

[]

Lafarge Secar 71

[]

Al₂O₃

CaO

Al₂O₃ CaO

CA₂

() BF-25 BF-20 BF-15

[]

/

Al₂O₃-SiC-C

()

()

°C

- mm

Pechiney

°C

Finger Test

% /

Silicona

- mm

%			
BF-25	BF-20	BF-15	
			- mm
			%
	/		
	/		()
/	/	/	- mm

.....

JEOL-JDX 8030
 K_α mA KV (CCS)
 ASTM C133-97

CAM SCAN (SEM)
 (EDS) MV 2300 ASTM C20-97

Finger Test

* * cm³

() cm

cm

SiC

() ()

- - - -

Finger Test

× × mm³

°C

cc

°C

BF-15 °C

(< μm)

X

:

L.O.I	SO ₃	MnO	K ₂ O	Na ₂ O	SiO ₂	TiO ₂	Fe ₂ O ₃	CaO	MgO	Al ₂ O ₃	
/	/	/	/	/	/	/	/	/	/	/	

:

Fe	C	S	Mn	Si	
/	/	/	/	/	

CaO

BF-25 BF-20 BF-15

SiO₂

[]

(Secar 71)

()

)

(

cm

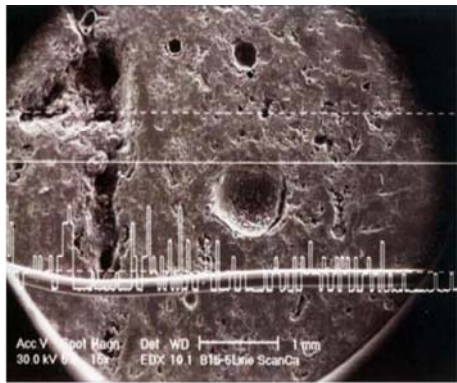
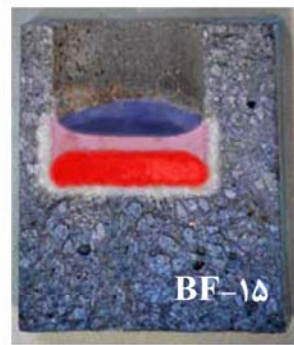
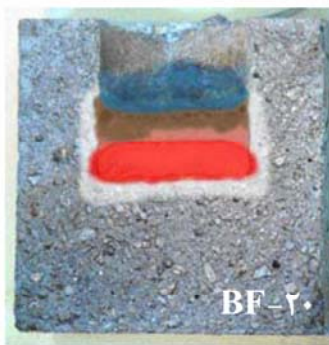
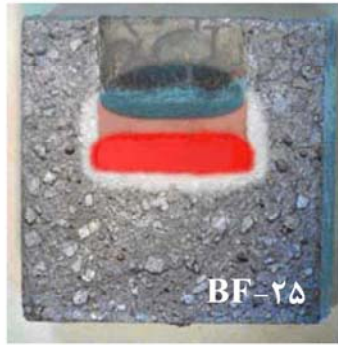
- cm

[]

CaO

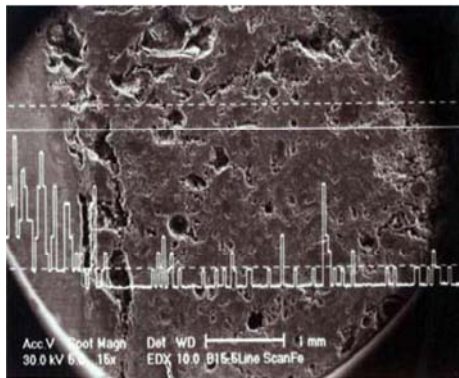
. Al₂O₃-SiC-C :

BF-25	BF-20	BF-15	(°C)	
/	/	/		g/cm ³
/	/	/		
/	/	/		
/	/	/		
/	/	/		%
/	/	/		
/	/	/		
/	/	/		
/	/	/		MPa
/	/	/		
/	/	/		
/	/	/		
/	/	/	%	



()

Al₄C₃ ()
 CO₂ CO
 Al₂O₃



()

[]
 (Line Scan)

() BF- : cm
 .Mg () Fe (-)
 BF- () BF-15
 15
 - μm BF-
 .(-)

(Akermanite)
(corundum)

(Gehlenite)

(Anorthite)

[]

FeO

FeO

()

FeO

(Fayalite)

BF-20
CAMS
)

