



POLYDIRGODAZ KHZUESTAN | شرکت پلی دیر گداز خوزستان

MANUFACTURER OF MONOLITHIC REFRACTORY PRODUCTS | تولید کننده انواع مواد و قطعات پیش ساخته نسوز





Introduction

Polydirgodaz Khuzestan is a private company founded in 2010 in Ahwaz, Iran dedicated to produce and supply the refractory products. This company provides at least 5000 tons of monolithic refractories per year for industries like cement, lime, glass, non-ferrous, iron and steel manufacturing plants as well as refineries and petrochemical plants. Polydirgodaz achieved notable success by precisely evaluating the industries requirements. In addition to the consumption of high purity raw materials, the company keeps total control of the manufacturing process to maintain the highest level of quality and reliability.

معرفی شرکت

شرکت پلی دیرگداز خوزستان در سال ۱۳۸۹ با هدف تولید و تامین دیرگداز های مورد نیاز صنایع فولاد، فلزات غیرآهنی، سیمان، آهک، شیشه، پالایشگاه ها و پتروشیمی با ظرفیت تولید ۵۰۰۰ تن در سال، در اهواز تاسیس گردید. این شرکت با ارزیابی نیازهای صنایع مختلف، بهره گیری از مواد اولیه با کیفیت و نظارت بر فرآیند و محصول نهایی توانسته است در مدت کوتاهی جایگاه خود را در میان تولیدکنندگان با سابقه پیدا کند.



Activities

- Produce aluminosilicate and magnesia castables, gunning materials and mortars.
- Manufacture a wide range of prefabricated refractories.
- Provide installation, maintenance and repair services.
- Offer technological consultation services in design and manufacturing fields.
- Supply refractory anchors, boards and ceramic fibers.

فعالیت های شرکت

- تولید انواع جرم های آلومینا سیلیکاتی و منیزیایی به صورت ریختنی، پاشیدنی و ملات.
- تولید قطعات پیش ساخته نسوز با اشکال مختلف.
- نصب، تعمیر و نگهداری نسوز واحدهای صنعتی.
- ارائه خدمات فنی و مهندسی در بخش های طراحی و ساخت نسوز واحدهای صنعتی.
- تامین انواع انکر ها، برد ها و فایبر های سرامیکی نسوز.



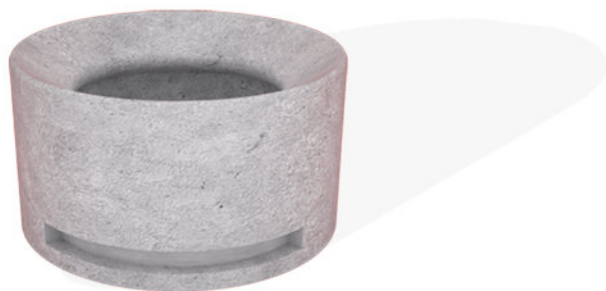
Products

- Dense Castables
RCC, MCC, LCC and Self-Flow Castables
- Insulating Castables
- Dense and Insulating Gunning Materials
- Air- and Heat-setting Mortars
- Prefabricated Refractories



محصولات

- جرم های ریختنی متداول، سیمان متوسط و کم سیمان
- جرم های ریختنی عایق
- جرم های پاشیدنی متراکم و عایق
- ملات ها با انواع گیرش در هوا و گیرش گرمایی
- قطعات پیش ساخته با اشکال پیچیده



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MANUFACTURER OF MONOLITHIC REFRACTORY PRODUCTS

POLYDIRGODAZ KHUZESTAN



CLASSIFICATION		RCC & MCC DENSE CASTABLES									
PRODUCT NAME		Poly Cast 45	Poly Cast 50	Poly Cast 60	Poly Cast 70	Poly Cast 85	Poly Cast 90	Poly Cast 94	Poly Cast 95	Poly Cast CG95	
GENERAL PROPERTIES	MAX. SERVICE TEMPERATURE °C	1500	1500	1600	1650	1700	1750	1800	1850	1800	
	SHELF LIFE months	9	9	9	9	9	9	9	9	9	
	NATURE OF BOND	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	
	INSTALLATION	Vibrating	Vibrating	Vibrating	Vibrating	Vibrating	Vibrating	Vibrating	Vibrating	Vibrating Gunning	
	REQUIRED WATER %	9-10	9-10	9-10	9-10	9-10	9-10	9-10	9-10	9-10	
CHEMICAL PROPERTIES	GRAIN SIZE mm	0 - 6	0 - 6	0 - 6	0 - 6	0 - 6	0 - 6	0 - 6	0 - 6	0 - 3	
	Al ₂ O ₃ %	45 - 47	50 - 52	60 - 62	≥70	≥85	≥90	≥94	≥95	≥95	
	SiO ₂ %	40	39	30	22	4	2	0.3	0.28		
	Fe ₂ O ₃ %	≤1.6	≤1.6	≤1.40	≤1.5	≤1.5	≤1.50	≤0.15	≤0.15	≤0.1	
	CaO %	5 - 7	5 - 7	5 - 7	5 - 7	3.5 - 4	4 - 5	4 - 5	4 - 5	4 - 5	
PHYSICAL PROPERTIES	B.D g/cm ³	at 110°C/24 hrs	≤2.2	≤2.2	≤2.3	≤2.4	≤2.7	≤2.75	≤2.85	≤2.9	≤2.6
		at 110°C/24 hrs	350	350	350	350	450	650	650	650	400
	CCS	at 800°C/3hrs	300	300	300	300	400	400	450	450	350
		at 1450°C/3hrs	300	400	450	450	550	600	600	600	400
		at 110°C/24hrs	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible
	PLC %	at 800°C/3hrs	-0.5 to +1	-0.5 to +1	-0.5 to +1	-0.2 to +0.4	-0.2 to +0.4	-0.4 to +0.2	-0.4 to +0.2	-0.4 to +0.2	-0.4 to +0.2
		at 1450°C/2hrs	-1 to +1	-1 to +1	-1 to +0.5	-1 to +0.5	-1 to +0.5	-0.5 to +1	-0.5 to +1	-1 to +0.5	-1 to +0.5
	THERMAL CONDUCTIVITY kcal/m hour °C	at 400°C	0.8	0.82	0.82	0.82	0.82	1.21	1.21	1.21	1.21
		at 600°C	0.80	0.83	0.84	0.84	0.84	1.23	1.23	1.23	1.23
		at 800°C	0.82	0.85	0.86	0.86	0.86	1.39	1.39	1.39	1.39
PACKAGING (Kg)		25	25	25	25	25	25	25	25	25	

