



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.



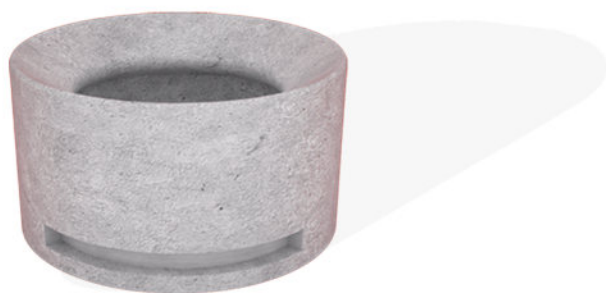
Products

- 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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MANUFACTURER OF MONOLITHIC REFRACTORY PRODUCTS
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 | at 110°C/24hrs | | ≥ 0.9 | ≥ 1.1 | ≥ 1.1 |
| | CCS kg/cm ² | at 110°C/24 hrs | | ≥ 10 | ≥ 20 | ≥ 20 |
| | PLC % | at 110°C | | 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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POLYDIRGODAZ KHUZESTAN

PACKAGING





info

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