
C88 TRIAL REPORT

Location: Lab test No. 04, School of chemical Engineering, Hanoi University of Science and Technology, C8 Building, HUST, No 1 Dai Co Viet Road, Ha Ba Trung, Hanoi, Vietnam.

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Trial period: 10 Oct 2012 – 19 Oct 2012

Trial Time: 20 h /day

Boiler No. 1

Coal rated load: 60 kg coal per hour

Type of coal: mixing of 4A and 4B

C88 injection rate: 1/2000 (Vol.)

Total Volume of coal used: 10800 KG

Total Volume of C88 used: 3 Kg

DESCRIPTION

Period 1(P1): Boiler runs from 10 Oct to 13 Oct 2012 without C88

Volume of Coal used: 4800 kg

Period 2(P2): Boiler runs from 14 Oct to 15 Oct 2012 with C88

Injection method: C88 is injected to coal during the grinding phase

Volume of Coal used: 1200 kg

Volume of C88 used: 0.6 kg

Issue: C88 catches fire (@ around 120° C - 150° C) during the coal drying phase (@ 450° C)

Period 3 (P3): Boiler runs from 16 Oct to 19 Oct 2012 with C88

Injection method: C88 is injected to kg coal in furnace directly.

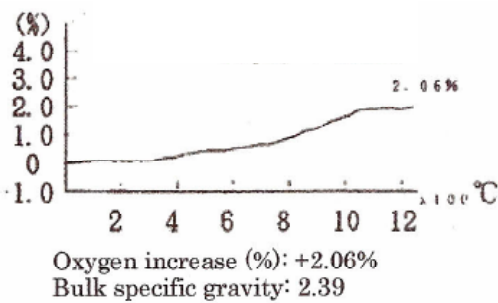
Volume of Coal used: 4800 kg

Volume of C88 used: 2.4 kg

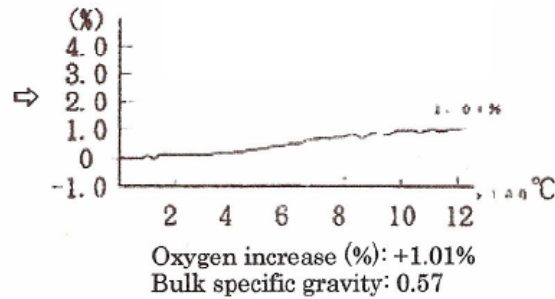
RESULT

1. Oxygen increase (%)

P1: Before Injection of C88



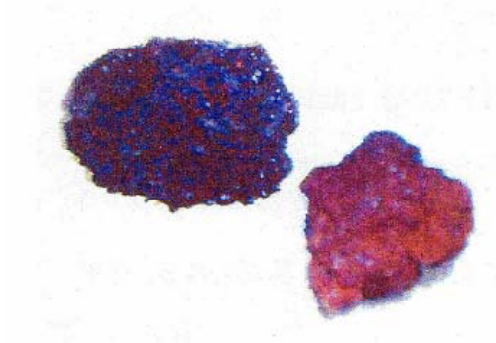
P3: After Injection of C88



Conclusion: The oxygen increase between P1 & P3 is smaller, demonstrating improvement of combustion

2. Clinker exfoliation (clinkers extracted from furnace bottom)

P1: Before Injection of C88



Dark color
Some are hard and bulky

P3: After Injection of C88



Reddish white
Pieces are smaller and easy to be broken

Conclusion: these changes due to oxygen absorption

3. Unburned combustibles in EP ash

	P1: No C88 (%)	P3: With C88 (%)	Reduction rate (%)
Average unburned combustibles in EP ash	5.4	4.8	11.1%

Conclusion: C88 promote oxidization to help carbon gasification and actively reduce the unburned carbon in ash