

IRON POWDER



LWC100.29

Normally, a typical oxy-fuel flame cannot generate sufficient heat to cut materials such as stainless steel due to the formation of heat resistant slag.

Powder cutting, in which iron powder is added to the flame, has a twofold effect. Firstly, the burning (oxidation) of the iron powder provides a higher cutting temperature. Secondly, the heat-resistant slag is diluted by the oxidised iron powder, causing a decrease of the slag melting temperature. This results in a more fluid slag that can easily be removed by the oxygen stream.

Advantages:

- High affinity for oxygen at the cutting temperature
- High burning temperature
- Excellent flow characteristics
- Reduced nozzle wear that can easily be removed by the oxygen stream.



LWC100.29 is truly dedicated for flame cutting, as the particle size distribution is carefully controlled. Large particles may block tubes and pipes, and interrupt gas and particle flow. On the other hand, too many fine particles will adversely affect the flow characteristics of the powder. LWC100.29 is designed to minimize inconsistencies between batches and manufactured using a highly stable and robust production method – the sponge iron powder process. The result is an exceptionally stable powder.



SPECIFICATION

Chemical Properties (%)	Unit	Specification	
		Min	Max
C	%		0.20
S	%		0.015
H2-Loss	%		1.00
Physical Properties			
Apparent density	g/cm3	2.40	2.60
Flow rate	s/50g		40.00
Particle size distribution (%)			
+180um	%		0.0
150-180um	%		1.0
106-150um	%		20.0
75-106um	%		30.0
45-75um	%		29.0
-45um	%	15.0	25.0