

Mfr's minimum recommendations

Below minimum recommendation

Exceeds diameter of supply tapping

XXX not enough supply tapings for this number of risers

Enter pressure (psig)

to calculate at here→ 0

Enter Specific Volume in

cubic feet (ft³) here→ 26.8

					Riser Diameter And Count						Header Diameter					
					2"	2-1/2"	2"	3"	2-1/2"	3"	2"	2-1/2"	3"	4"	5"	6"
Diameter (sch 40)					3.36	4.78	3.36	7.39	4.78	7.39	3.36	4.78	7.39	12.73	19.99	28.89
Internal area																
number of Risers					1	1	2	1	2	2						
					Steam Velocity in Risers (in ft/sec)						Steam Velocity in Header (in ft/sec)					
Make	Model	Fuel	Model #	Boiler output (lbs/hr)												
Columbia	** CSFE Series	Oil	CSFE-0365	82	26.2	18.4	13.1	11.9	9.2	5.9	26.2	18.4	11.9	6.9	4.4	3.0
Columbia	** CSFE Series	Oil	CSFE-3100S	121	38.6	27.1	19.3	17.6	13.6	8.8	38.6	27.1	17.6	10.2	6.5	4.5
Columbia	** CSFE Series	Oil	CSFHE-4100S	125	39.9	28.0	19.9	18.1	14.0	9.1	39.9	28.0	18.1	10.5	6.7	4.6
Columbia	** CSFE Series	Oil	CSFE-4125S	151	48.2	33.9	24.1	21.9	16.9	11.0	48.2	33.9	21.9	12.7	8.1	5.6
Columbia	** CSFE Series	Oil	CSFE-4150S	177	56.5	39.7	28.2	25.7	19.8	12.8	56.5	39.7	25.7	14.9	9.5	6.6
Columbia	** CSFE Series	Oil	CSFE-5175S	210	67.0	47.1	33.5	30.5	23.5	15.2	67.0	47.1	30.5	17.7	11.3	7.8
Columbia	** CSFE Series	Oil	CSFE-5200S	236	75.3	52.9	37.6	34.2	26.5	17.1	75.3	52.9	34.2	19.9	12.7	8.8
Columbia	** CSFE Series	Oil	CSFE-6225S	261	83.3	58.5	41.6	37.9	29.3	18.9	83.3	58.5	37.9	22.0	14.0	9.7
Columbia	** CSFE Series	Oil	CSFE-7275S	320	102.1	71.8	51.0	46.4	35.9	23.2	102.1	71.8	46.4	26.9	17.2	11.9
** Lacking a "CSFE Series" IOM, I used the Mfr's minimum recommendations from the "CSFE Series IV" manual																
Columbia	CSFE Series IV	Oil	CSFE-3090S	110	35.1	24.7	17.5	16.0	12.3	8.0	35.1	24.7	16.0	9.3	5.9	4.1
Columbia	CSFE Series IV	Oil	CSFE-4125S	153	48.8	34.3	24.4	22.2	17.2	11.1	48.8	34.3	22.2	12.9	8.2	5.7
Columbia	CSFE Series IV	Oil	CSFE-5185S	225	71.8	50.5	35.9	32.6	25.2	16.3	71.8	50.5	32.6	18.9	12.1	8.3
Columbia	CSFE Series IV	Oil	CSFE-6210S	257	82.0	57.6	41.0	37.3	28.8	18.6	82.0	57.6	37.3	21.6	13.8	9.5
Utica Boilers	Starfire SFE V	Oil	SFE-3090S	110	35.1	24.7	17.5	16.0	12.3	8.0	35.1	24.7	16.0	9.3	5.9	4.1
Utica Boilers	Starfire SFE V	Oil	SFE-4125S	153	48.8	34.3	24.4	22.2	17.2	11.1	48.8	34.3	22.2	12.9	8.2	5.7
Utica Boilers	Starfire SFE V	Oil	SFE-5185S	225	71.8	50.5	35.9	32.6	25.2	16.3	71.8	50.5	32.6	18.9	12.1	8.3
Utica Boilers	Starfire SFE V	Oil	SFE-6210S	257	82.0	57.6	41.0	37.3	28.8	18.6	82.0	57.6	37.3	21.6	13.8	9.5
Dunkirk	ESC V	Oil	ESC-3090S	110	35.1	24.7	17.5	16.0	12.3	8.0	35.1	24.7	16.0	9.3	5.9	4.1
Dunkirk	ESC V	Oil	ESC-4125S	153	48.8	34.3	24.4	22.2	17.2	11.1	48.8	34.3	22.2	12.9	8.2	5.7
Dunkirk	ESC V	Oil	ESC-5185S	225	71.8	50.5	35.9	32.6	25.2	16.3	71.8	50.5	32.6	18.9	12.1	8.3
Dunkirk	ESC V	Oil	ESC-6210S	257	82.0	57.6	41.0	37.3	28.8	18.6	82.0	57.6	37.3	21.6	13.8	9.5
Pennco	KSC V	Oil	KSC-3090S	110	35.1	24.7	17.5	16.0	12.3	8.0	35.1	24.7	16.0	9.3	5.9	4.1
Pennco	KSC V	Oil	KSC-4125S	153	48.8	34.3	24.4	22.2	17.2	11.1	48.8	34.3	22.2	12.9	8.2	5.7
Pennco	KSC V	Oil	KSC-5185S	225	71.8	50.5	35.9	32.6	25.2	16.3	71.8	50.5	32.6	18.9	12.1	8.3
Pennco	KSC V	Oil	KSC-6210S	257	82.0	57.6	41.0	37.3	28.8	18.6	82.0	57.6	37.3	21.6	13.8	9.5