

Properties of Sishen 64% 25mm lump ore



Substance	Specification (%)	Typical (%)
Chemical properties		
Fe	64.00 Min	64.02
SiO ₂	5.60 Max.	4.88
Al ₂ O ₃	1.50 Max.	1.33
P	0.060 Max.	0.057
S	0.026 Max.	0.014
K ₂ O	0.19 Max.	0.18
Fe ₂ O ₃	–	92.01
TiO ₂	–	<0.047
CaO	–	<0.080
MgO	–	<0.012
FeO	–	<0.180
Mn	–	<0.020
Na ₂ O	–	0.015
As	–	0.0023
Cr	–	0.0038
Ni	–	0.0027
Zn	–	<0.0012
Pb	–	0.0017
Cu	–	<0.0006
Mo	–	<0.0001
V	–	0.0032
LOI _(900°C)	–	0.63
Moisture	1.0 Max.	0.94

Substance	Specification (%)	Typical (%)
Physical properties		
Screen analysis at the port of loading:		
+25mm	6.5 Max	4.6
-25 + 20mm	–	19.4
-20 + 16mm	–	22.3
-16 + 12.5mm	–	20.8
-12.5 + 9.5mm	–	16.2
-9.5 + 8mm	–	6.5
-8.0 + 5mm	12.0 Max (-8mm)	6.0
-5mm		4.2
Metallurgical characteristics		
Decrepiation Index (ISO 8371)		
DI _{-6.3mm}	-	Est. 0.81
Reducibility Index (ISO 4695)		
RI _{R40}	-	0.57 %/min
Reducibility Index (ISO 7215)		
RI	-	43.0
Tumbler Index (ISO 3271)		
TI	-	89.0
AI	-	4.8
Reduction Disintegration Index (ISO 4696.1)		
RDI _{+6.3mm}	-	87.5
RDI _{-3.15mm}	-	7.5
RDI _{-0.5mm}	-	2.2