-826.253	0.0864		0	46488
176.52	64.7	211.2	-459.3	179.72	-826.733	0.0891	43457	19717	
176.52	62.7	209.5	-459.6	173.82	-827.228	0.0922	59918	27186	
176.52	60.6	207.7	-459.9	167.75	-827.74	0.0955	71421	32405	
176.52	58.6	205.8	-460.2	161.53	-828.275	0.0992	80206	36391	
176.52	56.6	203.8	-460.5	155.17	-828.828	0.1032	86953	39453	
176.52	54.5	201.8	-460.8	148.67	-829.405	0.1078	92174	41821	
176.52	52.5	199.6	-461.1	142.07	-830.008	0.1128	96135	43618	
176.52	50.4	197.3	-461.5	135.38	-830.64	0.1183	99018	44926	
176.52	48.4	195.0	-461.8	128.65	-831.304	0.1245	100961	45808	
176.52	46.4	192.5	-462.2	121.90	-832.003	0.1314	102077	46314	
176.52	44.3	190.0	-462.6	115.18	-832.743	0.1391	102459	46488	
176.52	42.3	187.3	-463.1	108.51	-833.527	0.1476	102192	46366	
176.52	40.3	184.6	-463.5	101.93	-834.36	0.1572	101347	45983	
176.52	38.2	181.8	-464.0	95.47	-835.248	0.1678	99989	45367	
176.52	36.2	178.9	-464.6	89.15	-836.198	0.1797	98170	44542	
176.52	34.1	175.9	-465.1	82.98	-837.217	0.1931	95940	43530	
176.52	32.1	172.8	-465.7	76.97	-838.314	0.2081	93339	42350	
176.52	30.1	169.7	-466.4	71.13	-839.498	0.2252	90393	41013	
176.52	28.0	166.4	-467.1	65.46	-840.782	0.2447	87130	39533	
176.52	26.0	163.0	-467.9	59.96	-842.179	0.2672	83564	37915	
177.24	66.7	214.3	-457.6	182.29	-823.732	0.0879		0	46099
177.24	64.7	212.6	-457.9	176.60	-824.22	0.0907	43079	19546	
177.24	62.7	210.9	-458.2	170.75	-824.724	0.0938	59387	26945	
177.24	60.6	209.1	-458.5	164.76	-825.245	0.0972	70780	32114	
177.24	58.6	207.3	-458.8	158.62	-825.79	0.1010	79460	36053	
177.24	56.6	205.3	-459.1	152.35	-826.353	0.1052	86139	39083	
177.24	54.5	203.2	-459.4	145.96	-826.941	0.1098	91309	41429	
177.24	52.5	201.1	-459.8	139.48	-827.555	0.1149	95237	43211	
177.24	50.4	198.8	-460.1	132.93	-828.198	0.1205	98106	44513	
177.24	48.4	196.5	-460.5	126.34	-828.875	0.1268	100053	45396	
177.24	46.4	194.0	-460.9	119.75	-829.587	0.1338	101187	45911	
177.24	44.3	191.5	-461.3	113.19	-830.34	0.1415	101602	46099	
177.24	42.3	188.9	-461.7	106.69	-831.137	0.1502	101379	45998	
177.24	40.3	186.2	-462.2	100.27	-831.984	0.1598	100587	45638	
177.24	38.2	183.5	-462.7	93.97	-832.887	0.1705	99286	45048	
177.24	36.2	180.6	-463.3	87.80	-833.852	0.1825	97530	44251	
177.24	34.1	177.7	-463.8	81.77	-834.886	0.1959	95361	43267	
177.24	32.1	174.6	-464.4	75.90	-835.998	0.2111	92821	42115	
177.24	30.1	171.5	-465.1	70.18	-837.199	0.2283	89934	40805	
177.24	28.0	168.2	-465.8	64.63	-838.5	0.2479	86727	39350	
177.24	26.0	164.8	-466.6	59.24	-839.914	0.2705	83211	37755	

Mass Flux Calculation

Molar Entropy	Press	Temp	Mass Enthalpy	Mass Density	Mass Enthalpy	Specific Volume	Mass Flux	Mass Flux	Max Mass Flux
kcal/kgmol°C	bara	°C	kcal/kg	kg/m3	Btu/lb	ft3/lb	lb/hr-in2	kg/hr-in2	kg/hr-in2
177.95	66.7	215.7	-456.2	179.21	-821.203	0.0894		0	45727
177.95	64.7	214.1	-456.5	173.58	-821.699	0.0923	42709	19378	
177.95	62.7	212.4	-456.8	167.79	-822.212	0.0955	58870	26710	
177.95	60.6	210.6	-457.1	161.87	-822.743	0.0990	70156	31831	
177.95	58.6	208.7	-457.4	155.81	-823.294	0.1028	78683	35700	
177.95	56.6	206.8	-457.7	149.64	-823.871	0.1071	85351	38726	
177.95	54.5	204.7	-458.0	143.36	-824.469	0.1117	90475	41050	
