

UDS SERVICE SIZING GUIDE

ELECTRIC	MAIN SERVICE AMPERAGE	TOTAL USABLE KILOWATS AVAILABLE IN RACEWAY				
		120/208 1 PHASE	120/208 3 PHASE	120/240 1 PHASE	120/240 3 PHASE	277/480 3 PHASE
	30	4.7	8.1	5.4	9.2	18.4
	50	7.8	13.5	9.0	15.3	30.6
	80	12.5	21.6	14.4	24.5	49.0
	100	15.6	27.0	18.0	30.6	61.2
	125		33.8		38.3	76.5
	150		40.5		45.9	91.8
	175		47.3		53.6	107.1
	200		54.0		61.2	122.4
	225		60.8		68.9	137.7
	250		67.5		76.5	153.0
	300		81.1		91.8	183.6
	350		94.6		107.1	214.2
	400		108.1		122.4	244.8
	450		121.6		137.7	275.4
	500		135.1		153.0	306.0
	550		148.6		168.3	336.6
	600		162.1		183.6	367.2

GAS	BTU/HR PER LENGTH OF RACEWAY @ 7" WC PRESSURE						
	SINGLE FEED						
	PIPE SIZE	10'	15'	20'	30'	40'	50'
	1 1/2"	975	790	675	550	N/A	N/A
	2"	2050	1700	1450	1175	990	900
	LOOPED FEED						
	PIPE SIZE	10'	15'	20'	30'	40'	50'
	1 1/4"	1200	960	840	700	590	540
	1 1/2"	1950	1580	1360	1100	930	850
	2"	4100	3400	2900	2350	1980	1800

BASED ON CONNECTION SIZE FOR NATURAL GAS AT 7" W.C. MAIN SERVICE FROM METER. DEPENDENT ON BUILDING PIPING SYSTEM AND PRESSURE. LOOPED SERVICE REQUIRED WHEN MORE THAN THREE APPLIANCES IN 10'(TO EQUALIZE FLOW AND INCREASE CAPACITY) PRESSURE DROP VARIES ACCORDING TO THE NUMBER OF APPLIANCES

STEAM	STEAM CAPACITIES(LBS. PER HOUR)						
	PRESSURE	VELOCITY FT/SEC	PIPE SIZE (O.D. X 0.065 INCH WALL)				
			1"	1 1/2"	2"	2 1/2"	3"
	5	50	35	90	170	270	395
		80	60	145	270	430	635
		120	85.0	215	405	650	950
	10	50	45	110	210	335	490
		80	70	180	330	535	785
		120	110.0	270	500	800	1175
	20	50	60	155	285	460	675
80		100	245	460	735	1080	
120		150.0	370	685	1105	1620	
30	50	80	195	365	585	855	
	80	125	310	580	935	1370	
	120	190.0	465	870	1400	2050	

STEAM SUPPLY LINE CAN BE SIZED FROM THE TABLE ABOVE. STEAM IS USALLY LOW PRESSURE AROUND 5PSI AND USE 2" OR 2 1/2" SUPPLY LINES. A 3" SUPPLY LINE IS VERY LARGE AND MAKES PLUMBING CONSTRUCTION DIFFICULT, IT SHOULD ONLY BE USED AS SUPPLY DEMANDS.

TYPICAL STEAM CONSUMPTION RATES			
EQUIPMENT	OPERATING PRESSURE(PSIG)	LBS PER HOUR	
		IN USE	MAXIMUM
10 GALLON STEAM JACKETED KETTLE	5-20	13	106
25 GALLON STEAM JACKETED KETTLE	5-20	29	124
40 GALLON STEAM JACKETED KETTLE	5-20	44	140
60 GALLON STEAM JACKETED KETTLE	5-20	58	152
DIRECT VEGTABLE STEAMER (PER COMPARTMENT)	5-20	29	80
POTATOE STEAMER	5-20	29	80