

# Dens Refractory Castable

## 3.1 Prefabricated Top Blocks: Grade PFB-01

### Essential properties and characteristics for grade PFB-01

Classification Temperature EN ISO 1927-1	°C	≥ 1400
Bulk Density (24 hour at 110°C) EN ISO 1927-6	g/cm3	≥ 2.0
Cold Crushing Strength(5houre at 1300 °C ) EN ISO 1927-6	MPa	≥ 16
Permanent Linear Change(5 hours at 1300°C) EN ISO 1927-6	%	-0.5≤ PLC≤+1
Thermal Shock Resistance DIN 51068, water quenching	cycle	≥ 15
Chemical Analysis EN ISO 1927-3		
AL2O3	WT%	≥ 40
Fe2O3		≤ 2.0
SiO2		35 - 40
CaO		≤ 4
Thermal Expansion (20°C – 1000°C ) EN 993-19	%	≤ 0.7
Thermal Conductivity ASTM C417-05 400	W/Mk	≤ 1.1
800		≤ 1.2
1200		≤ 1.3
Apparent Porosity (24h at 110) EN ISO 1927-6	%	15 – 20

#### BOM 1003

	NO.	Drawing NO.	PCS		Type	Weight	
Flue walls		ZN 235613	868	PFB-01+S235JR+1.4841	A1	380,045	kg
		ZN 235638	146	PFB-01+S235JR+1.4841	A2	64,291	kg
		ZN 235665	146	PFB-01+S235JR+1.4841	A3	64,291	kg
			<b>1,160</b>				<b>508,627 kg</b>

#### BOM 1003

	NO.	Drawing NO.	PCS		Type	Weight	
Head Walls		ZN 235924	35	PFB-01+S235JR	B1	9,390	kg
		ZN 237190	207	PFB-01+S235JR	B2	79,623	kg
		ZN 237199	35	PFB-01+S235JR	B3	10,055	kg
			<b>277</b>				<b>99,068 kg</b>

BOM 1003								
	NO.	Drawing NO.		PCS		Type	Weight	
End WALLS		ZN	237235	5	PFB-01+S235JR+1.4841	C1	1,210	kg
		ZN	237240	27	PFB-01+S235JR+1.4841	C2	9,678	kg
		ZN	237263	5	PFB-01+S235JR+1.4841	C3	1,305	kg
				<b>37</b>			12,193	kg

BOM 1003							
	NO.	Drawing NO		PCS	Quality	Type	total [kg]
	ZN	160122	Lifting Anchor Assembly	10	2.4879	or equal	10.6
							10.6

Prefabricated Top Blocks: Grade PFB-01		
	PCS	Kg
<b>Flue walls</b>	<b>1,160</b>	<b>508,627</b>
<b>Head Walls</b>	<b>277</b>	<b>99068</b>
<b>End Walls</b>	<b>37</b>	<b>12,193</b>
<b>Total</b>	<b>1,474</b>	<b>619,888</b>