

TABLE 1
BARE DOUBLE PIPE HAIRPIN MECHANICAL DESIGN DATA

SHELLSIDE SCH. 40				TUBE SIDE									
Type	25 NFA	De In.	Ao/Ai	O.D. In.	No. Tube	25 NFA	I.D. In.	Surface					Wall Thk
								10	20	30	Ft2/Ft	Ends	
1.5D	24.544	0.50	1.15	1.0	1	14.86	0.87	5.23	10.47	15.70	0.523	0	0.065
2B	72.8	1.32	1.21	0.75	1	7.55	0.62	3.93	7.85	11.78	0.393	0	0.065
2D	64.3	1.07	1.15	1.0	1	14.86	0.87	5.23	10.47	15.70	0.523	0	0.065
2F	49.9	0.75	1.25	1.32	1	21.61	1.05	6.88	13.76	20.65	0.688	0	0.133
2G	29.8	0.41	1.20	1.66	1	37.39	1.38	8.69	17.37	26.06	0.869	0	0.14
2.5D	100.1	1.47	1.23	1.0	1	12.88	0.81	5.23	10.47	15.70	0.523	0	0.095
2.5F	85.7	1.15	1.25	1.32	1	21.61	1.05	6.88	13.76	20.65	0.688	0	0.133
2.5G	65.6	0.81	1.20	1.66	1	37.39	1.38	8.69	17.37	26.06	0.869	0	0.14
2.5H	48.8	0.57	1.18	1.90	1	50.90	1.61	9.94	19.89	29.83	0.994	0	0.145
3.F	150.9	1.75	1.25	1.32	1	21.61	1.05	6.88	13.76	20.65	0.688	0	0.133
3G	130.7	1.41	1.20	1.66	1	37.39	1.38	8.69	17.37	26.06	0.869	0	0.14
3H	113.9	1.17	1.18	1.90	1	50.90	1.61	9.94	19.89	29.83	0.994	0	0.145
3J	74.1	0.69	1.15	2.38	1	83.89	2.07	12.43	24.86	37.29	1.243	0	0.154
3.5H	179.1	1.67	1.18	1.90	1	50.90	1.61	9.94	19.89	29.83	0.994	0	0.145
3.5J	139.2	1.19	1.15	2.38	1	83.89	2.07	12.43	24.86	37.29	1.243	0	0.154
3.5K	87.7	0.69	1.16	2.88	1	119.69	2.47	15.05	30.09	45.14	1.505	0	0.203
4H	247.4	2.13	1.18	1.90	1	50.90	1.61	9.94	19.89	29.83	0.994	0	0.145
4J	207.5	1.65	1.15	2.38	1	83.89	2.07	12.43	24.86	37.29	1.243	0	0.154
4K	156.0	1.15	1.16	2.88	1	119.69	2.47	15.05	30.09	45.14	1.505	0	0.203
4L	77.7	0.53	1.14	3.50	1	184.82	3.07	18.32	36.63	54.95	1.832	0	0.216
5K	337.9	2.17	1.16	2.88	1	119.69	2.47	15.05	30.09	45.14	1.505	0	0.203
5L	259.6	1.55	1.14	3.50	1	184.82	3.07	18.32	36.63	54.95	1.832	0	0.216
5M	186.0	1.05	1.13	4.0	1	247.17	3.55	20.93	41.87	62.80	2.093	0	0.226
5N	102.5	0.55	1.12	4.50	1	318.26	4.03	23.55	47.10	70.65	2.355	0	0.237
6L	481.7	2.57	1.14	3.50	1	184.82	3.07	18.32	36.63	54.95	1.832	0	0.216
6M	408.1	2.07	1.13	4.0	1	247.17	3.55	20.93	41.87	62.80	2.093	0	0.226
6N	324.6	1.57	1.12	4.50	1	318.26	4.03	23.55	47.10	70.65	2.355	0	0.237
8O	643.0	2.42	1.10	5.56	1	500.15	5.05	29.11	58.23	87.34	2.911	0	0.258
8P	388.9	1.36	1.09	6.63	1	722.26	6.07	34.67	69.34	104.01	3.467	0	0.28