177.95	52.5	202.6	-458.4	137.00	-825.094	0.1169	94374	42819	
177.95	50.4	200.3	-458.7	130.58	-825.749	0.1227	97231	44115	
177.95	48.4	198.0	-459.1	124.14	-826.437	0.1291	99181	45001	
177.95	46.4	195.6	-459.5	117.70	-827.162	0.1361	100335	45524	
177.95	44.3	193.1	-460.0	111.29	-827.928	0.1440	100782	45727	
177.95	42.3	190.5	-460.4	104.94	-828.739	0.1527	100600	45644	
177.95	40.3	187.9	-460.9	98.68	-829.6	0.1623	99857	45307	
177.95	38.2	185.1	-461.4	92.53	-830.517	0.1731	98611	44742	
177.95	36.2	182.3	-461.9	86.50	-831.496	0.1852	96913	43971	
177.95	34.1	179.4	-462.5	80.61	-832.545	0.1987	94802	43014	
177.95	32.1	176.4	-463.2	74.86	-833.674	0.2140	92319	41887	
177.95	30.1	173.3	-463.8	69.27	-834.891	0.2313	89488	40602	
177.95	28.0	170.1	-464.6	63.82	-836.208	0.2510	86333	39171	
177.95	26.0	166.7	-465.4	58.53	-837.64	0.2737	82866	37598	
178.65	66.7	217.3	-454.8	176.23	-818.666	0.0909		0	45369
178.65	64.7	215.6	-455.1	170.65	-819.171	0.0939	42348	19214	
178.65	62.7	213.9	-455.4	164.93	-819.693	0.0971	58365	26481	
178.65	60.6	212.1	-455.7	159.08	-820.233	0.1007	69547	31555	
178.65	58.6	210.2	-456.0	153.11	-820.794	0.1046	77997	35389	
178.65	56.6	208.3	-456.3	147.03	-821.377	0.1090	84541	38358	
178.65	54.5	206.2	-456.7	140.86	-821.989	0.1137	89670	40685	
178.65	52.5	204.1	-457.0	134.62	-822.625	0.1190	93543	42442	
178.65	50.4	201.9	-457.4	128.34	-823.292	0.1248	96389	43734	
178.65	48.4	199.6	-457.8	122.03	-823.992	0.1313	98345	44621	
178.65	46.4	197.2	-458.2	115.73	-824.729	0.1384	99517	45153	
178.65	44.3	194.7	-458.6	109.47	-825.508	0.1463	99994	45369	
178.65	42.3	192.2	-459.1	103.28	-826.332	0.1551	99852	45305	
178.65	40.3	189.6	-459.6	97.16	-827.207	0.1649	99156	44989	
178.65	38.2	186.9	-460.1	91.15	-828.138	0.1758	97961	44447	
178.65	36.2	184.1	-460.6	85.26	-829.132	0.1879	96316	43701	
178.65	34.1	181.2	-461.2	79.50	-830.196	0.2015	94261	42768	
178.65	32.1	178.2	-461.9	73.87	-831.34	0.2169	91831	41666	
178.65	30.1	175.1	-462.5	68.39	-832.573	0.2343	89053	40405	
178.65	28.0	171.9	-463.3	63.05	-833.907	0.2541	85949	38997	
178.65	26.0	168.6	-464.1	57.85	-835.355	0.2769	82527	37444	
179.34	66.7	218.8	-453.4	173.34	-816.121	0.0924		0	45026
179.34	64.7	217.1	-453.7	167.82	-816.635	0.0955	41995	19054	
179.34	62.7	215.4	-454.0	162.16	-817.166	0.0988	57872	26258	
179.34	60.6	213.6	-454.3	156.39	-817.715	0.1024	68955	31286	
179.34	58.6	211.8	-454.6	150.51	-818.286	0.1064	77329	35086	
179.34	56.6	209.8	-454.9	144.52	-818.88	0.1109	83818	38030	
179.34	54.5	207.8	-455.3	138.46	-819.498	0.1157	88853	40315	
179.34	52.5	205.7	-455.6	132.34	-820.149	0.1211	92743	42079	
179.34	50.4	203.5	-456.0	126.18	-820.827	0.1270	95581	43367	
179.34	48.4	201.2	-456.4	120.01	-821.539	0.1335	97542	44257	
179.34	46.4	198.8	-456.8	113.85	-822.288	0.1407	98732	44797	
179.34	44.3	196.4	-457.3	107.73	-823.08	0.1487	99238	45026	
179.34	42.3	193.9	-457.7	101.68	-823.917	0.1576	99133	44979	
179.34	40.3	191.3	-458.2	95.70	-824.805	0.1674	98481	44683	
179.34	38.2	188.6	-458.8	89.83	-825.75	0.1783	97334	44163	
179.34	36.2	185.8	-459.3	84.06	-826.756	0.1906	95726	43433	
179.34	34.1	183.0	-459.9	78.42	-827.838	0.2043	93736	42530	
179.34	32.1	180.0	-460.6	72.91	-828.997	0.2197	91358	41451	
