

4. 高爐用微孔鋁碳磚

Burned microporous alumina-graphite bricks for blast furnaces



名稱牌號 Brand of name	燒成微孔鋁碳磚 (爐腹至爐身中, 下部) burned microporous alumina-graphite bricks (for furnace belly to the middle and lower part of furnace body)			
	WLT-1	WLT-2	WLT-3	XWLT-S
指標 Index				
Al ₂ O ₃ %	≥65	≥60	≥55	≥60
C %	≥11	≥11	≥9	≥11
TFe %	≤1.5	≤1.5	≤1.5	≤2.0
常溫耐壓強度 Cold crushing strength Mpa	≥70	≥60	≥50	≥60
體積密度 Bulk density g/cm ³	2.85	≥2.65	≥2.55	2.65~2.75
顯氣孔率 Apparent porosity %	≤16	≤17	≤18	≤16
鐵水溶蝕指數 Molten iron solubility %	≤2.0	≤3.0	≤4.0	≤2.0
導熱系數 Thermal conductivity W/(m.k.) (0~800°C)	≥13	≥13	≥13	≥13
抗鹼性 (強度下降率) Basic-resistance (strength reduction) %	≤10	≤10	≤15	≤10
透氣度 Air permeability μ m ² (MDa)	≤4.95 × 10 ⁻⁴ (0.5)	≤1.97 × 10 ⁻³ (2.0)	≤1.97 × 10 ⁻³ (2.0)	≤1.0
平均孔徑 Average aperture μm	≤0.5	≤1.0	≤1.0	≤1.0
< 1 μm 容積 Capacity %	≥80	≥70	≥70	≥70
0.2Mpa 荷重軟化溫度 Refractoriness under load T _{0.6} °C				≥1650
氧化率 Oxidation %				≤1.0
熱穩定次數 Thermal stability Times (水冷 1100°C water cooled)				≥100