CLASSIFICATION		LCC DENSE CASTABLES									
		SPINEL CONTAINING					SELF FLOWING				
PRODUCT NAME		Poly Cast 60 LCC	Poly Cast 72 LCC	Poly Cast 85 LCC	Poly Cast 92 LCC	Poly Cast 82 S	Poly Cast 92 S	Poly Cast 92 SFC	Poly Cast 95 SFC	Poly Cast 92 MAG	
GENERAL PROPERTIES	MAX. SERVICE TEMPERATURE °C	1600	1650	1700	1800	1750	1850	1850	1850	1750	
	SHELF LIFE months	8	8	8	8	8	8	8	8	8	
	NATURE OF BOND	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Phosphate	
	INSTALLATION	Vibrating	Vibrating	Vibrating	Vibrating	Vibrating	Vibrating	Without Vibrating	Without Vibrating	Vibrating	
	REQUIRED WATER %	5- 6	5- 6	4.5 -5	4.5- 5	6- 7	5- 6	5 - 6	5 - 6	3 - 3.5	
	GRAIN SIZE mm	0 - 6	0 - 6	0 - 6	0 - 6	0 - 6	0 - 6	0 - 6	0 - 6	0 - 6	
CHEMICAL PROPERTIES	Al ₂ O ₃ %	≥60	≥72	≥85	≥93	≥82	≥93	≥92	≥95		
	SiO ₂ %	35	23	12	4	8				4	
	Fe ₂ O ₃ %	≤1	≤1.2	≤1.5	≤0.1	≤1	≤0.1	≤0.15	≤0.15	≤0.5	
	CaO %	1.4	1.4	1.5	1.5- 1.8	1.4 - 1.6	1.5 - 2	1.5 - 1.6	1.5 - 1.6	1.5 - 1.6	
	MgO %					5	5.5	5	2.2	≥92	
PHYSICAL PROPERTIES	B.D g/cm ³	at 110°C/24hrs	≤ 2.7	≤ 2.8	≤ 2.9	≤ 3	≤ 3	≤ 3	≤ 3	≤ 2.75	
		at 110°C/24 hrs	750	800	830	1050	620	680	850	850	350 - 500
	CCS kg/cm ²	at 800°C/3 hrs	800	850	940	1100	670	720	870	900	250 - 500
		at 1100°C/3 hrs	900	920	1030	1150	680	950	1050	1000	250 - 500
		at 1450°C/3 hrs	1000	1100	1220	1300	720	1100	1250	1280	250 - 500
	PLC %	at 110°C/ 24 hrs	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible
		at 1450°C/2 hrs	-0.5	+0.5	+0.3	+0.12	+0.9	+0.3	+0.5	+0.4	-0.5
	THERMAL CONDUCTIVITY kcal/m hour °C	at 400°C	1	1.1	1.5	2					
at 600°C		1.15	1.2	1.6	2.1			2.15	2.15		
at 800°C		1.2	1.22	1.7	2.2			2.25	2.25		
PACKAGING (Kg)		25	25	25	25	25	25	25	25	25	