179.34	30.1	177.0	-461.2	67.53	-830.245	0.2372	88630	40213	
179.34	28.0	173.8	-462.0	62.29	-831.596	0.2572	85573	38826	
179.34	26.0	170.5	-462.8	57.19	-833.064	0.2801	82204	37298	

Mass Flux Calculation

Molar Entropy	Press	Temp	Mass Enthalpy	Mass Density	Mass Enthalpy	Specific Volume	Mass Flux	Mass Flux	Max Mass Flux
kcal/kgmol°C	bara	°C	kcal/kg	kg/m3	Btu/lb	ft3/lb	lb/hr-in2	kg/hr-in2	kg/hr-in2
180.02	66.7	220.3	-452.0	170.54	-813.568	0.0939		0	44684
180.02	64.7	218.7	-452.3	165.07	-814.091	0.0971	41651	18898	
180.02	62.7	217.0	-452.6	159.49	-814.63	0.1004	57391	26040	
180.02	60.6	215.2	-452.9	153.79	-815.19	0.1042	68378	31024	
180.02	58.6	213.3	-453.2	148.00	-815.77	0.1082	76680	34791	
180.02	56.6	211.4	-453.5	142.11	-816.374	0.1127	83117	37712	
180.02	54.5	209.4	-453.9	136.16	-817.003	0.1177	88116	39980	
180.02	52.5	207.3	-454.3	130.15	-817.661	0.1231	91940	41715	
180.02	50.4	205.1	-454.6	124.11	-818.35	0.1291	94770	42999	
180.02	48.4	202.8	-455.0	118.07	-819.074	0.1357	96738	43892	
180.02	46.4	200.5	-455.5	112.05	-819.835	0.1430	97948	44441	
180.02	44.3	198.1	-455.9	106.06	-820.639	0.1510	98484	44684	
180.02	42.3	195.6	-456.4	100.14	-821.489	0.1600	98419	44655	
180.02	40.3	193.0	-456.9	94.30	-822.391	0.1699	97811	44379	
180.02	38.2	190.3	-457.4	88.55	-823.351	0.1809	96715	43881	
180.02	36.2	187.6	-458.0	82.91	-824.374	0.1932	95172	43181	
180.02	34.1	184.8	-458.6	77.39	-825.47	0.2070	93227	42299	
180.02	32.1	181.9	-459.2	71.99	-826.644	0.2225	90897	41242	
180.02	30.1	178.9	-459.9	66.71	-827.908	0.2401	88216	40025	
180.02	28.0	175.7	-460.7	61.57	-829.276	0.2602	85204	38659	
180.02	26.0	172.5	-461.5	56.55	-830.761	0.2833	81879	37150	
180.70	66.7	221.9	-450.6	167.83	-811.008	0.0955		0	44370
180.70	64.7	220.3	-450.9	162.42	-811.538	0.0986	41315	18745	
180.70	62.7	218.5	-451.2	156.91	-812.087	0.1021	56923	25827	
180.70	60.6	216.8	-451.5	151.29	-812.656	0.1059	67816	30770	
180.70	58.6	214.9	-451.8	145.58	-813.246	0.1100	76050	34505	
180.70	56.6	213.0	-452.1	139.79	-813.86	0.1146	82436	37403	
180.70	54.5	211.0	-452.5	133.94	-814.5	0.1196	87401	39655	
180.70	52.5	208.9	-452.9	128.05	-815.168	0.1251	91206	41382	
180.70	50.4	206.7	-453.3	122.13	-815.869	0.1312	94029	42663	
180.70	48.4	204.5	-453.7	116.21	-816.604	0.1379	96003	43559	
180.70	46.4	202.1	-454.1	110.32	-817.378	0.1452	97229	44115	
180.70	44.3	199.8	-454.6	104.46	-818.194	0.1534	97791	44370	
180.70	42.3	197.3	-455.0	98.67	-819.057	0.1624	97757	44355	
180.70	40.3	194.7	-455.5	92.95	-819.973	0.1723	97188	44096	
180.70	38.2	192.1	-456.1	87.33	-820.945	0.1835	96132	43617	
180.70	36.2	189.4	-456.7	81.80	-821.982	0.1958	94634	42937	
180.70	34.1	186.6	-457.3	76.39	-823.092	0.2097	92732	42075	
180.70	32.1	183.7	-457.9	71.09	-824.282	0.2253	90448	41038	
180.70	30.1	180.7	-458.6	65.92	-825.562	0.2430	87812	39842	
180.70	28.0	177.6	-459.4	60.86	-826.945	0.2632	84844	38495	
180.70	26.0	174.4	-460.2	55.93	-828.447	0.2864	81559	37005	
181.36	66.7	223.5	-449.1	165.19	-808.439	0.0970		0	44065
181.36	64.7	221.8	-449.4	159.85	-808.978	0.1002	40986	18596	
181.36	62.7	220.1	-449.7	154.41	-809.536	0.1038	56467	25620	
181.36	60.6	218.4	-450.1	148.87	-810.113	0.1076	67270	30522	
