Performance table flame cutting
ZHD Acetylene Heavy-duty nozzles
ZIN441 5/92

CUTTING WELDING SINCE 1898 ZINSER

Material-thickness mm	Cutting nozzle ZHD A	Heating nozzle ZHD A and P	Pressures (bar)			Cutting speed mm / min	Nozzle distance mm	Kerf mm	Consumption ltrs / h		
			Acetylene	Heating oxygen	Cutting oxygen				Acetylene	Heating oxygen	Cutting oxygen
3	3 - 6	3 - 100	0.2	1.0	2.0	790	3 - 5	0.9	350	390	500
5					2.5	770					
6					3.0	750					
6	6 - 10				4.0	720		1.1	350	390	1300
8					5.0	710					
10					6.0	690					
10	10 - 20		0.4	2.0	8.0	720	4 - 8	1.8	400	450	3300
15					9.0	650					
20					10.0	590					
20	20 - 30				8.0	590		2.1	400	450	3800
25					9.0	560					
30					10.0	470					
30	30 - 45				8.0	470	5 - 10	2.3	400	450	4200
35					8.5	450					
40					9.5	420					
45					10.0	400					
45	45 - 60				8.0	400		2.4	400	450	5400
50					8.5	380					
55					9.5	370					
60					10.0	340					
60	60 - 80		0.5	2.5	9.0	340		2.5	480	530	8300
70					10.5	330					
80					12.0	310					
80	80 - 100				9.0	300		2.7	480	530	9900
90					10.0	280					
100					11.0	270					
100	100 - 160	A a. P a. M 100 - 300	0.5	3.0	7.0	240	8 - 12	4.0	850	950	16300
120					8.0	230					
140					8.5	220					
160					9.0	210					
160	160 - 230			3.5	7.0	210	10 - 15	5.0	1200	1330	22000
180					8.0	195					
200					8.5	180					
230					9.0	160					
230	230 - 300			4.0	7.0	150		6.0	1200	1330	26500
250					8.0	135					
280					8.5	125					
300					9.0	115					

The indicated values are approximate values and refer only 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 surface. Cutting areas of a 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 %, for angular cuts of 30°: by approx. 25%, for 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 mesured on the torch entry. In case of higher-powered machines, pressure drops in the hose pipes have to be taken into account.