CLASSIFICATION		INSULATING CASTABLES			
PRODUCT NAME		Poly Cast 36 INSUL	Poly Cast 38 INSUL	Poly Cast 38 INSUL(Li)	
GENERAL PROPERTIES	MAX. SERVICE TEMPERATURE °C	1200	1250	1250	
	SHELF LIFE months	8	8	8	
	NATURE OF BOND	Hydraulic	Hydraulic	Hydraulic	
	INSTALLATION	Vibrating	Vibrating	Vibrating	
	REQUIRED WATER %	9 - 11 Liter/20Kg	9 - 11 Liter/20Kg	9 - 11 Liter/20Kg	
	GRAIN SIZE mm	0 - 3.6	0 - 3.6	0 - 3.6	
CHEMICAL PROPERTIES	Al ₂ O ₃ %	32 - 36	33 - 38	33 - 38	
	SiO ₂ %	38 - 40	40 - 45	40 - 45	
	Fe ₂ O ₃ %	5 - 7	5 - 8	1.3 - 1.5	
	CaO %	12 - 14	10 - 15	8 - 12	
	TiO ₂ %	2 - 2.8			
PHYSICAL PROPERTIES	B.D g/cm ³	at 110°C/24hrs	≥1.1	≥0.9	≥1.1
	CCS kg/cm ²	at 110°C/24 hrs	55-30	≥10	55-30
		at 1100°C/3 hrs	55-40		55-40
	P.L.C %	at 110°C	Negligible	Negligible	Negligible
		at 1100°C	-1 to +1	-1 to +1	-1 to +1
	THERMAL CONDUCTIVITY kcal/m hour °C	at 400°C	0.22	0.22	0.22
at 600°C		0.23	0.23	0.23	
at 800°C		0.25	0.25	0.25	
at 1000°C		0.30	0.30	0.30	
PACKAGING (Kg)		20	20	20	



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Produce aluminosilicate and magnesia castables, gunning materials and mortars

CLASSIFICATION

MORTARS

PRODUCT NAME

Poly Mor 40

Poly Mor 50

Poly Mor 60H

Poly Mor 60

Poly Mor 70H

Poly Mor 70

GENERAL PROPERTIES

MAX. SERVICE TEMPERATURE °C

1250

1400

1500

1500

1600

1600

SHELF LIFE months

8

8

8

8

8

8

NATURE OF BOND

Air Setting

Air Setting

Heat Setting

Air Setting

Heat Setting

Air Setting

INSTALLATION

Troweling

Troweling

Troweling

Troweling

Troweling

Troweling

REQUIRED WATER %

7 - 8
Liter/25Kg

7 - 8
Liter/25Kg

7 - 8
Liter/25Kg

7 - 8
Liter/25Kg

7 - 8
Liter/25Kg

7 - 8
Liter/25Kg

GRAIN SIZE mm

0 - 0.1

0 - 0.1

0 - 0.1

0 - 0.1

0 - 0.1

0 - 0.1

CHEMICAL PROPERTIES

Al₂O₃ %

40 - 38

48 - 50

58 - 62

58 - 62

68 - 72

68 - 72

SiO₂ %

52 - 55

42 - 45

30 - 35

30 - 35

20 - 22.5

20 - 22.5

Fe₂O₃ %

1.5 - 3

1.5 - 3

1.5 - 3

1.5 - 3

1.5 - 2

1.5 - 2

TiO₂ %

2 - 4

2 - 4

2 - 4

2 - 4

2 - 4

2 - 4

PACKAGING (Kg)

25

25

25

25

25

25

CLASSIFICATION		GUNNING MASSES					
		DENSE		INSULATING			
PRODUCT NAME		Poly GunL	Poly Gun EF	Poly Gun 38 INSUL(Li)	Poly Gun 36 INSUL	Poly Gun 36 INSUL(Li)	
GENERAL PROPERTIES	MAX. SERVICE TEMPERATURE °C	1600	1750	1250	1200	1250	
	SHELF LIFE months						
	INSTALLATION	Gunning	Gunning	Gunning	Gunning	Gunning	
	REQUIRED WATER %			9 - 11 Liter/20Kg	9 - 11 Liter/20Kg	9 - 11 Liter/20Kg	
	GRAIN SIZE mm	2.5-0	0 - 2.5	0 - 3.6	0 - 3.6	0 - 3.6	
CHEMICAL PROPERTIES	Al ₂ O ₃ %		1 - 1.5	33 - 38	32 - 36	33 - 38	
	SiO ₂ %	35	7 - 9	40 - 45	38 - 40	40 - 45	
	Fe ₂ O ₃ %	≤ 3	2.5 - 3.5	<1.6	5 - 7	1.3 - 1.5	
	CaO %	2.5-2	2 - 3	10 - 15	12 - 15	8 - 12	
	MgO %	50 - 52	85 - 86				
PHYSICAL PROPERTIES	B.D g/cm ³			≥ 0.9	≥ 1.1	≥ 1.1	
	CCS kg/cm ²			≥ 10	≥ 20	≥ 20	
	PLC %			Negligible	Negligible	Negligible	
	THERMAL CONDUCTIVITY kcal/m hour°C	at 400°C			0.22	0.22	0.22
		at 600°C			0.23	0.23	0.23
		at 800°C			0.25	0.25	0.25
		at 1000°C			0.30	0.30	0.30
PACKAGING (Kg)		1000	1000	20	20	20	

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PACKAGING





info

Factory | 6th Km of Ahvaz-Bandar Emam Highway, Ahvaz, Iran

Managers | Mehrab Zaheri +98 916 111 3043 Majid Khorasani +98 916 313 8206

Email | info@polydirgodaz.com

Website | www.polydirgodaz.com