181.36	58.6	216.5	-450.4	143.25	-810.713	0.1118	75437	34228	
181.36	56.6	214.6	-450.7	137.55	-811.337	0.1165	81775	37103	
181.36	54.5	212.6	-451.1	131.81	-811.988	0.1215	86708	39341	
181.36	52.5	210.5	-451.5	126.03	-812.667	0.1271	90495	41059	
181.36	50.4	208.4	-451.9	120.23	-813.379	0.1333	93313	42338	
181.36	48.4	206.1	-452.3	114.43	-814.126	0.1400	95292	43236	
181.36	46.4	203.8	-452.7	108.66	-814.912	0.1474	96534	43800	
181.36	44.3	201.5	-453.2	102.93	-815.74	0.1556	97120	44065	
181.36	42.3	199.0	-453.7	97.26	-816.616	0.1647	97117	44064	
181.36	40.3	196.5	-454.2	91.66	-817.544	0.1748	96584	43822	
181.36	38.2	193.9	-454.7	86.15	-818.531	0.1860	95568	43361	
181.36	36.2	191.2	-455.3	80.74	-819.582	0.1984	94111	42700	
181.36	34.1	188.5	-455.9	75.43	-820.705	0.2124	92251	41856	
181.36	32.1	185.6	-456.6	70.23	-821.91	0.2281	90010	40840	
181.36	30.1	182.6	-457.3	65.15	-823.205	0.2459	87417	39663	
181.36	28.0	179.6	-458.1	60.18	-824.604	0.2662	84490	38335	
181.36	26.0	176.4	-459.0	55.33	-826.123	0.2896	81244	36862	

Mass Flux Calculation

Molar Entropy	Press	Temp	Mass Enthalpy	Mass Density	Mass Enthalpy	Specific Volume	Mass Flux	Mass Flux	Max Mass Flux
kcal/kgmol°C	bara	°C	kcal/kg	kg/m3	Btu/lb	ft3/lb	lb/hr-in2	kg/hr-in2	kg/hr-in2
182.02	66.7	224.9	-447.9	163.00	-806.23	0.0983		0	43822
182.02	64.7	223.2	-448.2	157.72	-806.777	0.1016	40711	18472	
182.02	62.7	221.5	-448.5	152.33	-807.342	0.1052	56085	25447	
182.02	60.6	219.7	-448.8	146.86	-807.928	0.1091	66814	30315	
182.02	58.6	217.9	-449.2	141.31	-808.536	0.1134	74927	33996	
182.02	56.6	216.0	-449.5	135.70	-809.168	0.1181	81225	36853	
182.02	54.5	214.0	-449.9	130.04	-809.828	0.1232	86131	39079	
182.02	52.5	211.9	-450.3	124.35	-810.517	0.1288	89903	40791	
182.02	50.4	209.8	-450.7	118.65	-811.238	0.1350	92717	42068	
182.02	48.4	207.6	-451.1	112.96	-811.995	0.1418	94702	42968	
182.02	46.4	205.3	-451.6	107.29	-812.791	0.1493	95956	43537	
182.02	44.3	203.0	-452.0	101.66	-813.63	0.1576	96562	43812	
182.02	42.3	200.5	-452.5	96.09	-814.516	0.1667	96585	43822	
182.02	40.3	198.0	-453.0	90.59	-815.456	0.1768	96081	43594	
182.02	38.2	195.5	-453.6	85.17	-816.453	0.1881	95097	43147	
182.02	36.2	192.8	-454.2	79.85	-817.516	0.2006	93674	42502	
182.02	34.1	190.1	-454.8	74.63	-818.652	0.2147	91849	41674	
182.02	32.1	187.2	-455.5	69.51	-819.869	0.2305	89643	40673	
182.02	30.1	184.3	-456.2	64.51	-821.177	0.2484	87085	39512	
182.02	28.0	181.2	-457.0	59.61	-822.59	0.2688	84191	38199	
182.02	26.0	178.0	-457.8	54.82	-824.123	0.2922	80978	36741	
182.67	66.7	226.5	-446.5	160.52	-803.646	0.0998		0	43549
182.67	64.7	224.8	-446.8	155.30	-804.201	0.1032	40398	18329	
182.67	62.7	223.1	-447.1	149.99	-804.775	0.1068	55651	25250	
182.67	60.6	221.4	-447.4	144.60	-805.37	0.1108	66296	30080	
182.67	58.6	219.5	-447.8	139.13	-805.987	0.1151	74346	33732	
182.67	56.6	217.6	-448.1	133.62	-806.63	0.1199	80601	36570	
182.67	54.5	215.7	-448.5	128.06	-807.3	0.1251	85478	38783	
182.67	52.5	213.6	-448.9	122.47	-807.999	0.1308	89234	40487	
182.67	50.4	211.5	-449.3	116.88	-808.732	0.1371	92043	41762	
182.67	48.4	209.3	-449.7	111.30	-809.5	0.1439	94033	42665	
182.67	46.4	207.1	-450.2	105.74	-810.307	0.1515	95303	43241	
