Design Calculations

A = % of Oxygen in air flow

Tf = Total flow

fa = Air flow

fo = Oxygen flow

Thus

$$\text{End Oxygen} = \frac{fa(A) + fo(100)}{(fa+fo)}$$

O2 Flow rate

AirF/R	0.13	0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00
0.13	60.00	73.33	84.00	88.57	91.11	93.85	95.29	96.19	96.80	97.24	97.58
0.25	46.67	60.00	73.33	80.00	84.00	88.57	91.11	92.73	93.85	94.67	95.29
0.50	36.00	46.67	60.00	68.00	73.33	80.00	84.00	86.67	88.57	90.00	91.11
0.75	31.43	40.00	52.00	60.00	65.71	73.33	78.18	81.54	84.00	85.88	87.37
1.00	28.89	36.00	46.67	54.29	60.00	68.00	73.33	77.14	80.00	82.22	84.00
1.50	26.15	31.43	40.00	46.67	52.00	60.00	65.71	70.00	73.33	76.00	78.18
2.00	24.71	28.89	36.00	41.82	46.67	54.29	60.00	64.44	68.00	70.91	73.33
2.50	23.81	27.27	33.33	38.46	42.86	50.00	55.56	60.00	63.64	66.67	69.23
3.00	23.20	26.15	31.43	36.00	40.00	46.67	52.00	56.36	60.00	63.08	65.71
3.50	22.76	25.33	30.00	34.12	37.78	44.00	49.09	53.33	56.92	60.00	62.67
4.00	22.42	24.71	28.89	32.63	36.00	41.82	46.67	50.77	54.29	57.33	60.00

Combined Flow Rate

Oxygen Flow Rate

Air F/R	0.13	0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00
0.13	0.26	0.38	0.63	0.88	1.13	1.63	2.13	2.63	3.13	3.63	4.13
0.25	0.38	0.50	0.75	1.00	1.25	1.75	2.25	2.75	3.25	3.75	4.25
0.50	0.63	0.75	1.00	1.25	1.50	2.00	2.50	3.00	3.50	4.00	4.50
0.75	0.88	1.00	1.25	1.50	1.75	2.25	2.75	3.25	3.75	4.25	4.75
1.00	1.13	1.25	1.50	1.75	2.00	2.50	3.00	3.50	4.00	4.50	5.00
1.50	1.63	1.75	2.00	2.25	2.50	3.00	3.50	4.00	4.50	5.00	5.50
2.00	2.13	2.25	2.50	2.75	3.00	3.50	4.00	4.50	5.00	5.50	6.00
2.50	2.63	2.75	3.00	3.25	3.50	4.00	4.50	5.00	5.50	6.00	6.50
3.00	3.13	3.25	3.50	3.75	4.00	4.50	5.00	5.50	6.00	6.50	7.00
3.50	3.63	3.75	4.00	4.25	4.50	5.00	5.50	6.00	6.50	7.00	7.50
4.00	4.13	4.25	4.50	4.75	5.00	5.50	6.00	6.50	7.00	7.50	8.00