

Performance table flame cutting HSD Methane (natural gas) - Rapid speed nozzles ZIN438 5/92

CUTTING
WELDING
SINCE 1898



Material- thickness mm	Cutting nozzle HSD M	Heating nozzle HSD M*	Pressures (bar)			Cutting speed mm / min	Nozzle distance mm	Kerf mm	Consumption ltrs / h		
			Methane	Heating oxygen	Cutting oxygen				Methane	Heating oxygen	Cutting oxygen
3	3 - 6	3 - 100	0.2	1.0	2.5	670	3 - 5	0.9	800	870	550
5						640					
6						600					
6	4.0				630						
8					570						
10					530						
10	10 - 20		0.5	2.0	5.0	560	4 - 8	1.3	900	1300	2500
15						490					
20						430					
20	4.0				430						
25		410									
30		380									
30	30 - 45	0.5	2.0	6.0	380	5 - 10	1.7	900	1300	4800	
35					370						
40					360						
45					340						
45	45 - 60				330						
50					310						
55				300							
60				280							
60	60 - 80			300							
70				280							
80				270							
80	80 - 100			270							
90		250									
100		230									

For material thickness exceeding 100 mm, use ZHD-nozzles / Methan (ZIN440).

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.

* In case of flame cutting machines supplied by the public network, and thus having normally a pressure inferior to 800mm water column (0,08 bar), we recommend to use heating nozzles with an additional heating circuit.

In case of machines with several torches and central gas supply, piercing unit. etc., we recommend to use a fuel-gas-compressor pump (pressure intensifier).