182.67	44.3	204.7	-450.6	100.23	-811.159	0.1598	95930	43526	
182.67	42.3	202.3	-451.1	94.77	-812.058	0.1690	95981	43549	
182.67	40.3	199.9	-451.7	89.38	-813.01	0.1792	95510	43335	
182.67	38.2	197.3	-452.2	84.07	-814.021	0.1906	94562	42905	
182.67	36.2	194.7	-452.8	78.85	-815.097	0.2032	93177	42276	
182.67	34.1	192.0	-453.5	73.73	-816.247	0.2173	91390	41466	
182.67	32.1	189.1	-454.2	68.70	-817.478	0.2332	89224	40483	
182.67	30.1	186.2	-454.9	63.78	-818.802	0.2512	86705	39340	
182.67	28.0	183.2	-455.7	58.96	-820.231	0.2717	83849	38044	
182.67	26.0	180.0	-456.5	54.25	-821.78	0.2953	80672	36603	
183.32	66.7	227.9	-445.2	158.46	-801.424	0.1011		0	43320
183.32	64.7	226.3	-445.5	153.29	-801.986	0.1045	40135	18210	
183.32	62.7	224.6	-445.9	148.04	-802.568	0.1082	55288	25085	
183.32	60.6	222.8	-446.2	142.71	-803.17	0.1123	65862	29883	
183.32	58.6	221.0	-446.6	137.33	-803.796	0.1167	73863	33513	
183.32	56.6	219.1	-446.9	131.89	-804.447	0.1215	80081	36334	
183.32	54.5	217.1	-447.3	126.41	-805.126	0.1267	84934	38536	
183.32	52.5	215.1	-447.7	120.92	-805.835	0.1325	88676	40234	
183.32	50.4	213.0	-448.1	115.42	-806.576	0.1388	91482	41507	
183.32	48.4	210.8	-448.5	109.93	-807.354	0.1457	93477	42413	
183.32	46.4	208.6	-449.0	104.46	-808.172	0.1534	94759	42994	
183.32	44.3	206.3	-449.5	99.04	-809.033	0.1618	95404	43287	
183.32	42.3	203.9	-450.0	93.68	-809.943	0.1710	95478	43320	
183.32	40.3	201.4	-450.5	88.38	-810.906	0.1813	95033	43119	
183.32	38.2	198.9	-451.1	83.16	-811.928	0.1927	94115	42702	
183.32	36.2	196.3	-451.7	78.02	-813.016	0.2053	92761	42088	
183.32	34.1	193.6	-452.3	72.98	-814.178	0.2195	91006	41291	
183.32	32.1	190.8	-453.0	68.02	-815.422	0.2355	88873	40323	
183.32	30.1	187.9	-453.8	63.17	-816.758	0.2536	86385	39195	
183.32	28.0	184.9	-454.6	58.42	-818.201	0.2742	83561	37913	
183.32	26.0	181.7	-455.4	53.77	-819.764	0.2979	80414	36485	

Mass Flux Calculation

Molar Entropy	Press	Temp	Mass Enthalpy	Mass Density	Mass Enthalpy	Specific Volume	Mass Flux	Mass Flux	Max Mass Flux
kcal/kgmol°C	bara	°C	kcal/kg	kg/m3	Btu/lb	ft3/lb	lb/hr-in2	kg/hr-in2	kg/hr-in2
183.95	66.7	229.5	-443.8	156.12	-798.824	0.1026		0	
183.95	64.7	227.9	-444.1	151.01	-799.394	0.1061	39836	18074	
183.95	62.7	226.2	-444.4	145.84	-799.985	0.1099	54874	24897	
183.95	60.6	224.5	-444.8	140.59	-800.597	0.1140	65370	29660	
183.95	58.6	222.6	-445.1	135.29	-801.232	0.1184	73313	33264	
183.95	56.6	220.8	-445.5	129.94	-801.893	0.1233	79491	36067	
183.95	54.5	218.8	-445.9	124.56	-802.582	0.1286	84317	38256	
183.95	52.5	216.8	-446.3	119.16	-803.301	0.1344	88045	39948	
183.95	50.4	214.7	-446.7	113.76	-804.053	0.1408	90847	41219	
183.95	48.4	212.6	-447.1	108.38	-804.842	0.1478	92847	42127	
183.95	46.4	210.3	-447.6	103.02	-805.672	0.1555	94142	42714	43061
183.95	44.3	208.0	-448.1	97.71	-806.545	0.1640	94808	43016	
183.95	42.3	205.7	-448.6	92.45	-807.467	0.1733	94907	43061	
183.95	40.3	203.3	-449.1	87.25	-808.443	0.1836	94492	42873	
183.95	38.2	200.8	-449.7	82.12	-809.478	0.1951	93606	42471	
183.95	36.2	198.2	-450.3	77.08	-810.579	0.2078	92287	41873	
183.95	34.1	195.5	-451.0	72.12	-811.755	0.2221	90567	41092	
