

Performance table flame cutting
ZHD-R Acetylene Heavy-duty ring nozzles
ZIN448 6/95

CUTTING
WELDING
SINCE 1898



Material-thickness mm	Cutting nozzle ZHD-R A	Heating nozzle ZHD-R 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																		
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																		
25					9.0	560																		
30					10.0	470																		
30	30 - 45	0.4	2.0	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			0.5	2.5						8.0	400	5 - 10	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	5 - 10	2.5	480	530	8300
70																		10.5	330					
80				12.0	310																			
80	80 - 100			0.5	2.5								9.0	300	5 - 10	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		A a. P a. M 100 - 300	0.5	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			A a. P a. M 100 - 300	0.5	4.0	7.0	150	10 - 15	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 measured on the torch entry. In case of higher-powered machines, pressure drops in the hose pipes have to be taken into account.