

Performance table flame cutting
Gas-mixing nozzles Propane / Oxygen
ZIN414 3/86



Material-thickness mm	Nozzle	Pressures (bar)		Cutting speed mm / min	Kerf mm	Consumption ltrs / h	
		Propane	Oxygen			Propane	Oxygen
3	3 - 10	0.2	2.0	560	0.9	160	1700
6		0.2	2.5	535		230	2000
10		0.25	3.0	510		300	2300
10	10 - 25	0.25	3.0	510	1.2	400	2850
20		0.3	4.0	460		465	3380
25		0.3	4.5	430		500	3650
25	25 - 75	0.3	2.5	500	1.6	300	4300
50		0.3	3.0	400		450	4950
75		0.3	3.5	300		600	5600
75	75 - 125	0.3	3.0	250	2.4	400	5300
100		0.35	3.25	200		550	7000
125		0.4	3.5	155		700	8700
125	125 - 175	0.4	3.5	230	2.8	600	8700
150		0.45	3.75	180		700	9600
175		0.5	4.0	125		800	10500
175	175 - 225	0.5	4.0	150	3.2	750	10500
200		0.75	4.25	135		850	11500
225		1.0	4.5	115		950	12500
225	225 - 300	1.0	4.5	100	3.2	900	12500
260		1.8	5.0	95		990	17500
300		2.6	5.5	90		1080	22500

The indicated values are approximate values and only refer to unalloyed steel up to 0.3 % C and if using oxygen with a purity of 99.5 % minimum.

The indicated cutting speeds refer to straight cuts with a rust-free and scales-free surface. Cutting areas of quality class I according to DIN 2310 will be obtained.

The indicated cutting speeds have to be reduced for: shaping cuts with small radii: by approx. 10 %, angular cuts of 30°: by approx. 25 %, angular cuts of 45°: by approx. 45 %.

Nozzle size and the appropriate adjusting values have to correspond to the effective cutting thickness.

The indicated pressures are overpressures in bar, each measured on the torch entry. In case of higher-powered machines, pressure drops in the hose pipes have to be taken into account.