183.95	32.1	192.7	-451.7	67.26	-813.013	0.2382	88470	40141	
183.95	30.1	189.8	-452.4	62.49	-814.365	0.2564	86018	39028	
183.95	28.0	186.8	-453.2	57.81	-815.823	0.2771	83229	37763	
183.95	26.0	183.7	-454.1	53.23	-817.402	0.3010	80116	36350	
184.58	66.7	231.0	-442.5	154.17	-796.588	0.1039		0	
184.58	64.7	229.4	-442.9	149.12	-797.166	0.1074	39586	17961	
184.58	62.7	227.7	-443.2	144.00	-797.764	0.1112	54528	24740	
184.58	60.6	225.9	-443.5	138.83	-798.384	0.1154	64959	29473	
184.58	58.6	224.1	-443.9	133.59	-799.027	0.1199	72854	33056	
184.58	56.6	222.2	-444.3	128.32	-799.696	0.1248	78999	35843	
184.58	54.5	220.3	-444.7	123.02	-800.394	0.1302	83803	38023	
184.58	52.5	218.3	-445.1	117.71	-801.122	0.1361	87519	39709	
184.58	50.4	216.2	-445.5	112.40	-801.883	0.1425	90318	40979	
184.58	48.4	214.1	-445.9	107.10	-802.682	0.1496	92323	41889	
184.58	46.4	211.9	-446.4	101.83	-803.521	0.1573	93629	42481	42845
184.58	44.3	209.6	-446.9	96.60	-804.405	0.1658	94311	42791	
184.58	42.3	207.3	-447.4	91.42	-805.337	0.1752	94431	42845	
184.58	40.3	204.9	-448.0	86.31	-806.324	0.1856	94040	42668	
184.58	38.2	202.4	-448.5	81.27	-807.37	0.1971	93181	42278	
184.58	36.2	199.8	-449.2	76.30	-808.483	0.2100	91890	41693	
184.58	34.1	197.1	-449.8	71.42	-809.67	0.2243	90199	40925	
184.58	32.1	194.4	-450.5	66.62	-810.94	0.2405	88132	39987	
184.58	30.1	191.5	-451.3	61.91	-812.305	0.2588	85710	38888	
184.58	28.0	188.5	-452.1	57.30	-813.776	0.2796	82949	37636	
184.58	26.0	185.4	-453.0	52.77	-815.369	0.3036	79864	36236	
185.21	66.7	232.4	-441.3	152.27	-794.346	0.1052		0	
185.21	64.7	230.8	-441.6	147.28	-794.931	0.1088	39340	17849	
185.21	62.7	229.1	-442.0	142.22	-795.537	0.1126	54190	24587	
185.21	60.6	227.4	-442.3	137.11	-796.164	0.1168	64557	29291	
185.21	58.6	225.6	-442.7	131.95	-796.815	0.1214	72407	32853	
185.21	56.6	223.7	-443.1	126.75	-797.493	0.1264	78519	35626	
185.21	54.5	221.8	-443.4	121.53	-798.199	0.1318	83302	37796	
185.21	52.5	219.8	-443.9	116.30	-798.936	0.1378	87007	39477	
185.21	50.4	217.7	-444.3	111.07	-799.707	0.1442	89803	40745	
185.21	48.4	215.6	-444.7	105.86	-800.515	0.1513	91812	41657	
185.21	46.4	213.4	-445.2	100.67	-801.364	0.1591	93128	42254	42634
185.21	44.3	211.2	-445.7	95.53	-802.257	0.1677	93826	42571	
185.21	42.3	208.9	-446.2	90.43	-803.2	0.1772	93966	42634	
185.21	40.3	206.5	-446.8	85.40	-804.197	0.1876	93598	42467	
185.21	38.2	204.0	-447.4	80.43	-805.255	0.1992	92765	42089	
185.21	36.2	201.4	-448.0	75.54	-806.379	0.2121	91502	41516	
185.21	34.1	198.8	-448.7	70.73	-807.578	0.2265	89839	40762	
185.21	32.1	196.1	-449.4	66.00	-808.86	0.2427	87800	39837	
185.21	30.1	193.2	-450.1	61.35	-810.237	0.2611	85406	38750	
185.21	28.0	190.3	-451.0	56.80	-811.722	0.2821	82674	37511	
185.21	26.0	187.2	-451.8	52.33	-813.329	0.3061	79615	36123	

Mass Flux Calculation

Molar Entropy	Press	Temp	Mass Enthalpy	Mass Density	Mass Enthalpy	Specific Volume	Mass Flux	Mass Flux	Max Mass Flux
kcal/kgmol°C	bara	°C	kcal/kg	kg/m3	Btu/lb	ft3/lb	lb/hr-in2	kg/hr-in2	kg/hr-in2
185.83	66.7	233.9	-440.1	150.42	-792.097	0.1065		0	42428
185.83	64.7	232.3	-440.4	145.49	-792.69	0.1101	39100	17741	
185.83	62.7	230.6	-440.7	140.49	-793.303	0.1140	53859	24437	