SiC

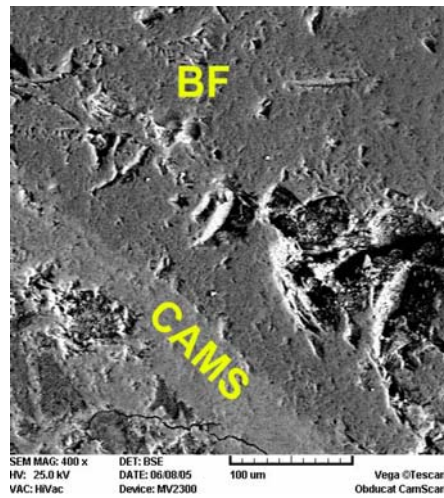
[]

(-)

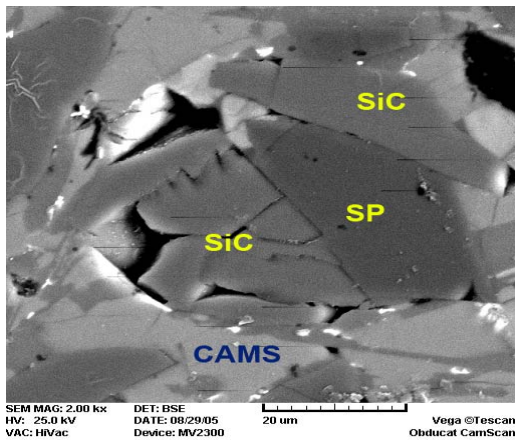
[]

TiO₂

CaO



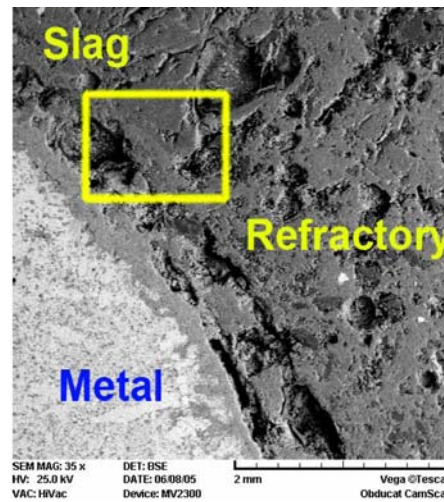
()



SEM :

(BF-20)

)



()

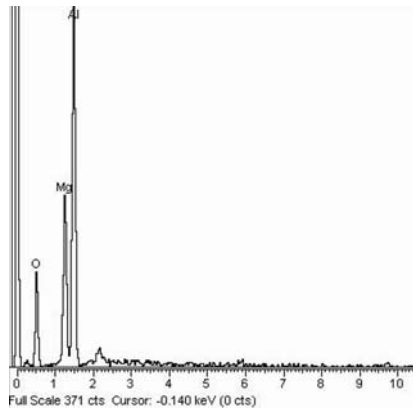
x () x () BF-15

CA₆

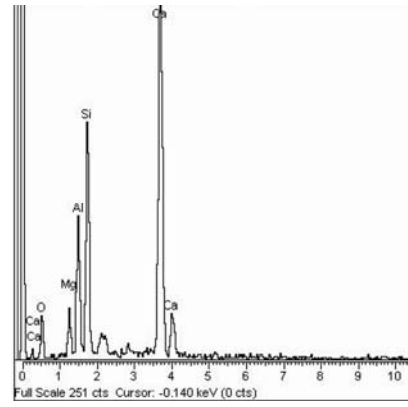
[]

(-)

BF- BF- BF-



()



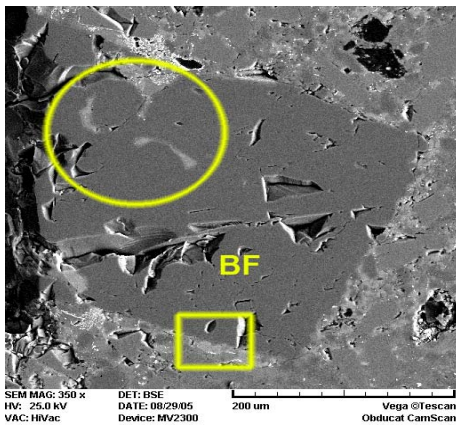
()

EDS :

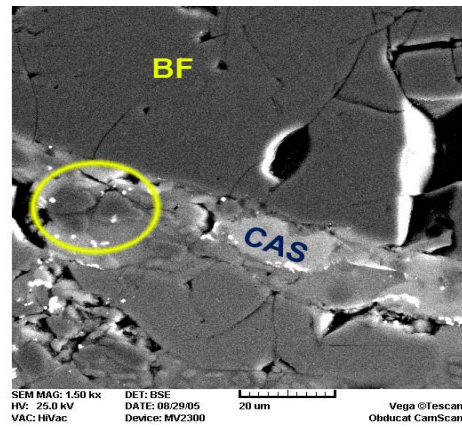
()

() (CMAS)

()



()



()

SEM :

[]

-Al₂O₃-MgO-CaO

SiO₂

(-)

