

Performance table flame cutting
Gas-mixing nozzles Acetylene / Oxygen
ZIN413 3/86



Material-Thickness mm	Nozzle	Pressures (bar)		Cutting speed mm / min	Kerf mm	Consumption ltrs / h	
		Acetylene	Oxygen			Acetylene	Oxygen
3	3 - 10	0.3	2.5	680	0.9	250	1250
6			3.0	600		295	1440
10			3.5	525		340	1640
10	10 - 25	0.3	3.0	540	1.2	360	2160
20			3.75	500		405	2510
25			4.0	470		430	3230
25	25 - 75	0.15	2.5	500	1.6	400	4050
50			3.0	460		550	4675
75			3.5	380		700	5300
75	75 - 125	0.2	3.0	250	2.4	500	5300
100			3.25	210		725	7000
125			3.5	165		950	8700
125	125 - 175	0.2	3.5	150	2.8	950	8700
150			3.75	135		1025	9600
175			4.0	115		1100	10500
175	175 - 225	0.2	4.0	120	3.2	1100	10500
200			4.25	115		1250	11500
225			4.5	110		1400	12500
225	225 - 300	0.2	4.5	115	3.2	1400	12500
260			5.0	100		1450	17500
300			5.5	90		1500	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.