185.83	60.6	228.9	-441.1	135.45	-793.938	0.1183	64164	29113	
185.83	58.6	227.1	-441.4	130.35	-794.597	0.1229	71970	32654	
185.83	56.6	225.2	-441.8	125.23	-795.283	0.1279	78051	35413	
185.83	54.5	223.3	-442.2	120.09	-795.998	0.1334	82814	37574	
185.83	52.5	221.3	-442.6	114.93	-796.743	0.1394	86508	39250	
185.83	50.4	219.3	-443.1	109.78	-797.524	0.1459	89300	40517	
185.83	48.4	217.2	-443.5	104.65	-798.341	0.1531	91313	41431	
185.83	46.4	215.0	-444.0	99.55	-799.2	0.1609	92640	42033	
185.83	44.3	212.8	-444.5	94.48	-800.103	0.1696	93353	42356	
185.83	42.3	210.4	-445.0	89.47	-801.056	0.1791	93512	42428	
185.83	40.3	208.1	-445.6	84.51	-802.064	0.1896	93166	42271	
185.83	38.2	205.6	-446.2	79.62	-803.132	0.2012	92357	41904	
185.83	36.2	203.1	-446.8	74.80	-804.268	0.2142	91120	41343	
185.83	34.1	200.5	-447.5	70.05	-805.478	0.2287	89484	40601	
185.83	32.1	197.7	-448.2	65.39	-806.773	0.2450	87473	39688	
185.83	30.1	194.9	-449.0	60.81	-808.163	0.2635	85107	38615	
185.83	28.0	192.0	-449.8	56.31	-809.66	0.2845	82401	37387	
185.83	26.0	188.9	-450.7	51.89	-811.281	0.3087	79369	36011	
186.44	66.7	235.4	-438.8	148.62	-789.842	0.1078		0	42227
186.44	64.7	233.8	-439.1	143.75	-790.442	0.1115	38865	17634	
186.44	62.7	232.1	-439.5	138.81	-791.062	0.1154	53536	24290	
186.44	60.6	230.4	-439.8	133.83	-791.705	0.1197	63781	28939	
186.44	58.6	228.6	-440.2	128.80	-792.373	0.1244	71544	32461	
186.44	56.6	226.7	-440.6	123.75	-793.067	0.1295	77595	35206	
186.44	54.5	224.8	-441.0	118.68	-793.79	0.1350	82338	37358	
186.44	52.5	222.9	-441.4	113.61	-794.544	0.1410	86021	39029	
186.44	50.4	220.8	-441.9	108.54	-795.333	0.1476	88811	40295	
186.44	48.4	218.7	-442.3	103.48	-796.16	0.1548	90828	41210	
186.44	46.4	216.6	-442.8	98.46	-797.028	0.1627	92163	41816	
186.44	44.3	214.4	-443.3	93.47	-797.942	0.1714	92891	42146	
186.44	42.3	212.1	-443.8	88.53	-798.905	0.1810	93068	42227	
186.44	40.3	209.7	-444.4	83.65	-799.923	0.1915	92744	42080	
186.44	38.2	207.3	-445.0	78.83	-801.002	0.2032	91958	41723	
186.44	36.2	204.7	-445.6	74.08	-802.149	0.2163	90746	41173	
186.44	34.1	202.1	-446.3	69.40	-803.371	0.2308	89136	40443	
186.44	32.1	199.4	-447.0	64.80	-804.678	0.2472	87152	39542	
186.44	30.1	196.6	-447.8	60.27	-806.08	0.2658	84812	38481	
186.44	28.0	193.7	-448.7	55.83	-807.591	0.2870	82133	37265	
186.44	26.0	190.6	-449.6	51.47	-809.225	0.3113	79126	35901	
187.05	66.7	236.9	-437.5	146.87	-787.581	0.1091		0	42030
187.05	64.7	235.3	-437.9	142.05	-788.187	0.1128	38635	17530	
187.05	62.7	233.6	-438.2	137.17	-788.815	0.1168	53219	24147	
187.05	60.6	231.9	-438.6	132.25	-789.466	0.1211	63406	28769	
187.05	58.6	230.1	-439.0	127.30	-790.141	0.1259	71127	32272	
187.05	56.6	228.3	-439.4	122.32	-790.843	0.1310	77149	35004	
187.05	54.5	226.4	-439.8	117.32	-791.575	0.1366	81873	37148	
187.05	52.5	224.4	-440.2	112.32	-792.338	0.1426	85546	38814	
187.05	50.4	222.4	-440.6	107.32	-793.136	0.1493	88333	40078	
187.05	48.4	220.3	-441.1	102.35	-793.972	0.1565	90353	40995	
187.05	46.4	218.2	-441.6	97.40	-794.85	0.1645	91698	41605	
187.05	44.3	216.0	-442.1	92.49	-795.773	0.1732	92439	41942	
187.05	42.3	213.7	-442.6	87.62	-796.747	0.1828	92634	42030	
187.05	40.3	211.3	-443.2	82.81	-797.775	0.1935	92330	41892	