CaO-Al₂O₃-SiO₂ (-)

SiC BF-15

CaO- (CAMS) CaO-Al₂O₃-MgO-SiO₂

EDS

(-) (CAM) Al₂O₃-MgO

CA₆ (-)

(-) (-)

Al₂O₃ SiO₂

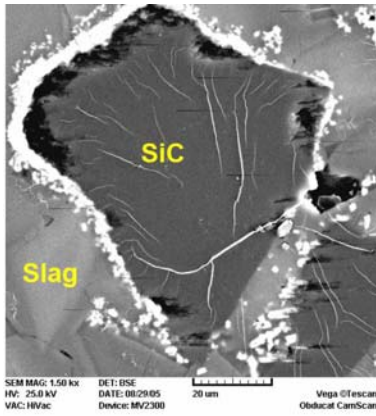
Ti

Si Al Mn

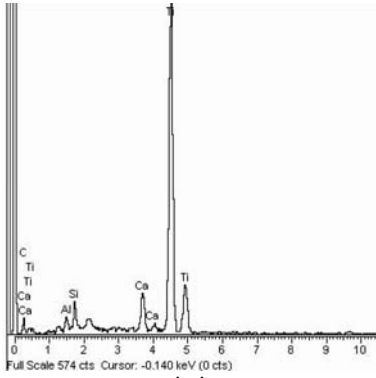
TiO₂

MnO

[]



()



()

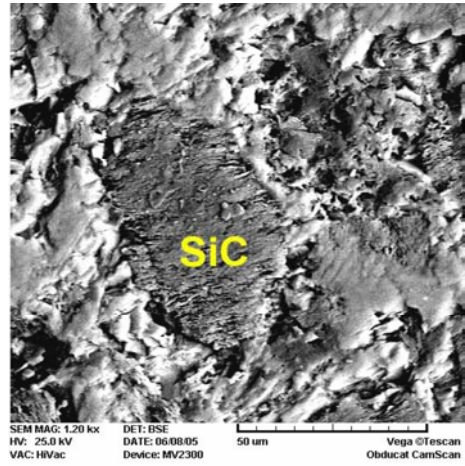
SEM ():

. SiC EDS ()

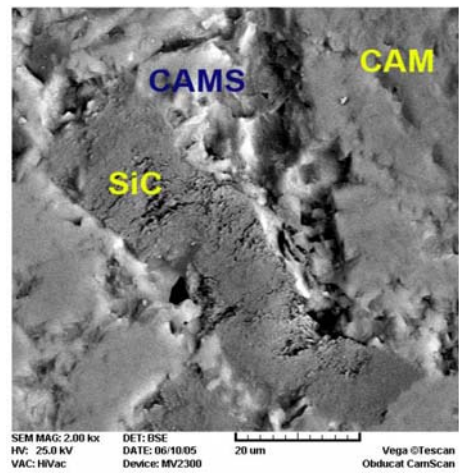
(BF-25 BF-20 BF-15)

Finger Test

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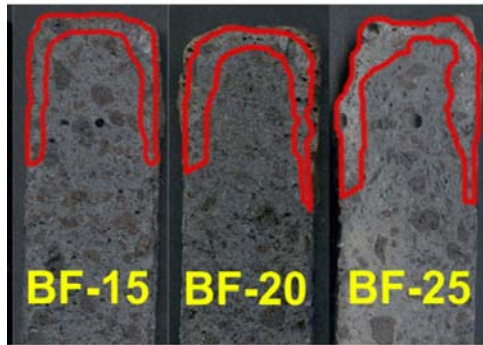
TA-15

CaO- () SiC ()

SiC Al₂O₃-MgO-SiO₂

BF-25

Al₂O₃-SiC-C



SiO₂

Finger Test

BF-

SiO₂
BF-25

15

Finger Test

() ()

MgO

MgO .

CaO

MgO

[]

MgO

[]

BF-15

[]

CaO

()

BF-15 CaO

CaO BF-15

CaO .

CaO .

Al₂O₃

CA₂

CaO-

SiO₂ CaO-

[]

Al₂O₃-SiC-C

Al₂O₃

MgO

CaO

L.O.I	SO ₃	MnO	K ₂ O	Na ₂ O	SiO ₂	TiO ₂	Fe ₂ O ₃	CaO	MgO	Al ₂ O ₃	
/	/	/	/	/	/	/	/	/	/	/	
-	/	/	/	/	/	/	/	/	/	/	Slag-BF-15
-	/	/	/	/	/	/	/	/	/	/	Slag-BF-20
-	/	/	/	/	/	/	/	/	/	/	Slag-BF-25

-%

. []

BF-15

Finger Test

Finger Test

BF-15

BF-25

Al₂O₃-SiC-C

%

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