187.05	38.2	208.9	-443.8	78.06	-798.865	0.2052	91567	41546	
187.05	36.2	206.4	-444.5	73.38	-800.023	0.2183	90379	41007	
187.05	34.1	203.8	-445.1	68.76	-801.257	0.2330	88794	40288	
187.05	32.1	201.1	-445.9	64.22	-802.575	0.2495	86835	39399	
187.05	30.1	198.4	-446.7	59.75	-803.99	0.2681	84521	38349	
187.05	28.0	195.4	-447.5	55.36	-805.513	0.2894	81867	37145	
187.05	26.0	192.4	-448.4	51.05	-807.162	0.3138	78885	35792	

Mass Flux Calculation

Molar Entropy	Press	Temp	Mass Enthalpy	Mass Density	Mass Enthalpy	Specific Volume	Mass Flux	Mass Flux	Max Mass Flux
kcal/kgmol°C	bara	°C	kcal/kg	kg/m3	Btu/lb	ft3/lb	lb/hr-in2	kg/hr-in2	kg/hr-in2
187.65	66.7	238.4	-436.3	145.16	-785.312	0.1104		0	41837
187.65	64.7	236.8	-436.6	140.40	-785.926	0.1141	38410	17427	
187.65	62.7	235.1	-437.0	135.58	-786.561	0.1182	52910	24006	
187.65	60.6	233.4	-437.3	130.72	-787.22	0.1226	63040	28603	
187.65	58.6	231.6	-437.7	125.83	-787.903	0.1273	70721	32087	
187.65	56.6	229.8	-438.1	120.92	-788.613	0.1325	76714	34807	
187.65	54.5	227.9	-438.5	115.99	-789.353	0.1381	81420	36942	
187.65	52.5	226.0	-439.0	111.07	-790.125	0.1442	85082	38604	
187.65	50.4	224.0	-439.4	106.15	-790.932	0.1509	87866	39867	
187.65	48.4	221.9	-439.9	101.24	-791.777	0.1582	89890	40785	
187.65	46.4	219.8	-440.4	96.37	-792.665	0.1662	91244	41399	
187.65	44.3	217.6	-440.9	91.53	-793.598	0.1750	91998	41741	
187.65	42.3	215.3	-441.4	86.74	-794.581	0.1847	92209	41837	
187.65	40.3	213.0	-442.0	81.99	-795.62	0.1954	91925	41708	
187.65	38.2	210.6	-442.6	77.31	-796.721	0.2072	91184	41372	
187.65	36.2	208.1	-443.3	72.69	-797.89	0.2204	90019	40844	
187.65	34.1	205.5	-444.0	68.14	-799.135	0.2351	88458	40135	
187.65	32.1	202.9	-444.7	63.65	-800.465	0.2517	86524	39258	
187.65	30.1	200.1	-445.5	59.24	-801.892	0.2704	84234	38219	
187.65	28.0	197.2	-446.3	54.91	-803.429	0.2918	81605	37026	
187.65	26.0	194.2	-447.3	50.64	-805.09	0.3163	78647	35684	
188.25	66.7	239.9	-435.0	143.50	-783.037	0.1116		0	41649
188.25	64.7	238.3	-435.4	138.79	-783.658	0.1154	38189	17327	
188.25	62.7	236.6	-435.7	134.03	-784.301	0.1195	52607	23869	
188.25	60.6	234.9	-436.1	129.24	-784.967	0.1240	62682	28440	
188.25	58.6	233.2	-436.5	124.41	-785.658	0.1288	70323	31907	
188.25	56.6	231.3	-436.9	119.56	-786.376	0.1340	76289	34614	
188.25	54.5	229.5	-437.3	114.71	-787.124	0.1397	80977	36741	
188.25	52.5	227.5	-437.7	109.85	-787.905	0.1458	84630	38398	
188.25	50.4	225.5	-438.2	105.00	-788.721	0.1526	87411	39660	
188.25	48.4	223.5	-438.7	100.17	-789.575	0.1599	89438	40580	
188.25	46.4	221.4	-439.2	95.37	-790.472	0.1680	90800	41198	
188.25	44.3	219.2	-439.7	90.60	-791.415	0.1768	91566	41546	
188.25	42.3	217.0	-440.2	85.87	-792.408	0.1866	91794	41649	
188.25	40.3	214.6	-440.8	81.20	-793.457	0.1973	91528	41528	
188.25	38.2	212.3	-441.4	76.58	-794.569	0.2092	90808	41201	
188.25	36.2	209.8	-442.1	72.02	-795.749	0.2224	89665	40683	
188.25	34.1	207.2	-442.8	67.53	-797.005	0.2372	88128	39985	
188.25	32.1	204.6	-443.5	63.10	-798.348	0.2539	86217	39119	
188.25	30.1	201.8	-444.3	58.74	-799.787	0.2727	83952	38091	
188.25	28.0	198.9	-445.2	54.46	-801.336	0.2942	81346	36909	
188.25	26.0	195.9	-446.1	50.24	-803.011	0.3189	78412	35577	